WAKE TECH®

COMMUNITY COLLEGE

College Catalog | Volume

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Remember to check the online College Catalog for the most up-to-date information at
http://www.waketech.edu/student-services/catalog

Welcome to Wake Tech!

This catalog is designed for you – to make sure you have the latest information about Wake Tech courses, programs, and learning opportunities. We want to support every member of our community in making informed decisions about education, training, and career opportunities.

Wake Tech's mission is to provide equitable access to education that transforms lives through economic mobility and personal fulfillment. Our primary goal is the success of our students, both in and out of the classroom. We offer a wide range of programs and services to help students meet their goals for academic achievement, employment, career fulfillment, and lifelong learning for every rung of the career ladder.

We are dedicated to reaching students in every part of Wake County and rallying around them to go as far as their dreams, talents, and resilience take them. Our faculty and staff stand ready to help in every way possible. Students are encouraged to make the most of their time at Wake Tech by building relationships with instructors, college leaders, their peers, and the entire campus community.

Thank you for your interest in Wake Tech. We hope these opportunities for learning and growth will serve you well and enhance your life.

Sincerely,

Dr. Scott Ralls
President

About the Catalog

CATALOG INTRODUCTION

The Wake Technical Community College Catalog is an information and reference guide on college policies, facilities, degree, certificate and diploma programs, course offerings, services, and personnel. The statements in the catalog are for informational purposes only, and should not be considered the basis of a contract between the institution and the student.

All Wake Technical Community College policies (academic; student services; administrative) apply to all students, regardless of campus and center locations or mode of instructional delivery, unless expressly defined by the college.

Generally, the provisions outlined in the catalog are applicable as stated, but Wake Technical Community College reserves the right to initiate changes, including but not limited to academic requirements for graduation, without direct notification to individuals. Any statement in this catalog is subject to change by the college.

Though the college catalog is produced as a reference guide, each student is responsible for keeping apprised of current requirements for graduation for a particular degree program. Please visit our website at http://catalog.waketech.edu for the most recent version of this catalog.

DISABILITY DISCRIMINATION

Wake Technical Community College does not discriminate on the basis of disability in the admissions or employment processes or in access to programs, facilities, or activities. The following persons, whose offices are at the Main Campus, located at 9101 Fayetteville Rd., (401 South) have been designated to coordinate compliance with the non-discrimination requirements of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973:

Disability Support Services/Access for Students
Regina Willis - 919-866-5670
Sorenson Video Phone for Deaf – 919-324-1508

Employment Access Benita Clark, Vice President of Human Resources 919-866-5937

Facilities Access Jeffrey Carter, Vice President of Facilities 919-866-5148

EQUAL ACCESS

Wake Technical Community College is committed to the policy that all persons shall have equal access to its programs, facilities and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, or sexual orientation. For more information, see the Non-Discriminatory Policy in the Admissions section of this catalog.

SEX CRIMES PREVENTION ACT

The Federal Campus Sex Crimes Prevention Act requires registered sex offenders/predators to provide to the Wake County Sheriff's Office notice of each institution of higher education in the state at which the offender/predator is employed, carries on a vocation, or is a student. Any member of the Wake Technical Community College community who wishes to obtain further information regarding sexual offenders/predators in their area may refer to any the following websites:

NC Sex Offender and Public Protection Registry
https://www.ncdps.gov/Our-Organization/Law-Enforcement/state-bureau-investigation/sex-offender-registry

National Sex Offender Public Registry
http://www.nsopr.gov

HISTORY, STATEMENT OF VALUES, AND ACCREDITATION

WAKE TECH HISTORY

Wake Technical Community College is a tax-supported, public, non-profit, educational institution under the control of a Board of Trustees. It is part of the North Carolina Community College System, and is accredited by the Southern Association of Colleges and Schools. Authority for the establishment of the College is found in Chapter 115D of the General Statutes of North Carolina.

The College was chartered on April 3, 1958, as the Wake County Industrial Education Center. Operation actually began October 7, 1963, with 34 curriculum students on campus and 270 enrolled in the various industrial training programs. On January 8, 1964, the Center was formally dedicated as W.W. Holding Industrial Education Center and transferred from the Wake County Board of Education to a Board of Trustees. On March 3, 1966, W.W. Holding Industrial Education Center was granted approval by the State Board of Education as W.W. Holding Technical Institute and licensed to award the Associate in Applied Science degree. The name was changed to Wake Technical Institute in September 1974 and to Wake Technical College on March 1, 1980. The name was changed to Wake Technical Community College on December 1, 1987.

The College was first accredited by the Southern Association of Colleges and Schools on December 3, 1970.

WAKE TECH MISSION STATEMENT

Mission Statement

Wake Technical Community College provides equitable access to education that transforms lives through economic mobility and personal fulfillment.

In pursuit of its mission, the college adheres to an open door policy, offering quality education that is accessible and affordable to all adults regardless of age, sex, socioeconomic status, ethnic origin, race, religion, or disability. Wake Tech provides vocational, technical, and occupational training; university transfer preparation; basic skills development; community partnership opportunities; and a variety of support services and resources.

WAKE TECH VISION

We will reach students in every part of Wake County and rally around them to go as far as their dreams, talents, and resilience take them.

WAKE TECH CORE VALUES

Wake Technical Community College will structure its operations, training and educational programs around the Core Values of accountability, respect, responsibility, critical thinking, communication, and collaboration.

Accountability - Accountability is essential for an environment of learning. Those who are accountable stand by their words and actions, taking full responsibility for what they create and for what they contribute to the community.

Respect - Respect is a prerequisite for enhancing learning. Community members who respect themselves and others help create a safe, yet open, climate of learning.

Responsibility - Responsibility is the root of success. Students who assume personal responsibility for their education will reach their goals. Responsible students also make contributions to their communities.

Critical Thinking - Critical thinking is the fundamental purpose of higher education. The ability to solve problems through the application of the appropriate skills is critical to all disciplines.

Communication - Communication is increasingly the key competency for living and working in the information age. Communicating effectively in oral and written forms through traditional and new media is a powerful tool for personal and career success.

Collaboration - Collaboration, by bringing together individual knowledge and talents, creates teams that are greater than the sum of their parts. Such teamwork maximizes benefits to individuals and the community.

COLLEGE GOALS

Economic Mobility

Students who earn a credential at Wake Tech or one of their transfer institutions are better off economically after they leave.

Equitable Outcomes
Students are successful regardless of their race, gender or socioeconomic status.

Labor Market
Students find sustainable employment after completing a credential where they earn a living wage.

Transfer
Students transfer more and faster than in the past, do well when they transfer, and earn bachelor's degrees.

Completion
Students complete vastly more degrees and other meaningful credentials at faster rates than in the past.

Learning
Students gain the knowledge, skills, and abilities they need for the labor market and transfer.

Equitable Access
Students from underrepresented groups, including minority and low income students, are able to enter Wake Tech programs and access the support services they need to be successful.

PROGRAMS & SERVICES
The College translates its mission, vision, values, and goals into action through clearly defined programs and services. Specifically, the College:

- **offers** credit programs leading to associate degrees, diplomas, and certificates designed for immediate entry into employment, an associate degree in general education, and associate degrees designed to transfer to four-year institutions. The College also offers pre-curriculum programs for students to develop academic proficiency so that they may successfully complete curriculum courses;

- **provides** occupational career enhancement programs for individuals and support for economic development to businesses, industries, and agencies. Basic skills education, English as a Second Language and a wide variety of continuing education courses and programs for personal enrichment are offered on campus and throughout the county. The College further serves its constituents by providing a broad range of community services, partnerships, and outreach programs;

- **provides** a wide range of support services designed to assist students in successfully fulfilling their education and occupational goals. These services, developed to meet the diverse needs of individual students, begin with their initial contact with the College and continue throughout their enrollment and job placement or transfer for further study; and

- **practices** sound fiscal management and systematic planning to provide facilities, equipment, and state-of-the art technology to ensure quality education opportunities at secure facilities accessible to Wake County citizens.

SACSCOC ACCREDITATION
Southern Association of Colleges and Schools Commission on Colleges Accreditation (SACSCOC)

Wake Technical Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate degrees, diplomas, and certificates. Contact the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Wake Technical Community College.

CALEA
The college's Public Safety Education Campus has been awarded CALEA Training Academy Accreditation by the Commission on Accreditation for Law Enforcement Agencies (13575 Heathcote Boulevard; Suite 320; Gainesville, Virginia 20155) www.calea.org.

Specific Program Accreditation

Automotive Systems Technology Accreditation
The college's Automotive Systems Technology associate degree program has received certification by the ASE Education Foundation, 1503 Edwards Ferry Road, N.E., Suite 401, Leesburg, VA 20176; (1-703-669-6650); www.aseeducationfoundation.org and accredited by National Institute for Automotive Service Excellence (ASE). All

eight areas meet the strict industry standards required for ASE MASTER certification. This is the highest level of achievement recognized by the National Institute for Automotive Service Excellence (ASE).

Criminal Justice Program Accreditation
The college's Criminal Justice Technology program is accredited by the North Carolina Criminal Justice Education and Training Standards Commission.

Culinary Technology Program Accreditation
The college's Culinary Technology program is accredited by the American Culinary Federation, 180 Center Place Way; St. Augustine, FL 32095; (1-800-624-9458); acf@acfchefs.net .

Dental Assisting and Dental Hygiene Programs Accreditation
The college's programs in Dental Assisting and Dental Hygiene have received accreditation (without reporting requirements) status from the American Dental Association, Commission on Dental Accreditation. A copy of the appropriate accreditation standards and/or the Commission's policy and procedure for submission of complaints may be obtained by contacting the Commission at 211 East Chicago Avenue, Chicago, IL 60611-2678, or by calling 1-800-621-8099, extension 4653.

Detention Officer's Certificate
The college's Detention Officer's Certificate program has been accredited by the North Carolina Sheriffs' Education and Training Standards Commission to offer the certification course for individuals seeking to become detention officers effective March 16, 2011. North Carolina Sheriffs' Education and Training Standards Commission; North Carolina Department of Justice, 9001 Mail Service Center, Raleigh, NC 27699-9001.

Heavy Equipment and Transport Technology/ Construction Equipment Systems Program Accreditation
The college's Heavy Equipment and Transport Technology/Construction Equipment Systems Program is accredited by Accreditation Board of the Associated Equipment Distributors (The AED Foundation; 600 22nd Street, Suite 220, Oak Brook, IL 60523; www.aedfoundation.org).

Medical Assisting Program Accreditation
The Medical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs
25400 U.S. Highway 19 North, Suite 158
Clearwater, FL 33763
727-210-2350
www.caahep.org

Medical Lab Technology Program Accreditation
The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) is the accrediting agency for the Medical Laboratory Technology program and the approving agency for the Phlebotomy program. The NAACLS is located at 5600 N. River Road, Suite 720, Rosemont, IL 60018-5119; (1-773-714-8880).

Nursing Program Accreditation
The college's Associate Degree in Nursing program is accredited by the Accreditation Commission for Education in Nursing (ACEN).
The ACEN is located at 3343 Peachtree Road NE, Suite 850, Atlanta, GA, 30326; (1-404-975-5000) (Fax number 1-404-975-5020). http://www.acenursing.org/

Pharmacy Technology Accreditation
The college's Pharmacy Technology program is accredited by the American Society of Health System Pharmacists (ASHP) and Accreditation Council for Pharmacy Education (ACPE). The ASHP is located at 7272 Wisconsin Avenue, Bethesda, MD 20814. www.ashp.org

Radiography Program Accreditation
Wake Technical Community College's program in Radiography is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The JRCERT is located at 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182; (1-312-704-5300).

Surgical Technology Program Accreditation
The college's Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) on recommendation of the Accreditation Review Committee for Surgical Technology (ARC-ST). Effective September 1, 2016 CAAHEP approved Wake Tech's request to place this program on inactive status for two years.

MISREPRESENTATION

Policy Statement

Wake Technical Community College will not engage in substantial misrepresentation of itself as an institution, the nature of its educational programs, its financial charges, the employability of its graduates, or its relationship with the Department of Education.

Wake Tech prohibits substantial misrepresentation, as defined in this policy, by any of its individual representatives; or by any institution, organization, or person not officially affiliated with or authorized by the college, including those with whom the institution has an agreement to provide educational programs, recruitment or admissions services, marketing, or advertising. Substantial misrepresentation is prohibited in all forms, including those used in advertising or promotional materials and those used in the marketing or sale of instructional courses or programs offered by the college.

Definitions

Substantial Misrepresentation - any false, erroneous or misleading statement that the institution, a representative of the institution, or a covered service provider makes "directly or indirectly" to a student, prospective student, member of the public, accrediting agency, state agency, or U.S. Department of Education
Misleading Statement - any statement that has the likelihood or tendency to deceive or confuse

PROGRAM APPROVALS

The following Wake Tech programs have been reviewed by and met the standards for approval of the organizations/agencies indicated:

- Emergency Medical Technology - North Carolina Office of Emergency Medical Services
- Human Services Technology - North Carolina Department of Health and Human Services, Division of Health Service Regulation
- Nursing - North Carolina Board of Nursing
- Phlebotomy - National Accrediting Agency for Clinical Laboratory Sciences
- Veteran's Services - North Carolina Approving Agency for Veterans Education and Training

COLLEGE MEMBERSHIPS

Wake Tech is a member of the following organizations;

APPA Membership & Outreach Department
Advisory Board/Education Advisory Board (American Health Line)
American Association for Women in Community Colleges (AAWCC)
American Association of Collegiate Registrars and Admissions Officers (AACRAO)
American Association of Community Colleges (AACC)
American College Personnel Association (ACPA)
American Council on Education (ACE)
American Culinary Federation (ACF)
American Marketing Association (AMA)
American Mathematical Association of Two-Year Colleges (AMATYC)
Association Community College Business Officials (ACCBO)
Association for Commuter Transportation (ACT)
Association for the Advancement of Sustainability in Higher Education (AASHE)
Association for the Title IX Administrators (ATIXA)
Association of College & University Auditors (ACUA)
Association of College & University Policy Administrators (ACUPA)
Association of Community College Trustees (ACCT)
Association of Higher Education and Disability (AHEAD)
Break Away
Carolinas Association of Collegiate Registrars & Admissions Officers (CACRAO)
Center for Urban Transportation
Chamber of Commerce - Apex
Chamber of Commerce – Cary
Chamber of Commerce - Fuquay-Varina
Chamber of Commerce - Garner
Chamber of Commerce - Holly Springs
Chamber of Commerce - Knightdale
Chamber of Commerce - Morrisville

Chamber of Commerce – Raleigh
Chamber of Commerce – Rolesville
Chamber of Commerce - Wake Forest
Chamber of Commerce – Wendell
Chamber of Commerce – Zebulon
College and University Professional Association for Human Resources (CUPA-HR)
Community Colleges Workforce Consortium-Jobs for the Future, Inc.
Connect for Success NC
Construction Management Association of America (CMAA)
Cooperating Raleigh Colleges (CRC)
Council for Advancement and Support of Education (CASE)
Edge
EduCause
Excelencia In Education
Institute of Internal Auditors
Instructional Technology Council
League for Innovation Community College, Leadership Institute, League Alliance Services
Learning Resources Network (LERN)
NASPA (Student Affairs Administrators in Higher Education)
National Alliance of Concurrent Enrollment Partnerships (NACEP)
National Association for Community College Entrepreneurship (NACCE)
National Association of Colleges and Employers (NACE)
National Association of Diversity Officers in Higher Education (NADOHE)
National Association of Educational Procurement (NAEP)
National Association of International Educators (NAFSA)
National Association of Student Financial Aid Administrators (NASFAA)
National Council for Marketing & Public Relations (NCMPR)
National Council for State Authorization Reciprocity Agreement (NC-SARA)
National Grant Management Association (NGMA)
National HEP Camp Association
National Institute of Governmental Purchasing (NIGP)
National Institute for Staff & Organizational Development – The University of Texas (NISOD)
National Restaurant Association/NC Restaurant Association (NC RLA)
National Safety Council (NSC)
North Carolina Association of Campus Law Enforcement Administration (NCACLEA)
North Carolina Association of Colleges and Employers (NCACE)
North Carolina Association of Community College Facility Operations (NCACCFO)
North Carolina Association of Community College Trustees (NCACCT)
North Carolina Association of Government Information Officers (NCAGIO)
North Carolina Campus Compact
North Carolina Chamber (formerly NCCBI)
North Carolina Community-Student Development Administrator's Association (NC SDAA)
North Carolina Council of Officers for Resource Development (NC CORD)
North Carolina Honors Association (NCHA)
North Carolina NWBE Coordinators' Network (NC MWBE)
North Carolina State Education Assistance Authority (SARA NC)
North Carolina Technology Association (NCTA) NCTECH
Online Learning Consortium, Inc. (OLC)
Organization for Safety, Asepsis & Prevention (OSAP)
PMMI
Perimeter Park Phase II & III Owner's Association, Inc.
President's Forum
Regional Transportation Alliance
Safety & Health Council of North Carolina
SEMI
Southern Association of Colleges & Schools Commission on Colleges, Inc. (SACSCOC)
Southern Association of Colleges with Associate Degree (SACAD)
Southern Association of Collegiate Registrars and Admissions Officers (SACRAO)
Steel Erectors Association of America
Triangle Technology Executives Council
University and College Designers Association (UCDA)
US Green Building Council (USGBC)

FOUNDATION

The Wake Technical Community College Foundation manages an array of resources that are critical to the success of the college: corporate investments, foundation grants, alumni and employee contributions, and financial and in-kind support from many other friends of the college. These resources allow Wake Tech to meet instructional and institutional needs and continue to offer top-quality, affordable education and training to the Wake County region.

Gifts are used for program support, instructional technology and equipment, institutional priorities and opportunities, and to promote student success and employee innovation. All private gifts to Wake Technical Community College should be directed to the Wake Technical Community College Foundation, a tax-exempt, 501(c)(3) nonprofit corporation, operating exclusively for the benefit of the college and Wake Tech students.

Donors or advisors should send correspondence to:

Wake Technical Community College Foundation
9101 Fayetteville Road
Raleigh, North Carolina 27603-5696
919-866-6250
foundation@waketech.edu

Website: http://foundation.waketech.edu

ADMISSIONS

OPEN DOOR POLICY
Policy
Wake Technical Community College is subject to the Open Door Admission Policy established by the State Board of Community Colleges. This policy provides for admission of any legal resident of the United States who is a high school graduate or at least 18 years old, or an emancipated minor.

This policy is based on the belief that the college has something to offer at all educational levels and that through effective guidance any person can find his or her place in the proper educational program.

Wake Technical Community College reserves the right to refuse admission to any applicant who has been suspended or expelled for disciplinary reasons from another educational institution. Additionally, the College reserves the right to refuse admission to any applicant who poses an articulable, imminent, and significant threat to others. Such applicants will be evaluated on a case-by-case basis.

Procedures
Suspension or Expulsion from Another Educational Institution
An applicant who has been suspended or expelled for disciplinary reasons from another educational institution or who poses an articulable, imminent, and significant threat to others shall be evaluated as follows:

An evaluation committee composed of WTCC Police staff, Associate VP for Enrollment Services, curriculum representative and two Enrollment & Student Services representatives, shall review information presented by the Associate Dean of Admissions. The Associate VP for Enrollment Services serves as the chair and recorder of the committee. At their discretion, the committee may request an interview with the applicant. The committee will make a recommendation to the President through the Senior Vice President for Enrollment and Student Services within seven (7) business days of their convening and review of the information presented. The President or his designee will make the final admission decision. Upon receiving the President's decision, the Associate Vice President for Enrollment Services will notify the applicant.

State Authorization for Distance Education
Online education is an integral part of Wake Technical Community College's program offerings. Wake Tech is a member of the National Council for State Authorization Reciprocity Agreements (NC SARA) which allows students in participating states and territories to enroll in online distance education classes. For more information, visit https://www.waketech.edu/student-services/online-learning/technical-support/state-authorization.

NON-DISCRIMINATORY POLICY
Wake Technical Community College offers equal employment and educational opportunities to all employees, students, prospective employees, and prospective students. Equal educational opportunity and compliance with the American with Disabilities Act are viewed by the Board of Trustees as an integral part of the mission and purpose of Wake Technical Community College.

Questions concerning this policy should be addressed to:

Student Matters
Office of Student Conduct
   Southern Wake Campus: 919-866-6169
   Scott Northern Wake Campus: 919-532-5663

Employee Matters
Director of Employee Relations & Talent Management, 919-866-5934

STEPS TO ENROLLMENT

1. Complete the North Carolina Residency Determination at ncresidency.org
2. Apply online at admissions.waketech.edu
3. Activate your student account at my.waketech.edu
4. Submit an official high school transcript or high school equivalency transcript for review and placement into a particular program of study/coursework. Subsequent registration will be blocked if transcripts are not received within 30 days of the start of the first semester.
5. Submit official college transcripts for placement or consideration of transfer of credits in your chosen program of study.
6. Apply for financial aid, if needed. Official transcripts are required before awarding of financial aid. If your high school transcript is not from a valid institution, it may affect your ability to receive financial aid.
7. Attend orientation.
8. Meet with an advisor for course selection.
9. Complete the E-Learning Module if enrolling in online courses.

10. Register and pay for classes.

Anyone wishing to attend Wake Tech must complete the online Application for Admission at http://admissions.waketech.edu/. The application should indicate whether the applicant is a curriculum student applicant or a visiting student applicant, as follows:

- A **curriculum student applicant** is any applicant pursuing admission into a degree, diploma, or certificate program. Curriculum student applicants must complete the standard online Residency, Application for Admission and submit official high school transcripts if required for placement into a program of study. Awarding of financial aid will be blocked if official transcripts are not on file. Subsequent registration will be blocked on the 30th day of the semester if official transcripts are not received by the college.

- A **visiting student applicant** is any applicant planning to enroll in one or more curriculum courses but not pursuing admission into a degree, diploma, or certificate program. Visiting student applicants must complete the standard online Residency, Application for Admission and meet all course prerequisites. To verify completion of prerequisite courses, applicants must complete the Visiting Student Prerequisite Approval Form and provide official or unofficial transcripts before registering.

   Note: Generally, the visiting student status is limited to 16 semester hours. Visiting students are not eligible for financial aid or veterans' benefits, nor are they permitted to earn any degree, diploma, or certificate awarded by the college. Students wishing to change from visiting student to curriculum status must complete the enrollment steps as outlined above for a curriculum student applicant.

- **High School Programs/Career and College Promise:** The Career and College Promise program provides dual enrollment educational opportunities for eligible North Carolina high school students. Visit ccp.waketech.edu for more information about eligibility, admissions, and enrollment.

TRANSCRIPTS FOR INCOMING STUDENTS

Curriculum student applicants must have official transcripts of high school and college work (if applicable) submitted directly to Wake Tech. Acceptance by Wake Tech is conditional, based on receipt of a final, official high school transcript.

Awarding of financial aid may be blocked if an official high school transcript is not on file. Subsequent registration will be blocked on the 30th day of the semester if official transcripts are not received by the college. Transcripts submitted become the property of the college upon receipt and may not be copied for student use.

High School: Applicants who are high school seniors can have their school submit a transcript showing work through the first semester of the junior year for admission, as soon as possible after the semester has ended, and a final transcript showing graduation at the close of school.

GED/High School Equivalency: Applicants who have a high school equivalency certificate should request that an official copy be sent directly to Wake Tech. Applicants can obtain documentation from the High School Equivalency Office in the state where the certificate was issued.

College: Applicants who wish to transfer credits to Wake Tech must submit official transcripts for an evaluation to be completed.

Applicants presenting transcripts of completed associate degrees or higher will not need to submit high school transcripts.

Applicants should submit transcripts by mail to:
Wake Tech Community College
Admissions Office
9101 Fayetteville Road
Raleigh NC 27603
Or send electronically to transcripts@waketech.edu

PLACEMENT TESTING (RISE Test)

The RISE test is customized for NC by NROC – EDREADY. The test is used to determine readiness and skill level in English, reading, writing, and math. It is administered to applicants pursuing a degree, a diploma, and certain certificates who did graduate from a U.S. high school and who have no other admission criteria for placement. Test results are used to place students in the appropriate class level and to determine if transition instruction is needed.

ADMISSIONS

Students are exempt from taking the RISE test or portions thereof and are placed based on the following criteria. The criteria is verified through official transcript or score report:

1. Graduation from any U.S. high school with an unweighted GPA.

2. SAT scores prior to 1/1/2012 of 510 reading or writing and 510 math. SAT scores prior to 3/1/2016 of 500 or higher in critical reading or writing and 500 or higher in math; or SAT scores after 3/1/2016 of 480 or higher in evidence based reading and writing and 530 or higher in math. Scores must be less than ten (10) years old at the time of application to Wake Tech; **or**

3. ACT scores earned after 3/1/2014 of 22 or higher in reading or 18 or higher in English, and 22 or higher in math will allow college level placement. ACT scores of 16-17 in English, 20-21 in reading, and a 20-21 in math will allow placement with an addition of a 1 hour transition support course. ACT scores must be less than ten (10) years old at the time of application to Wake Tech; **or**

4. An Associate's degree or higher earned from a regional or nationally accredited institution;

5. A grade of "C" or better in college-level English and math courses earned from a regional or nationally accredited institution.

6. Placement may be based on High School Equivalency (HSE) for applicants who have HSE scores taken January 2014 or later with scores shown below:
*GED: 145 or higher on all subject areas
*HISET: 15 or higher on all subject areas with a 4 on essay

If no placement measure exists an applicant may request to take the RISE placement test or begin in transition courses.

Students who are non-native speakers of English will take the ACCUPLACER-EFL test and may be required to enroll in English as a Foreign Language (EFL) courses. Additional information about EFL is available in the Student Services section of this catalog under Academic Support and Opportunities.

Applicants who have been notified that they need placement testing may schedule an appointment by emailing placementtest@waketech.edu.

To prepare for computerized placement testing, applicants can review test preparation materials at http://testingcenter.waketech.edu/.

PROGRAM PLACEMENT REQUIREMENTS

Associate Degree and Diploma Programs
- High school diploma or equivalent
- Placement inventories, when eligible, to aid in course placement and academic guidance
- Medical examination for certain Health Sciences programs
- Additional minimum requirements in some programs (contact admissions at 1-800-WakeTech for more information)

Certificate Programs
- High school diploma or equivalent for some certificate programs (contact admissions at 1-800-WakeTech for more information)
- Placement inventories to aid in course placement, and academic guidance
- Medical examination for certain Health Sciences programs
- Additional minimum requirements in some programs (contact admissions advisor at 919-866-5000 for more information)

Upon admission, students must meet current program requirements. In some instances, licensing or employment in certain fields may be limited by an individual's prior criminal record. Prospective students should check with an academic advisor or appropriate academic department head to determine if such sanctions apply.

ADMISSIONS

COURSE REGISTRATION
Students who have been admitted to and have enrolled in a curriculum degree, diploma, or certificate program will receive information about course planning and registration from **an assigned advisor**, based on the student's program of study

Visiting students (those who have not declared a program of study) are not assigned an advisor but may seek assistance with course planning or registration from the Advising Office as needed.

Registration is conducted online via Self Service: http://register.waketech.edu.

- After logging in, Click on the "**Academics**" icon (4th icon down) in the left navigation
- Click on "**Student Planning**"
- Select "**Plan & Schedule**"

More detailed information is available in my.waketech.edu by clicking on "Registration Guide/Self Service Steps".

Access to the registration system **may be blocked** if a financial or academic hold has been placed on a student's records. Some classes may require special permission to register from the curriculum dean. Visit Wake Tech's Registration and Student Records Services website http://registrar.waketech.edu.

Registration will be canceled if payment is not received by the deadline listed for the period for which the student has registered. Students are responsible for paying for all scheduled classes by published deadlines. Wake Tech no longer mails invoices. Payment amounts and deadlines are available from online: https://www.waketech.edu/student-services/registration-student-records/payment-deadlines. Students are strongly encouraged to pay tuition and fees by credit or debit card at the time of registration to avoid waiting in line for the cashier.

Currently-enrolled degree, diploma, and certificate students are notified of upcoming registration periods through the academic calendar, on the Student Portal, by notices around campus, by faculty advisors, and online through the Registration and Records website: https://waketech.edu/student-services/registration-student-records/payment-deadlines/priority-dates. The student is responsible for scheduling an appointment with an advisor.

Course Load
The maximum course load is 20 credit hours per term. To carry more than the maximum load, students pursuing a degree, diploma, or certificate must obtain an electronic override permission from the dean or the dean's designee.

LIMITED ENROLLMENT PROGRAMS
Some Wake Tech programs have more applicants than available space, as follows:

Agricultural Systems
Associate Degree Nursing
Automotive Systems Technology
Computed Tomography
Construction Equipment Systems
Cosmetology
Dental Assisting
Dental Hygiene
Diesel & Heavy Equipment
Emergency Medical Science
Esthetics
Heavy Equipment Operator
Healthcare Simulation Technology
Magnetic Resonance Imaging Technology
Mammography
Medical Assisting
Medical Laboratory Technology
Medical Sonography
Pharmacy Technology
Phlebotomy
Radiography
Therapeutic Massage

These "limited enrollment" programs may have unique admission requirements and may use additional criteria, such as postsecondary coursework, related work experience, or professional certification, for selecting applicants. Limited enrollment programs may also have their own policies, procedures, schedules, and deadlines, which are subject to change. Interested applicants should begin by contacting the Admissions Office and talking to an admissions advisor, who will answer initial questions and guide them through the next steps in the process.

ENGLISH AS A FOREIGN LANGUAGE (EFL)

The English as a Foreign Language (EFL) department offers academic English courses for individuals whose native language is not English and who wish to study at the college and university level in the United States. These courses comprise an intensive English language program that focuses on language for academic purposes; courses are offered on four proficiency levels in grammar, composition, reading, and listening/speaking with an additional fifth level in composition. See the course descriptions listed as EFL in the course descriptions sections of this catalog for specific course information. This program meets the requirements for those students who have a student visa. Prospective students who wish to obtain a student visa should go to the International Student website at http://international.waketech.edu. Tuition rates are the same as those for other curriculum classes offered at Wake Tech.

Prospective students can call 919-866-6700, email: efl@waketech.edu for more information or visit the EFL website: http://efl.waketech.edu for more information about the EFL program.

INTERNATIONAL STUDENTS

The International Student Office assists international student applicants who wish to apply for a student (F-1) visa. The office assists F-1 status students in employment authorizations, reinstatements, extensions of I-20 expiration date, transferring I-20's to a SEVP certified institution, travel abroad, and re-entry procedures and with documentation of F-1 status. In addition, international students may seek advice and referral information on all aspects of living and studying in the United States. All international (F-1) students and other (non-immigrant) visa holders who want to convert to F-1 status are required by USCIS regulations to have a current record of local and foreign addresses on file with the college.

Information about the application process for international students can be found at http://international.waketech.edu/.

READMITTED STUDENTS

A student who withdraws from the college for reasons **other than** academic or administrative may apply for readmission for any subsequent semester. An applicant for readmission who has not attended for **one year or more** must submit a new application, and upon readmission, must meet current program requirements.

A student who has been dismissed for academic or administrative reasons may re-enroll with the approval of the Associate Vice President for Enrollment Services and the division dean. The student must request re-enrollment in writing from the Office of Student Conduct.

Readmission, re-enrollment, and any attendance conditions or restrictions are at the discretion of the college.

Health Sciences programs may have additional readmission requirements and policies; they can be found in the Student Policy Handbook for each Health Sciences program.

VACCINATION POLICY

Students at Wake Technical Community College are not required to provide documentation of immunizations for admission to the college; however, documentation is required in specific programs, as follows:

- All students enrolled in curriculum health sciences and continuing education healthcare courses **in which clinical procedures are performed** must provide documentation of required immunizations, titers, and screening for tuberculosis.

- All students in Basic Law Enforcement Training must provide documentation of current tetanus vaccination and undergo tuberculosis screening prior to admission, if required by a physician.

- All F-1 students must complete the International Student Medical Form documenting **tuberculosis screening within the last 12 months**. Any students with a positive screening must also provide a report of a complete chest x-ray within the last 12 months.

ADMISSIONS

WE ARE HERE TO HELP!

Locations
Southern Wake Campus, 9101 Fayetteville Rd. (401 South), Raleigh, NC 27603
Scott Northern Wake Campus, 6600 Louisburg Rd., Raleigh, NC 27616
Perry Health Sciences Campus, 2901 Holston Ln., Raleigh, NC 27610
Western Wake Campus, 3434 Kildaire Farm Rd., Cary, NC 27518
Public Safety Education Campus, 321 Chapanoke Rd., Raleigh, NC 27603
RTP Campus, 10908 Chapel Hill Rd., Morrisville, NC 27560

<u>Curriculum Admissions</u>
Should assistance be needed, please feel free to contact an Admissions Information Specialist at (919) 866-5420 or find information online at http://admissions.waketech.edu

<u>Registration and Student Records Services</u>
Location: Southern Wake Campus, Student Services Building, Room 243
Phone: (919) 866-5700

<u>Advising</u>
Phone: (919) 866-5474 or advising@waketech.edu

Remember to check the online College Catalog for the most up-to-date information at http://www.waketech.edu/student-services/catalog

REGISTRATION AND RECORDS

CURRICULUM CLASS SCHEDULES
Curriculum class schedules are available online before the start of the upcoming semester through Plan & Schedule; Login to Self-Service: http://selfserve.waketech.edu.

To view the schedule:

1. Click on the **Academics** icon (4th icon down) in the left side navigation
2. Select **Course Catalog**
3. Look for the desired course(s); you can also click on **Advanced Search** to search with additional criteria

Instructions and help are available at https://my.waketech.edu/login.php.

CURRICULUM REGISTRATION DATES
Curriculum students begin registration at different times, depending on their status as:

1. Newly-admitted students;
2. Returning degree/diploma/certificate-seeking students, based on the number of credits completed at Wake Tech;
3. Non-degree-seeking students (or
4. High school/Career & College Promise/early admission students.

Registration priority dates and other important registration and payment dates can be found on the Registration and Records website: http://www.waketech.edu/student-services/registration-student-records.

Please note that calendars are subject to change.

RESIDENCY CLASSIFICATION
The state of North Carolina subsidizes tuition at NC public colleges and universities for all students whose permanent legal residence, or domicile, is in North Carolina. Students pay "in-state" or "out-of-state" tuition based on a residency determination process. The statute places the burden of proof on the student to establish, by a preponderance of evidence, that they are a bona fide domiciliary rather than mere residents of North Carolina.

Effective October 23, 2017, Wake Tech added the Residency Determination Service (RDS) process to its admission procedures. All prospective applicants must complete the online residency determination before they can apply to the college. Most will be required to complete only the Initial Consideration process. Current students whose circumstances change or who believe their status is incorrect must complete the Reconsideration and Appeal process. **Students are responsible for notifying Registration and Records if a change in residency status occurs. Wake Tech can update a student's tuition statement due to a change in residency within a given term; however, we cannot adjust for previous terms.**

Upon completion of the residency determination process, students will be issued a Residency Certification Number (RCN) that can be used at all public colleges in North Carolina.

All residency determinations will be made by RDS and not the college. However, Wake Tech staff may be able to assist students with employer sponsorships, military benefits, and other special exceptions allowed by the state.

More information about residency requirements and the NC Residency Determination Service is available at www.ncresidency.org.

TRANSCRIPT REQUESTS
Wake Tech Registration and Student Records is responsible for all student records and for the protection of student rights as provided by the Family Education Rights and Privacy Act (FERPA). Transcripts of academic record will be issued only with written authorization by the student.

Official copies of transcripts may be obtained in person at Southern Wake, Scott Northern Wake, Research Triangle Park (RTP) and Perry Health Sciences campuses with a photo I.D. Transcripts may also be obtained by mail from Registration and Student Records, Wake Tech Community College, 9101 Fayetteville Road, Raleigh, NC 27603; download an order form online at http://www.waketech.edu/student-services/registration-student-records/how/order-transcripts.

Wake Tech also offers online transcript ordering, including secure pdf transcripts in partnership with National Student Clearinghouse. A direct link can be found at http://www.waketech.edu/student-services/registration-student-records/how/order-transcripts

REGISTRATION AND RECORDS

Mail and online transcript requests will be processed within two business days. Official Wake Tech transcripts are **$5 per copy** when ordered directly with Wake Tech; online requests through the National Student Clearinghouse will incur a service fee. Unofficial copies are available at no charge; however, pursuant to State Board of Community Colleges Code 200.2, no transcripts will be provided to students with outstanding debt to the college.

PRIOR LEARNING

Prior learning is a means by which students can satisfy graduation requirements by applying transfer work and credits from placement examination. When granted, students are given an equivalency for the prior learning work meaning that it is deemed equivalent to a specific Wake Tech course. However, no academic credit is awarded, and thus the equivalency does not count toward the student's grade point average.

Equivalencies will be noted on the official transcript as transferred equivalencies or non-course equivalencies. Equivalencies will be taken into consideration for program completion at Wake Tech only. Acceptance of prior learning work at one college does not necessarily mean that acceptance will be given at every college. Students are encouraged to review the prior learning policies at any college they may be considering to transfer or enroll.

Department and Special Course Challenge Examinations

Students seeking credit for non-transferable learning experiences for any course, except College/University Transfer and Pre-Curriculum may request a challenge examination. Subject matter for which credit is sought must be equivalent to the course(s) being challenged. Challenge examination requests will not be accepted for incomplete or failed course work. **Note: Not all courses can be challenged. Please refer to divisional staff for specifics on courses to be challenged within their division**.

Requests must be made with full justification to the appropriate academic dean or designee at the time of registration. Upon approval, students will be directed to contact the Individualized Learning Center on Southern Wake Campus or the dean or department head to schedule the challenge examination. Students who successfully challenge a course will receive credit for the course with a grade of "X". The course will not enter into grade-point average computations, but will count toward total hours earned.

Students challenging the Spanish (SPA 120) class are required to submit a challenge form. This course may be challenged at their first class meeting or by appointment with the department head for foreign languages. Students who challenge the SPA 120 class will receive non-course work equivalency for the course. No grade will be recorded. The equivalency will not enter into the grade-point average computation.

Students should make every effort to start the challenge examination process as soon as they register for a course, as some divisions have restrictive challenge examination procedures.

Students must take all challenge examinations no later than the 10% point of the semester or term. Results of challenge examinations will be mailed after the exams have been graded and results forwarded to the Registrar's Office.

Students must register and pay tuition for courses to be challenged and must submit requests for challenge examinations after registering. To receive credit on the transcript record, it is necessary to remain registered for a class that has been challenged successfully. Students may not challenge ENG 111, 112, 113, and 114 or any other College/University Transfer courses; instead, students may take the appropriate CLEP, AP, or DANTES exam.

Most challenge exams are administered within the appropriate department, however, a select number of courses, including BUS 110, 121, 137, 147 and 153 may be taken in the Individualized Learning Center (ILC) on Southern Wake Campus. Students challenging these select courses must obtain approval from the division dean and contact the ILC (919-866-5276) to schedule an appointment to take the exam. Both the division dean-approved form # 610 and student photo identification are required for ILC-administered challenge exams.

College Level Examination Program (CLEP) Credit

The College Level Examination Program, or CLEP, gives students an opportunity to earn college credit for knowledge acquired outside the classroom. All CLEP credit is evaluated on the basis of the receiving institution's policies. To view Wake Tech equivalencies for CLEP visit TES, our transfer equivalency library, and type College Board into the Institution Search box. Please be sure to notice the minimum score in the note field for each equivalency.

Visit College Board at www.collegeboard.com/clep for more information about CLEP testing.

Advanced Placement (AP) Credit

The College Entrance Examination Board sponsors an advanced placement program that enables high school students to complete college-level courses and to demonstrate college-level achievement through examinations. Wake Tech will award non-course work equivalency for students who meet minimum scores on AP exams according to the following chart. These equivalencies can then be applied toward the student's graduation requirements.

Note to students pursuing College Transfer degrees (Associate in Arts or Associate in Sciences, etc.) or students intending to transfer courses to UNC-system schools: "Advanced Placement (AP) course credits awarded for a score of three or higher, are acceptable as part of a student's successfully completed general education core under the Comprehensive Articulation Agreement. Credit for two successive courses can only be awarded with a score of five.

Only one course of credit may be awarded for the AP Calculus AB exam. A score of three may award credit for MAT 263 (four credit hours) while a score of four or five may award credit for MAT 271 (four credit hours). A score of three on the Calculus BC may award credit for only MAT 271 (four credit hours). A score of four or five on the Calculus BC exam may award credit for two courses, MAT 271 and MAT 272 (for a total of eight credit hours). Students who receive AP course credit at a community college but do not complete the general education core will have AP Credit awarded on the basis of the receiving institution's AP policy. Transferred-in courses from institutions other than North Carolina community colleges are not a part of this agreement.

To view Wake Tech equivalencies for AP credit visit TES, our transfer equivalency library, and type College Board into the Institution Search box. Please be sure to notice the minimum score in the note field of each equivalency.

Dantes Standardized Subject Tests (DSST)

The DANTES (Defense Activity for Nontraditional Education Support) program is a testing service conducted by Educational Testing Service for the Department of Defense. DANTES' mission is to help service members obtain credit for knowledge and skills acquired through non-traditional educational experiences. DANTES Subject Standardized Tests provide a way for military personnel to obtain credit by examination for knowledge of material commonly taught in college courses.

To view Wake Tech equivalencies for DANTES visit TES, our transfer equivalency library, and type DSST Program Exams into the Institution Search box. Please be sure to notice the minimum score in the note field of each equivalency.

Joint Services Transcript (JST)

Prospective students who have military experience, may be able to obtain some equivalencies toward an AAS degree, diploma, or certificate for training received in military services. Individuals seeking equivalency for military training must have an official Joint Services Transcript (JST) sent to the college.

The JST is a uniform transcript of all military training and experiences for service members in all branches and includes Army Officer and Warrant Officer training, joint military training conducted by other services, and Defense Activity for Non-Traditional Education Support (DANTES)-funded test scores. To obtain your official JST, visit: https://jst.doded.mil/official.html. The appropriate dean or department head will evaluate the transcript, and equivalency will be awarded as appropriate.

Foreign Language Placement Testing

The main objective of foreign language placement exams is to determine the best level for students to continue their French or Spanish language studies at Wake Tech. It is to the students' advantage to be placed into the appropriate course allowing them to improve their language skills at Wake tech, so that upon transfer, students may successfully continue their studies at a four-year institution.

Even though credits earned through the placement exam count towards graduation requirements at Wake Tech, students are strongly encouraged to meet with an Academic Advisor to determine how credits earned through placement may affect their transfer status, degree completion, and financial aid. The implications of credits earned through the placement exam may vary based on individual student pathways to transfer.

Students may be eligible to take a foreign language placement exam if they fall into one or more of the following categories:

1. The student has recently earned a grade of B (87%) or better consistently in three (3) courses of high school study of the same language.
2. The student has recently lived or studied in a French or Spanish speaking country, for more than six (6) months.
3. The student has interacted and/or communicated in French or Spanish on a daily basis at work or in another formal setting.

REGISTRATION AND RECORDS

Information about French and Spanish Placement Exams
Note: Students who have completed a curriculum foreign language course at Wake Tech are not eligible to take placement exams.

Placement exams are free to Wake Tech students; they may be taken only once. Exams are given using computerized adaptive software. The exam length is 5-40 minutes, and results are given immediately. Students must present a photo ID.

Students who successfully place out of FRE and/or SPA 111/181 will need to withdraw from that class and enroll in the appropriate level of language to study. Alternatively, they may enroll in another class that they may need to meet their degree requirements at Wake Tech. If students have questions regarding which classes they should take for their degree program at Wake Tech, they need to consult with an Academic Advisor.

Certified Administrative Professional (CAP)
Students applying for entry into: Office Administration, Office Administration/Legal, and Medical Office Administration, programs will be granted equivalency for the courses listed in TES, our transfer equivalency library, upon documented proof of exam completion.

To view Wake Tech equivalencies for Certified Administrative Profession (CAP) visit TES, our transfer equivalency library, and type Certified Administrative Professional into the Institution Search box.

Medical Coding Certification
Students with a CPC, CCA or CCS-P rating within the last six years will receive credit for the courses listed in TES, our transfer equivalency library.

To view Wake Tech equivalencies for Medical Coding visit TES, our transfer equivalency library, and type Medical Coding into the Institution Search box.

Computer Concepts
The following illustrates curriculum credentials which will be awarded for third party credentials including Microsoft Certification, Cisco Course Completion and Certifications. As well as CompTIA, HDI, Information Tech Infrastructure Library (ITIL), Red Hat and VMWare certifications.

To view Wake Tech equivalencies for Computer Concepts visit TES, our transfer equivalency library, and type Computer Concepts into the Institution Search box.

Associate Degree Nursing (ADN): LPN to ADN Advanced Placement Option
The LPN to ADN Advanced Placement Option awards eligible licensed practical nurses 19 credit hours toward the Associate Degree Nursing program, pending successful completion of core nursing courses. Applicants must meet all standard admission requirements for the Associate Degree Nursing program and must have completed BIO 168, BIO 169, BIO 175, ENG 111, PSY 150, PSY 241, SOC 210.

Students should contact the Associate Degree Nursing Department Head or a Health Science Admissions Counselor with questions about admission criteria.

To view Wake Tech equivalencies for LPN to ADN visit TES, our transfer equivalency library, and type LPN to ADN Advanced Placement into the Institution Search box.

Emergency Medical Science Advanced Placement through Certification
Students may receive prior learning through certification. Students should contact the Department Head of EMS with questions about additional prior learning.

To view Wake Tech equivalencies for Emergency Medical Services Certifications visit TES, our transfer equivalency library, and type Emergency Medical Services into the Institution Search box.

Carolinas Associated General Contractors Articulation Agreement
Wake Tech will award equivalencies for specific CAGC courses in partial fulfillment of program requirements leading to an Associate in Applied Science degree, diploma, or certificate in Construction Management Technology. The college will award equivalencies as listed in visit TES, our transfer equivalency library, after review of an official transcript from CAGC.

To view Wake Tech equivalencies for the Carolinas Associated General Contractors Articulation Agreement visit TES, our transfer equivalency library, and type Carolinas Associated General Contractors into the Institution Search box.

REGISTRATION AND RECORDS

International Baccalaureate (IB) Credit
Students may receive credit for achieving acceptable scores on the International Baccalaureate (IB) examinations. To view Wake Tech equivalencies for IB Credit visit TES, our transfer equivalency library, and type International Baccalaureate into the Institution Search box. Please note the minimum score in the note field of each equivalency.

Business and Industry Equivalencies
To view Wake Tech equivalencies for Business and Industry visit TES, our transfer equivalency library, and type Business and Industry Equivalencies into the Institution Search box. Credit can also be awarded at the discretion of the dean or department head.

SAS Base Programmer Certificate
Students applying for entry into the Business Analytics program will be granted equivalency for earning the SAS Certified Base Programmer certificate.

To view Wake Tech equivalencies for the SAS Base Programmer Certificate visit TES, our transfer equivalency library, and type SAS Base Programmer into the Institution Search box.

High School Articulation Agreement
The North Carolina Department of Public Instruction and the North Carolina Community College System have a statewide articulation agreement through which students may be eligible for college credit following the completion of identified Career Technical Education (CTE) courses in high school. This agreement creates a systematic and seamless process through which students can move from high school to community college without duplicating efforts or repeating courses.

Criteria used to award college credit for identified CTE courses include the following:

- Final grade of B or higher in CTE course.
- A RAW score of 93 or higher on standardized CTE post-assessment test. (score revision effective fall 2012)
- To receive articulated credit, students must enroll at the community college within two years of his or her high school graduation date.
- Credit is not automatically awarded, students must visit the Registrar's Office at Wake Tech to request the credit be applied toward their Wake Tech record.

The student's official high school transcript must include the CTE post-assessment scores.

Community college officials are responsible for verifying and accepting the articulated courses on the high school transcript for college credit.

TRANSFER CREDITS

Transferred Coursework
Wake Tech considers courses for transfer equivalency from other colleges or accredited collegiate institutions through a commission whose responsibility is accrediting degree-granting institutions classified as collegiate, and that is housed in a regional or national accrediting agency.

Only those courses with a grade of "C" or higher will be considered for transfer. To receive credit for a specific Wake Tech course, the transferring course must be equivalent in content (and in college/university transfer credit hours) to a Wake Tech course. Official transcripts from accredited institutions will be reviewed against established standard equivalencies and transfer equivalency recommended by the appropriate dean or a designee.

All decisions about transfer equivalency are discretionary on the part of the college: whether equivalency will be allowed, how much will be allowed, and how it will be applied. In exercising this discretion, the college will apply principles recommended by its regional accreditor and national higher education organizations that set standards for transfer credit. These principles focus on the level, content, quality, and comparability of a course and its relevance to the student's intended program of study.

It is not necessary for students to request a review of transferred coursework. Students should submit official transcripts to the Admissions Department. Transcripts will be forwarded to the Registrar's Office for initial review against established standard equivalencies. Once the transfer credit review is complete, the accepted credit is applied and noted on the student's academic record. Students may review their transfer credit on their transfer credit summary.

REGISTRATION AND RECORDS

Please note that a granted equivalency does not mean that it satisfies a graduation or program requirement; that depends on whether the course is listed as a requirement on the curriculum schedule for the specific program (major) in which the student was enrolled when admitted to the college. **The academic dean has the option of moving the student to a more current version of the program of study (curriculum schedule).** If a student changes programs (major), he or she should speak with an advisor to determine which transfer credits, if any, apply to the new program.

Example: A student may be given transfer equivalency for ACC-101 Fundamentals of Accounting, which the student completed while an accounting major at XYZ College. However, the student is now enrolled at Wake Tech in Nursing, and ACC-101 is not a required course in Nursing. Therefore, the course would not be applicable toward graduation requirements at Wake Tech.

Transfer credit does not factor into a student's curriculum GPA calculation. A grade of TA, TB, or TC is awarded for the transferred credit internally to aid with financial aid evaluations. These transfer credit grades do not appear on the student transcript. Students must complete at least 25% of the hours required for a degree, diploma or certificate in residence at Wake Tech.

Transfer Equivalency Practices

As the Commission on Colleges of the Southern Association of College and Schools (SACSCOC) Transfer of Academic Credit position paper states: "The Commission supports institutional autonomy in determining its own standards for transfer of academic credit while also encouraging institutions not to impose artificial impediments or meaningless requirements on the transfer process. The accreditation standards of this Commission require member institutions to analyze credit accepted for transfer in terms of level, content, quality, comparability, and degree program relevance."

The "Joint Statement on the Transfer and Award of Credit" created by the American Association of Collegiate Registrars and Admissions Officers, the American Council on Education, and the Council for Higher Education Accreditation establishes similar standards. These national organizations have identified three fundamental considerations:

1. the educational quality of the learning experience which the student transfers;
2. the comparability of the nature, content, and level of the learning experience to that offered by the receiving institution; and
3. the appropriateness and applicability of the learning experience to the programs offered by the receiving institution, in light of the student's educational goals.

It is Wake Tech's practice to accept the following categories of courses as meeting the considerations outlined above:

1. matching courses from North Carolina community colleges;
2. equivalent courses from participants in the North Carolina Comprehensive Articulation Agreement;
3. comparable courses from regionally- and nationally-accredited institutions of higher education

These categories also meet requirements of the State of North Carolina and its agencies; these requirements are detailed in each section. Courses that do not fit into one of these three categories (including foreign transcripts) will be considered individually by the director of the program to which the student is seeking admission.

Matching Courses from North Carolina Community Colleges

In accordance with the State Board of Community Colleges Code (1D SBCCC 400.97) which reads, "When a student receives credit for a Combined Course Library course, this credit shall be transferable to any college in the North Carolina Community College System," Wake Tech will accept:
- all matching courses from other NC community colleges for transfer credit;
- matching courses from other NC community colleges to meet Wake Tech program and prerequisite requirements as stated in the college's current official catalog.

Equivalent Courses from Participants in the NC Comprehensive Articulation Agreement

The Comprehensive Articulation Agreement between the University of North Carolina System and the North Carolina Community College System, as revised in 2014, reads (part IV, section (B) (6)), "Transfer credit for courses that originate at a UNC institution or independent college or university that is part of the CAA is acceptable as part of a student's successfully-completed general education core or associate in arts or associate in science program under the CAA."

Wake Tech's policy is to also apply this guideline to associate in applied science programs.

Wake Tech will accept:
- all CAA participant college and university courses equivalent to courses on the CAA Transfer Course List for transfer credit;

- CAA participant college and university courses equivalent to courses on the CAA Transfer Course List to meet Wake Tech program and prerequisite requirements as stated in the college's current official catalog.

Comparable Courses from Regionally- and Nationally-Accredited Institutions of Higher Education
Program directors will as appropriate review courses from regionally- and nationally-accredited institutions of higher education to establish that their level, content, and quality are comparable to a Wake Tech course, and to confirm their relevance to a student's intended program.

If a course is found to be comparable, Wake Tech will accept the course:
- for transfer credit; and
- to fulfill program and prerequisite requirements as stated in the current official Wake Tech Catalog.

Notes:
- These practices apply to courses with no differentiation based on delivery method.
- Equivalent or comparable courses, at minimum, must carry the same number of credit hours and the same type of instructional hours; for example, lecture and lab.
- In some instances, a course may transfer in to Wake Tech as elective credit if the course does not meet the comparability criteria stated above.
- Wake Tech may award transfer credits for fewer credit hours than a transferred course carries.

PROGRAM OF STUDY CHANGES
Students wishing to change from one program of study to another or to enroll in a second program of study must initiate the change through an advisor (available at the Southern Wake, Scott Northern Wake, Western Wake, RTP, Perry Health Sciences, and Public Safety Education campuses).

Students receiving VA benefits must also file a request for a program of study change (VA form 22-1995) with the Wake Tech Veteran Services office. Students may not be enrolled in more than two associate degree programs at one time.

CHANGES IN STUDENT DATA FOR CURRICULUM STUDENTS (Name, Address, E-Mail)
Changes in student data must be reported when they occur, in writing, to the Registration and Student Records Services Division.

To request a **name change**, the student will fill out a Permanent Record Change Form, which can be obtained on Southern Wake, Scott Northern Wake, RTP and Perry Health Sciences campuses. **Forms must be accompanied by copies of the legal document authorizing the name change in order for changes to be processed.**

Completed forms may be submitted in person, online, or by mail to Registration and Student Records, Wake Tech Community College, 9101 Fayetteville Road, Raleigh NC 27603.

Change in **address, telephone numbers, or e-mail** can be submitted via Self-Service.

If you have questions or need more information, call Registration and Student Records at 919-866-5700.

SECURITY OF STUDENT RECORDS (FERPA)
Annual Notice To Students Of Their Rights Under The Family Educational Rights And Privacy Act Of 1974 (FERPA)
Wake Technical Community College complies fully with the Family Educational Rights and Privacy Act of 1974 (FERPA) and informs students of their rights under FERPA three times per year (after census of the fall, spring, and summer terms) via their college-issued email accounts. FERPA, as amended, protects the privacy of educational records, establishes the rights of students to inspect and review their educational records, and provides guidelines for the correction of inaccurate or misleading data through informal and formal hearings. To the extent consistent with FERPA, students who seek the correction of inaccurate or misleading data or who have other complaints should follow the grievance procedure found in the college catalog. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office concerning alleged failures by the college to comply with FERPA.

Wake Tech's policy establishing its intent to comply with FERPA and procedures for implementing the provisions of FERPA are published in the college catalog. Questions about FERPA or Wake Tech's policy and procedures should be directed to the Registration and Records Services Division.

REGISTRATION AND RECORDS

Care of Records:
Policies and Procedures
Wake Technical Community College, in the execution of its responsibilities to students, maintains accurate and confidential student records. The college staff recognizes the rights of students to have access to their educational and personal records in accordance with college policy and the Family Educational Rights and Privacy Act of 1974.

Definition of "Educational Records"
The term "educational records" as defined under the provisions of FERPA includes files, documents, and other materials that contain information directly related to students and that are maintained by an educational institution or an authority on behalf of the institution.

The term "educational record," under the provision of the act, does not include the following:

1. Records of institutional, supervisory, and administrative personnel that are in the sole possession of the maker and that are not accessible or revealed to any other person except a substitute for the above-named personnel.
2. Records and documents of security officers of the institution that are kept apart from such educational records.
3. Records of students that are made or maintained by physicians, psychiatrists, psychologists, counselors, or other recognized professionals or paraprofessionals acting in their official capacity; and that are made, maintained, or used only in connection with a provision for treatment of the student and not available to anyone other than persons providing such treatment, except that such records can be personally reviewed by a physician or other appropriate professional of a given student's choice.
4. Records of alumni or former students.

Students may not review or inspect:

1. Financial records of the parents of the students or other information therein contained.
2. Confidential recommendations, if the student has signed a waiver of his or her rights of access, provided that such a waiver may not be required of the student.

Control Provisions on Student Records and Student Information
The official student file shall not be sent outside the Wake Tech Admissions Office, Registration and Student Records Services Division, Financial Aid Office, Placement Office, or Cooperative Education Office except in circumstances specifically authorized in writing by the president or appropriate vice president.

Students have the right to inspect their own records as covered by FERPA, whether recorded in hard copy, electronic data processing media, or microfilm. The registrar has been designated by the college to coordinate the inspection and review of student records. Requests to review records must be made in writing, specifying the item or items of interest. Records will be made available for review within forty-five (45) days. Upon inspection, students are entitled to an explanation of any information contained in the record.

Students may have copies of their records except:
1. When a financial "hold" exists.
2. When the copy requested is a transcript of an original or source document that exists elsewhere.

A fee of $.50 per page will be charged for copies of records other than the student's transcript(s) of academic records.

Transcripts and other information, except as provided by FERPA, are released only with the written consent of the student. Such written consent must:
1. Specify the records or data to be released, to whom it is to be released, and the reason(s) for release.
2. Be signed and dated by the student.

Disclosure of Information without the Student's Consent
Educational records will be disclosed without written consent of students to properly identified and authorized representatives of the Comptroller General of the United States, the Secretary of Education, state educational officials, and the Department of Veterans Affairs for audit and evaluation of federal and state-supported programs or in connection with enforcement of the federal or legal requirements that relate to such programs. Routine requests for student data from agencies such as the Department of Education, OEO, research agencies, and state-reporting agencies may be honored without prior approval of the student only in formats where students are not identified. In the course of fulfilling its contractual obligations with third party vendors, the college recognizes that the third party vendor is acting as a legal agent ("school official") of the college and will use the confidential information for the purposes stated in the agreement.

REGISTRATION AND RECORDS

Currently, the college has entered into agreements with vendors that include but are not limited to the following:

- Barnes and Noble Bookstores
- Higher One
- National Student Clearinghouse
- Maxient Student Conduct Manager
- College Foundation Incorporated (CFI) School Services
- Visual Zen
- Academic Works
- Hyland
- Informer
- Starfish
- MAP

Confidential information requested by anyone other than federal or state agencies as specified above will be released only under the following conditions:

1. An official order of a court of competent jurisdiction.
2. A subpoena: Students will be notified immediately by registered mail that their records are being subpoenaed.
3. At the request of the parents of a student, upon receipt of a certified copy of their most recent Federal Income Tax Form naming the student as a dependent.

Requests for confidential information will be honored without prior consent of the student in connection with an emergency, if the knowledge of such information by appropriate persons is deemed necessary (by a responsible person) to protect the health or safety of the student or others.

Faculty and administrative officers of the College who demonstrate a legitimate educational need will be permitted to look at the official student record of a particular student.

Directory Information
The college may make the following directory information available to the public unless the student notifies the registrar in writing by the end of the first week of the term that such information is not to be made available:

1. Student's name
2. Date of birth
3. Wake Tech Email Address
4. Major field of study or program
5. Dates of enrollment
6. Degrees, diplomas, or certificates received
7. College honors

The college designates the following categories of student information as "limited-use directory information":

1. Photographs, videos, or other media containing a student's image or likeness

As designated limited-use directory data, this information will not be provided to external parties not contractually affiliated with the college. Use and disclosure of this information shall be limited to (a) publication on websites hosted by, on behalf of, or for the benefit of the college; (b) publication in print for purposes including but not limited to college marketing, public relations, outreach, and press releases; at college events including but not limited to athletic events, college fairs and open houses, student organization activities, campus atmosphere, etc. (c) college officials who have access, consistent with FERPA, to such information and only in conjunction with a legitimate educational interest; and (d) external parties contractually affiliated with the college, including official third party vendors and partner institutions with a joint memorandum of understanding.

Any release of student information for public use or use by the media, except for the specified directory information and limited-use directory information detailed above, must have the prior written approval of the student(s) involved.

Record of Access
A record of access to the official student record will be maintained within the record itself. This record will show the name, address, date, and purpose of the person(s) who have been granted access. All persons who have access will be included in this record except those institutional employees who, because of the nature of their duties, have been granted access.

REGISTRATION AND RECORDS

Student's Rights to Question Contents of Official Records
A student has the right to view his official records as maintained by the college; furthermore, a student may question any inaccurate or misleading information and request correction or deletion of that data from the official records.

All such requests will be sent to the registrar and will become a part of that student's record.

All requests for correction of a student record will be acted upon within 45 days of receipt of that request. If the custodian can verify that such data is, in fact, in error, appropriate corrections will be made and the student will be notified in writing. In the event that the registrar fails to resolve the request to the student's satisfaction, the student may continue the grievance through compliance with the grievance procedure found in the college catalog. If the outcome of the grievance is in agreement with the student's request, the student will be permitted to review his record to verify that the change has been made correctly. If the student's request is denied, he will be permitted to append a statement to the record in question, showing the basis for his disagreement with the denial. Such appendages will become a permanent part of the record.

How to file a complaint
Students who feel their rights under FERPA have been violated, should submit their concern to the college through the Student Compliant Form; more information is available in the College catalog. Eligible students or parents may also file a written complaint on FERPA violations to the U.S. Department of Education at the following address:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202

CONTINUOUS ENROLLMENT

(For Students Admitted Prior to Fall 2014)
Students officially enrolled in the Associate in Arts or Associate in Science program **prior to fall 2014** must have been continuously enrolled in order to retain the conditions and protections contained in the Comprehensive Articulation Agreement in place at the time of their initial enrollment. "Continuously enrolled" means that the student must have been enrolled every fall and spring semester since their initial enrollment.

Students who have not been continuously enrolled will be subject to the Comprehensive Articulation Agreement jointly approved by the State Board of Community Colleges and the University of North Carolina Board of Governors in February 2014.

WE ARE HERE TO HELP!

Locations
Southern Wake Campus: 9101 Fayetteville Road (401, south of Garner), Raleigh NC 27603
Scott Northern Wake Campus: 6600 Louisburg Road (401, north of I-540), Raleigh NC 27616
Perry Health Sciences Campus: 2901 Holston Lane (adjacent to Wake Med), Raleigh NC 27610
Western Wake Campus: 3434 Kildaire Farm Road, Cary NC 27518
Public Safety Education Campus: 321 Chapanoke Road, Raleigh NC 27603
RTP Campus: 10908 Chapel Hill Road, Morrisville, NC 27560

Curriculum Admissions
Information is available online at http://admissions.waketech.edu or by calling an Admissions Information Specialist at 919-866-5420.

Registration and Student Records Services
Southern Wake Campus: Student Services Building, Room 243
919-866-5700 or registrar@waketech.edu

Scott Northern Wake Campus: Building B, Room 216

Online: http://www.waketech.edu/student-services/registration-student-records

Advising
919-866-5474 or advising@waketech.edu

Remember to check the online College Catalog for the most up-to-date information at
http://www.waketech.edu/student-services/catalog

FINANCIAL AID

GENERAL INFORMATION
Wake Tech Financial Aid strives to provide quality assistance to all students, and makes every effort to ensure that no qualified student is denied the opportunity to continue his or her education because of economic disadvantages. Through a program of scholarships, grants, work-study, and loans, Wake Tech Financial Aid provides students with options for supplementing their own and their families' resources to pursue their education goals. For more information on financial aid at Wake Tech, visit http://financialaid.waketech.edu.

FINANCIAL AID APPLICATION
To apply for financial aid, you must complete the **Free Application for Federal Student Aid (FAFSA)** online at **www.fafsa.gov**. The FAFSA should be completed as soon as possible on or after October 1 for the upcoming academic year. If you prefer not to complete the application online, you may complete the FAFSA in PDF format and mail it to the processing center, or request a paper FAFSA by calling the Central Processing Center at 1-800-433-3243. If you are hearing impaired, you may contact the TTY line at 1-800-730-8913.

DEADLINE & "PRIORITY" DATES
To allow time for processing and offering financial aid to students before the first day of classes, priority deadlines have been established for each semester, as follows:

If you plan to enroll:	FAFSA must be completed online by:	All paperwork due to the Financial Aid Office by:
Fall Semester	June 1	July 1
Spring Semester	October 1	November 1
Summer Term	April 1	May 1

Note: If the deadline listed above falls on a weekend or holiday, paperwork is due the next business day.

Students will be notified of their offers once all required documentation has been received in the Financial Aid Office. Students who submit applications and documentation **after** the deadlines above must be prepared to pay for their tuition, fees, and books. Students may view their financial aid information during each stage of the process through the student portal – Self Service – Financial Aid.

STUDENT RESPONSIBILITIES
To receive Federal Title IV and/or state assistance, a student must:

- Demonstrate financial need through the completion of the FAFSA.
- **Have a valid high school diploma or a High School Equivalency certificate on file with the college. (See NOTE below.)**
- Be enrolled in an eligible program of study at Wake Tech.
- Be a U.S. citizen or an eligible non-citizen.
- Have a valid Social Security Number.
- Maintain satisfactory academic progress.
- Certify that he or she is not in default on a federal student loan and does not owe money on any federal aid.
- Not have been convicted for the possession or sell of illegal drugs for an offense that occurred while you were receiving federal student aid.
- Register with Selective Service, if required.

NOTE: Students with a high school diploma determined to be invalid are not eligible for financial aid. A diploma will be deemed invalid if there is reason to believe that limited coursework was required to complete the diploma or that a fee was charged by the agency that issued the diploma.

Students with an invalid diploma may establish eligibility for financial aid as outlined below. "Enrollment" as used below is defined as officially registered and attending classes.

FINANCIAL AID

To receive financial aid funds, a student must be qualified to study at the postsecondary level. A student qualifies if he/she:

1. Has a high school diploma;
2. Completes a recognized equivalent of a high school diploma, such as a GED;
3. Completes one of the ability-to-benefit (ATB) alternatives and is either currently enrolled in an eligible career pathway program or first enrolled in an eligible postsecondary program prior to July 1, 2012.
4. Has an accredited associate's degree;
5. Has successfully completed at least 60 semester credit hours that do not result in the awarding of an associate's degree, but that are acceptable for full credit toward a bachelor's degree at any institution; or
6. Is enrolled in a bachelor's degree program where at least 60 semester credit hours have been successfully completed, including hours transferred into the bachelor's degree program.

Students will not be denied admission to Wake Tech; however, they will not be eligible to receive financial aid until one of the above items is completed. More information is available in the Financial Aid Office.

FINANCIAL AID FOR STUDENTS WITH DISABILITIES
Vocational Rehabilitation is a public service program operated through the Division of Vocational Rehabilitation, Department of Human Resources. Vocational Rehabilitation offers several financial resources to assist individuals with disabilities. Students may be eligible for financial assistance to complete a course of study to meet individualized needs. Prospective students should contact the nearest Division of Vocational Rehabilitation Services office.

FINANCIAL AID FOR TRANSFER STUDENTS
Any student who transfers to Wake Technical Community College must provide official transcripts from all schools attended, including high school. Wake Tech will evaluate all transcripts to determine if an offer of financial aid can be made.

Financial aid received at any other institution within the same academic year may reduce the amount of financial aid available to the student at Wake Tech.

Students wising to repeat courses for which they have already received transfer credit will have to be evaluated on an individual basis with consideration given to previous aid received in accordance with federal repeated coursework regulations.

GRANTS
Wake Technical Community College offers several different federal and state grant programs. Grants are gifts of financial aid and as such do not generally have to be repaid as long as a student remains enrolled each semester. Students who withdraw completely may be required to repay a portion of federal grant funds received.

FEDERAL GRANT PROGRAMS

1. **Federal Pell Grants**
   Student must be a U.S. citizen or permanent resident enrolled in an eligible program, demonstrate financial need, and meet all other eligibility requirements. Students must complete the Free Application for Federal Student Aid (FAFSA). For 2021-22, annual offers range from $672-$6,495, depending on enrollment status. The maximum PELL-eligible Estimated Family Contribution (EFC) is $5,846. Offer ranges are subject to change based on congressional action.

2. **Year Round Pell**
   Beginning with 2017-18 academic year, an eligible student may now receive full Federal Pell Grant for the summer term (Ex. Summer 2018) even if they received a full Federal Pell Grant during the fall and spring semesters. Year-round Pell allows students to receive up to 150 percent of a regular grant offer over the course of the academic year so that they can continue taking classes in the summer and finish their degrees faster than they would otherwise.

   With careful planning, Pell Grant recipients may take advantage of this new regulation to earn their degree faster. However, students should keep in mind that the summer term is shorter (8-10 weeks) than fall and spring semesters (16 weeks). Students should consult with their academic advisor to develop a manageable course load for the shorter summer term. Just because students may be eligible for full-time Pell Grant funds DOES NOT mean students are required to carry a full-time load.

FINANCIAL AID

Note: The provisions of the new law state that any Pell Grant received will be included in determining the student's Pell Grant duration of eligibility and Lifetime Eligibility Used (LEU). To be eligible for additional Pell Grant funds:

- Student must be otherwise eligible to receive Pell Grant funds for the payment period
- Student must be enrolled at least half-time in the payment period(s) (6 credit hours) during the summer term, and
- Student must be maintaining satisfactory academic progress

3. **Lifetime Eligibility for Federal Pell Grants**
   Effective July 1, 2012, Pell grants are limited to a lifetime maximum of the equivalent of 12 full-time semesters or six years (or 600%) for community colleges, vocational schools, and public and private four-year universities. Limits will be tracked by the Department of Education for each institution the student has attended.

   A full year (100%) of eligibility is counted regardless of the amount of the grant received. For example, a student who is eligible for $3000 in Pell grant funds who received $1000 in the fall term, $1500 in the spring term, and $500 in the summer term, has been offered 100% for the year. Pell grants are only available to undergraduate students. Once a bachelor's degree is earned, the student is no longer eligible for Pell grant funds, even if the 600% eligibility has not been met. Students are required to meet and maintain satisfactory academic progress standards to maintain eligibility.

4. **Federal Supplemental Educational Opportunity Grants (FSEOG)**
   The Federal Supplemental Educational Opportunity Grant (FSEOG) provides grant funds to exceptionally needy students. Eligibility is determined by a student's submission of the FAFSA and all required documentation. The maximum offer at Wake Tech is $1000 per academic year; offers may be reduced. Students who submit the FAFSA by March 15 and all required documentation work by June 1 will receive priority consideration.

5. **Federal Work Study Program**
   Federal work study provides part-time employment opportunities to students in need of financial assistance. Students generally work 10-20 hours per week. This grant is administered based on the availability of funding. Students must complete the FAFSA and turn in all required documentation in order to be considered for this grant In most instances, a student must be enrolled at least half-time in an eligible diploma or associate's degree program and must maintain satisfactory academic progress to qualify. Federal Work Study earnings are paid on a monthly basis after a time record has been signed, approved, and processed by the Financial Aid Office and Human Resources. For more information pertaining to the Federal Work Study Program, visit the Financial Aid webpage at: https://www.waketech.edu/financial-aid/types-financial-aid/work-study/interest-form.

6. **Iraq and Afghanistan Service Grant (IASG)**
   You may be eligible for an Iraq and Afghanistan Service Grant if you meet the following conditions:

   - Your parent or guardian was a member of the U.S. armed forces and died as a result of military service performed in Iraq or Afghanistan after the events of 9/11/01; and
   - You were under 24 years old or enrolled in college at least part-time at the time of your parent's or guardian's death; and
   - You meet all requirements for the Federal Pell Grant, however your Expected Family Contribution makes you ineligible.

   For more information pertaining to the Iraq and Afghanistan Service Grant, you may visit the Federal Student Aid website at https://studentaid.ed.gov/sa/types/grants-scholarships/iraq-afghanistan-service.

STATE OF NORTH CAROLINA GRANT PROGRAMS

1. **North Carolina Community College Grant Program (NCCCG)**
   To be eligible to receive these funds a student must 1) be a North Carolina resident; 2) be enrolled for at least six credit hours in an eligible curriculum program; and 3) demonstrate moderate financial need based on the FAFSA. To apply, the student must complete the FAFSA. The student's EFC must be within the range determined by the state of North Carolina each academic year. Students who have already earned a bachelor's degree or have exceeded their lifetime limit of six full-time semesters of funding are not eligible. Effective fall 2016, students who register for 15 or more credit hours in a semester may be eligible for additional state funds.

2. **North Carolina Education Lottery Scholarship (NCELS)**
   North Caroling Education Lottery Scholarship funds are disbursed each fall and spring semester. Students who have already earned a bachelor's degree or have exceeded the lifetime limit of 10 full-time semesters of financial aid are not eligible to receive these funds.

   To be eligible, a student must complete a FAFSA and must 1) be a North Carolina resident, 2) be enrolled for at least six credit hours in an eligible curriculum program, 3) have an EFC within the range determined each academic year by the state of North Carolina, and 4) demonstrate moderate financial need based on the FAFSA.

LOANS

The U.S. Department of Education (USDOE) offers three types of loans through the **William D. Ford Direct Loan Program**: Direct Subsidized Loans, Direct Unsubsidized Loans, and Direct PLUS Loans. Student loans have to be repaid to the lender.

2020-21 Direct Loan Interest Rates and Fees
(for loans with a first disbursement date on or after July 1, 2020 and before July 1, 2021), the interest rates will be fixed for the life of the loan.

Subsidized Interest Rate (Undergraduate): 3.73%   Fee: 1.057%*

Unsubsidized Interest Rate (Undergraduate): 3.73%   Fee: 1.057% *

*Direct Loan Fee: The Subsidized and Unsubsidized Federal Direct Stafford Loans have a 1.057% origination fee (for loans originated prior to October 1, 2021) which will be deducted from the gross amount of the loan borrowed.

Since 2013, interest rates on federal student loans have been set annually according to the 10-year Treasury note rate, plus a fixed percentage that differs by loan type (e.g., subsidized Stafford, unsubsidized Stafford, PLUS).

1. **Direct Subsidized Loans**
   Direct subsidized loans are need-based: To qualify for a direct subsidized loan, a student must demonstrate financial need as a result of filing the FAFSA. Eligibility is determined by the institution; funds are provided by the U.S. Treasury and repaid to agencies designated by the U.S. Department of Education. The amount that may be borrowed per year ranges from $3500 to $5500 for undergraduates, depending on grade level; it is set by the federal government. Interest on the loan is paid by the government as long as the student is enrolled at least half time. The student becomes responsible for repayment (principal and interest) six months after graduating or dropping below half-time enrollment. **

   **For new loans made between July 1, 2012, and July 1, 2014, interest accruing during the six-month grace period will not be paid by the federal government. The student is responsible for that interest, even though loan repayment does not begin until after the six-month grace period.

2. **Direct Unsubsidized Loans**
   Direct unsubsidized loans are not need-based; however, to qualify, students must still complete a FAFSA. Eligibility is based on the cost of attendance minus other expected financial aid. Students are charged interest from the date the loan funds are disbursed. Annual maximums, interest rates, and repayment provisions are the same as those for direct subsidized loans.

3. **Direct PLUS Loans**
   Parents of a dependent undergraduate student may apply for a PLUS loan to help meet costs of attendance not covered by other financial aid. Completion of a FAFSA is required, and parents must submit a PLUS Request form to the Financial Aid Office. PLUS loans generally offer better interest rates and repayment options than other non-federal education loans. Repayment typically starts when funds are disbursed; however, deferments are available upon request.

4. **Forgivable Education Loans for Service (NCFELS)**
   The Forgivable Education Loan for Service was established by the North Carolina General Assembly in 2011; the first loans were available for the 2012-13 academic year. The loan provides financial assistance to qualified students who are committed to working in North Carolina in fields designated as critical employment shortage professions. Visit http://www.cfnc.org/FELS for the application process, specific program details, and deadlines.

FINANCIAL AID

SCHOLARSHIPS

The Wake Tech Foundation offers a variety of merit-based and financial need-based scholarships for Wake Tech students enrolled in **curriculum** (for-credit) programs. For information about scholarships for students in Workforce Continuing Education programs, students should contact the Workforce Continuing Education Career Pathways Program.

To be considered for a scholarship on the basis of financial need, you must complete the Free Application for Federal Student Aid (FAFSA) and supply all necessary documentation to the Financial Aid office prior to the April 30th scholarship deadline.

Scholarship applications are available during spring semester online at https://foundation.waketech.edu/scholarshipappinstructions. Applications are accepted online via the website: https://www.waketech.edu/wake-tech-foundation/scholarshipguidelines **from March1 through April 30** for the upcoming academic year. Selections are made in June.

Applications are evaluated by a committee of Wake Tech faculty and staff. Only applicants who have received an acceptance letter from Wake Tech Admissions by the scholarship application deadline will be considered. Students are strongly encouraged to apply for scholarships to offset tuition costs.

ENROLLMENT REQUIREMENTS

For financial aid purposes, full time enrollment is *always* considered 12 credit hours, regardless of whether the student is enrolled in the fall, spring, or summer semester. Students receiving veteran's benefits should contact their Wake Tech VA representative.

Enrollment requirements for financial aid programs are listed below:

To receive the maximum Pell Grant offer, a student must be enrolled for 12 credit hours or more each semester in an eligible program of study. Depending on eligibility a reduced Pell Grant offer may be given to students enrolled three-fourths time (9-11 credit hours), half time (6-8 credit hours), or less than half time (1-5 credit hours). Only courses in a student's program of study can be included when determining the offer for each semester. For example, a student who is enrolled for 12 credit hours but is taking a five-credit-hour course that is not part of his or her program of study will receive PELL Grant funds for seven credit hours only. Students should refer to Financial Offer Information to learn more about disbursement requirements.

- To receive funding from the North Carolina Community College Grant or the North Carolina Education Lottery Scholarship, students must be enrolled at **least half time** when funds are released.
- To receive funding from the Direct Loan Program, students must be enrolled for at **least six credit hours** when funds are released and must maintain continuous enrollment with at least six credit hours.
- Students must register for all courses, including mini-mesters, by the last day to drop for the term.

FINANCIAL AID REFUNDS AND REPAYMENTS

After your financial aid has disbursed to your student account tuition, fees, and book charges will be deducted, and any balance that remains in your account will be refunded to you by the Cashier's Office. Wake Tech uses Bank Mobile to process financial aid refunds. A Refund Selection Kit will be mailed to the address on record and by email. The refund selection kit will arrive in a bright green envelope. Once you receive the kit, go to www.mywaketechcard.com to select your refund preference. You may choose any of the following:

1. Have the funds directly deposited into an existing bank account (2-3 days)
2. Open a bank account with Higher One and have your funds deposited into it (1-2 days)
3. Have a paper check mailed to you (5-6 days)

Once you've made your selection, you will receive your refund as indicated above. You can find out the date your refund will be released to Higher One on the refund disbursement schedule posted on http://www.waketech.edu/student-services/financial-aid/financial-aid-refunds.

TITLE IV REPAYMENT

Title IV (TIV) (federal) financial aid funds are offered under the assumption that a student will remain in classroom attendance for the entire period (semester) for which the funds were offered.

When a student withdraws from all courses for any reason, he or she may no longer be eligible for the full amount of TIV funds originally offered. The return of funds to the federal government is based on the premise that a student earns financial aid in proportion to the length of time during which he or she remains enrolled. A pro-rated schedule determines the amount of federal financial aid the student will have earned at the time of full withdrawal. For example, a student who withdraws in

the second week of the semester has earned less of his or her financial aid than a student who withdraws in the fifth week. Once the 60% point in the semester is reached, a student is considered to have earned all of the financial aid originally offered and will not be required to return any funds.

Federal regulations require a recalculation of financial aid eligibility if a student:

- Completely withdraws;
- Stops attending before the semester's end; or
- Does not complete all modules (mini-sessions) in which the student is enrolled as of the start date of the mini-session.

Wake Tech students who receive federal financial aid but do not remain in attendance through the end of the semester could be responsible for repaying a portion of the financial aid originally received. Students who never begin classes (do not ever attend) are not eligible for federal financial aid and must repay all financial aid originally offered.

NOTE: Wake Tech's institutional tuition/fee refund policy is separate from federal regulations concerning the return of unearned financial aid. A tuition/fee refund from Wake Tech will have no impact on the amount a student must repay to federal financial aid programs.

State Grant Repayments

Effective fall 2012, students who receive funds from the North Carolina Community College Grant or the North Carolina Education Lottery Scholarship and completely withdraw from classes before the 35% point of the term will be required to repay a percentage of funds.

IF YOU CHANGE YOUR MIND ABOUT A CLASS

It is imperative that you cancel your registration for any class you decide not to attend. This is **especially** important if you have been offered financial aid, because your financial aid offer holds your classes and prevents you from being automatically dropped for nonpayment. It is your responsibility to cancel your registration. If you decide not to attend a class or classes but fail to cancel your registration, you will be responsible for all tuition and fee charges for those classes.

If you are considering withdrawing from Wake Technical Community College, we strongly urge you to speak to a Financial Aid Specialist to determine how withdrawing may affect you.

SATISFACTORY ACADEMIC PROGRESS (for financial aid recipients)
Standards of Satisfactory Academic Progress for Financial Aid Recipients
Effective July 1, 2019

Federal regulations require schools to monitor the academic progress of each student who applies for financial aid and to certify that each student applicant is making satisfactory academic progress toward a degree, diploma, or certificate. Federal regulations require schools to establish Standards of Satisfactory Academic Progress (SAP) that include qualitative and quantitative measures of progress and a time frame for completion of a program of study.

These standards are applied to students who receive financial aid from any of the following programs: Federal Pell Grant, Federal Supplemental Education Opportunity Grant, Federal Work Study, North Carolina Community College Grant, North Carolina Education Lottery Scholarship, Federal Direct Subsidized and Unsubsidized Loans, Federal Direct PLUS loans, and institutional grants, scholarships, and loans. Students' academic performance is evaluated at the end of each semester of enrollment. Any student not meeting the minimum standards outlined below will be given financial aid warning status and notified by email from the Financial Aid Office. The student must meet the minimum requirements by the end of the financial aid warning semester; if not, financial aid will be suspended until the standards are met.

Pre-Curriculum Coursework
Although pre-curriculum courses do not count toward completion of a degree, federal regulations require that pre-curriculum courses be included when calculating cumulative completion rate for the purpose of determining Satisfactory Academic Progress for financial aid recipients. Wake Technical Community College will also count grades earned in pre-curriculum courses in the student's cumulative GPA. Therefore, a student's financial aid GPA may differ from the college GPA that shows on the transcript. Most pre-curriculum courses are graded as pass (P) or fail (R). For financial aid purposes, a P will be treated as an A grade and an R will be treated as an F grade.

FINANCIAL AID

Federal regulations also state that students may not receive financial aid (including grants and loans) for more than 30 credit hours of pre-curriculum coursework. Students who exceed this limit will be denied financial aid for pre-curriculum courses, and denial cannot be appealed. Students are limited to one Direct Loan for completion of pre-curriculum coursework.

Qualitative: Cumulative Grade Point Average (GPA) Requirement
In accordance with federal regulations, a student's cumulative GPA must be reviewed at the end of each semester of attendance, including summer.

1. Students must have earned a cumulative 2.0 GPA (or higher) when grades are reviewed at the end of the semester.
2. Students who do not earn the required cumulative 2.0 GPA will be placed on financial aid warning for their next semester of attendance.
3. While on financial aid warning, the student remains eligible for financial aid:
   a. If the student earns a cumulative 2.0 GPA (or higher) by the end of the financial aid warning semester, the warning will be lifted (provided the student meets all other SAP guidelines).
   b. If the student does **not** earn a cumulative 2.0 GPA by the end of the financial aid warning semester, financial aid will be suspended. The student will not qualify for financial aid effective the next semester of attendance and until such time as the student again meets all SAP guidelines.

Quantitative: Completion Rate Requirement
In accordance with federal regulations, students must successfully complete at least 67% of cumulative credits attempted in order to meet the requirements for financial aid. For example, if a student has attempted 60 credit hours during enrollment, he/she must successfully complete 40 or more of those hours. Student completion rates are reviewed at the end of each semester of attendance, including summer.

1. Students must earn a cumulative 67% completion rate. Grades are reviewed at the end of each semester.
2. Students who do not earn a cumulative 67% completion rate will be placed on financial aid warning for their next semester of attendance.
3. While on financial aid warning, the student remains eligible for financial aid:
   a. If the student completes sufficient credits to earn a 67% completion rate by the end of the financial aid warning semester, the warning will be lifted (provided the student meets all other SAP guidelines).
   b. If the student does **not** complete sufficient credits to earn a 67% completion rate by the end of the financial aid warning semester, financial aid will be suspended. The student will not qualify for financial aid effective the next semester of attendance and until such time as the student again meets all SAP guidelines.

Maximum Time Frame
The maximum time frame within which to complete a degree (or other program of study) is 150% of the published length of the program. For example, if the published length of a program of study is 64 semester hours, a student may attempt up to 96 semester hours (64 x 150% = 96). To determine the published length of a program, please refer to the Wake Technical Community College Catalog. A student becomes ineligible when it becomes mathematically impossible for him/her to complete the program within 150% of its length.

Students who exceed the maximum allowable time frame for completing a program of study may appeal if they experience documented extenuating circumstances. The student must provide a Maximum Time Frame Appeal Form including the timetable for completion; if the plan is deemed reasonable and the circumstances are valid, the student will receive financial aid on a probationary basis for one or more semesters until the degree is completed. Failure to comply with the plan will result in suspension of financial aid.

A student may request a "recalculation" of the maximum timeframe component in the following scenarios: (1) a change in the program of study; (2) attempting multiple programs; or (3) has successfully completed a program and is returning to pursue another program. If deemed appropriate, the recalculation would include only the credit hours that are applicable to their current program(s) of study. In the case of multiple degrees, each program would be calculated separately to only include the credit hours that are applicable to each program. A student may only request the recalculation twice in their academic career at Wake Tech. A review of a student's remaining aid eligibility and the ability to complete will be taken into consideration for students completing multiple programs. The student must be meeting the GPA and completion rate requirements for a recalculation to be approved.

Appeals
Students may appeal the suspension of their financial aid eligibility in the event of documented extenuating circumstances.

Extenuating circumstances are those that are unexpected, could not be planned for, and are outside of the student's control. Extenuating circumstances may include, but are not limited to, illness or injury of the student or an immediate family member or the death of a family member. Documentation from a third-party verifying the circumstances is required. Circumstances such as lack of maturity, lack of effort, and typical work and family life balance will not be considered. The appeal must address why the student failed to make satisfactory progress and what has changed in the student's situation that will allow the student to demonstrate satisfactory academic progress in the future. Appeals must be submitted in writing to the Financial Aid Office. The Satisfactory Academic Progress Appeals Committee will review the appeal and notify the student in writing regarding the status of the appeal. If it is mathematically impossible for a student to meet the 2.0 GPA requirement, the appeal will not be approved. Appeals are not retroactive; they are approved for the student's current (if enrolled) or the next semester of enrollment. Students are generally limited to two suspension appeals requests while attending Wake Tech. Please refer to the Satisfactory Academic Appeal website for information regarding submission deadlines.

Students whose appeals have been approved will be placed on financial aid probation for their current or next semester of attendance. The student will be placed on an academic plan that must be followed in order to continue enrollment. The plan may include requirements for academic performance and/or for meetings with an academic advisor or Wake Tech counselor. Students who meet these requirements will continue to be on probation for the next semester. Continued eligibility for financial aid is contingent on meeting the requirements of each semester's academic plan. Failure to meet the requirements of the academic plan will result in termination of financial aid the next semester of attendance. A student's academic progress status does not return to satisfactory until he/she earns a cumulative 2.0 GPA and a cumulative 67% progress rate and does not exceed the maximum timeframe for program completion.

Treatment of Selected Grades

Withdrawals: Credit hours in which a student receives a grade of "W", "WP", "WF", "R", and "F" are included in the number of hours attempted but do not count toward successfully completed hours; consequently, students who withdraw may have difficulty meeting the completion rate component of satisfactory academic progress requirements.

Incompletes: Incomplete grades are treated as an F in the SAP calculation. Upon notification by the student that the final grade has been submitted, the actual grade, credit hours attempted, and credits earned will be used to determine if the student is maintaining satisfactory academic progress.

Transfer Credit: Students transferring from another institution will be considered making satisfactory progress at the time of enrollment. A student's maximum timeframe for receiving financial aid will be reduced by the number of transferred credit hours applied towards his/her program of study at Wake Tech. Transfer hours applicable to the student's program of study count favorably towards the student's rate of progression.

Audits: An audit (AU) grade is not considered attempted coursework. It is not included in the determination of grade point average or completion rate. A student cannot receive financial aid for an audited course.

Credit by examination: Credit hours earned by examination are considered attempted and completed coursework and therefore **will** be considered in calculating a student's completion rate. Financial aid does not pay for credit hours earned by examination.

Repeated course: Per federal regulations, financial aid can pay for one repeat of a course in which a grade of B, C, D, or P was earned. All repeated courses are included as attempted credits. A student may not receive financial aid for repeating a course in which he or she previously earned a grade of "A," because a grade of "A" cannot be improved upon.

Failed course: Per federal regulations, financial aid can pay for a failed course until the course is successfully passed; however, each attempt is included in both attempted and earned credits. As a result, a student's rate of progression may be negatively affected. Students must adhere to the Wake Technical Community College policy regarding limitations on repeat courses.

Summer terms: Credit hours attempted and earned during summer term will be included in the calculation of satisfactory academic progress, just as those earned during any other enrollment period.

Successful completion: A grade of A, B, C, D, X, or P is considered successful course completion. A grade of F or R is **not** considered successful completion.

FINANCIAL AID

KEY TERMS RELATED TO SATISFACTORY ACADEMIC PROGRESS STANDARDS

Satisfactory Academic Progress Policy: An institution's policy for determining whether an otherwise eligible student is making satisfactory academic progress in his/her educational program in order to receive financial aid assistance.

Satisfactory: Student has met the minimum SAP standards and is eligible to continue to receive federal financial aid for the next semester

Financial Aid Warning: Students who have not earned the required GPA or completion rate will be placed on financial aid warning for the following semester. Satisfactory academic progress will be monitored at the end of each semester to determine if the student meets the standards and is eligible to continue to receive financial aid. The student may receive financial aid during the warning period.

Financial Aid Probation: Students whose appeals have been approved by the Satisfactory Academic Progress Appeals Committee are placed on financial aid probation.

Financial Aid Suspension: Students on financial aid warning status who have not successfully earned a cumulative GPA of 2.0 and cumulative completion rate of 67% at the conclusion of the warning period will have their financial aid suspended. Financial aid will also be suspended for students who have attempted the maximum allowable credit hours for their program of study.

Notification of Financial Aid Suspension or Warning: The Financial Aid Office will send an email to any student who is placed on financial aid warning or suspension; however, failure to receive correspondence does not negate a suspension or warning status.

Academic Plan: A plan developed by the institution and the student to ensure that the student is able to meet the institution's satisfactory academic progress standards by a specific point in time.

Continued Probation 1 is assigned to a student who satisfies the conditions of his/her Academic Plan. The student is eligible to receive financial aid for an additional semester and is expected to complete all courses with a C or better, with no withdrawals or Fs.

Continued Probation 2 is assigned to a student who satisfies the conditions of **Continued Probation 1**. The student must complete all courses with a C or better, with no withdrawals or Fs.

Continued Probation 3 is assigned to a student who satisfies the conditions of **Continued Probation 2**.

Continued Probation 4 is assigned to a student who satisfies the conditions of **Continued Probation 3**.

Appeal: Students who have been disqualified from receiving financial aid may submit a Satisfactory Academic Progress Appeal Form if extenuating circumstances have affected academic performance. The circumstances must be explained and documented in writing and submitted to the Satisfactory Academic Progress Appeals Committee.

Extenuating Circumstances: Circumstances that are unexpected, could not be planned for, and are outside of the student's control and can be documented by a third-party. Extenuating circumstances may include, but are not limited to, illness or injury of the student or an immediate family member or the death of a family member. Circumstances such as lack of maturity, lack of effort, and typical work and family life balance will not be considered.

Qualitative component: The specified standard, typically grade point average (GPA), that a student must have at each evaluation period.

Quantitative component: The pace at which students must progress through their programs to ensure that they will graduate within the maximum timeframe.

Transfer Credit: Credit hours from another institution which are accepted toward the student's education program at the current institution and which count as both attempted and completed hours.

FINANCIAL AID

Regaining Eligibility: Students who continue to attend school without federal financial aid may regain eligibility for financial aid by earning a cumulative GPA of 2.0 and a cumulative completion rate of 67%. A student may request reconsideration of eligibility for financial aid by submitting a written request to the Financial Aid Office once all requirements are met; however, satisfactory academic progress is automatically reviewed at the end of each semester for students with an ISIR on file within the past three years.

Returning students are evaluated on a continuing basis from the last enrollment, unless an extenuating circumstance is considered. Returning students who enrolled under an earlier academic progress policy will be required to meet the standards of the current policy upon their return.

Complete academic record: To measure a student's satisfactory progress toward degree, diploma, or certificate requirements, the student's complete academic record at Wake Tech must be evaluated, whether or not the student received aid for the entire time of enrollment. Any course grades of W or WF that were forgiven by Wake Tech must be included in a student's cumulative record when determining satisfactory academic progress standards. When students complete coursework for more than one major, academic progress standards for each major must be met for that student to receive student aid.

NOTE: Warning status or suspension status due to failure to make satisfactory academic progress can be changed only by successfully completing classes – a student may not improve his/her status by simply "sitting out" a semester. Once the student meets both SAP requirements – a cumulative GPA of 2.0 and a cumulative completion rate of 67% – the student's status will change and he/she will be considered in good standing for financial aid.

The Dean of Financial Aid (or designee) is the person authorized by Wake Technical Community College to provide financial aid information to students. Office hours are 8 a.m.–6 p.m., Monday–Thursday, and 8 a.m.–5 p.m. on Friday.

WE ARE HERE TO HELP!

Locations

Southern Wake Campus
9101 Fayetteville Rd. (401 South), Raleigh
Student Services Bldg Rom 015
Monday-Thursday 8:00 am - 6:00 pm
*Friday 8:00 am - 5:00 pm **(Limited Services offered in Student Services Building, Lobby Lower Level)**

Perry Health Sciences Campus
2901 Holston Ln., Raleigh
HSB Suite 102, RM 105
Monday - Thursday 8:00 am - 4:00 pm
Friday 8:00 am – 4:00 pm (limited services)

Western Wake Campus Millpond Village
3434 Kildaire Farm Rd., Cary
Room 255, Tuesday 10:00 am - 12:00 pm

Scott Northern Wake Campus
6600 Louisburg Rd. (401 North), Raleigh
Building C, RM 322
Monday-Thursday 8:00 am - 6:00 pm
*Friday 8:00 am - 5:00 pm **(Limited Services offered in Building A, Room 322)**

Public Safety Education Campus
321 Chapanoke Rd., Raleigh
Room 1714
Monday 1:00 pm - 3:00 pm

RTP Campus
10908 Chapel Hill Rd., Morrisville
RT1RM105D
Tuesday & Thursday 8:00 am – 5:00 pm
Friday 8:00 am – 4:00 pm

FINANCIAL AID

Southern Wake Campus Phone Number
919-866-5410

Websites
Please visit http://waketech.financialaidtv.com/, which contains several videos that explain various financial aid topics and concerns or visit the Financial Aid's main website, http://financialaid.waketech.edu

Financial Aid Application
www.fafsa.ed.gov

Remember to check the online College Catalog for the most up-to-date information at http://www.waketech.edu/student-services/catalog

ACADEMIC INFORMATION

ATTENDANCE POLICY

All Wake Technical Community College policies (academic; student services; administrative) apply to all students, regardless of campus and center locations or mode of instructional delivery, unless expressly defined by the college.

Absences

Wake Tech encourages regular class attendance; absences can hurt academic performance and are not a part of good scholarship. Students are expected to take personal responsibility for their attendance and use discretion when making schedule choices to meet the demands of work, family, and other responsibilities.

A class absence is defined as missing one-third or more of any regularly-scheduled class meeting.

Students who know of upcoming absences should notify their instructors in advance; if advance notice is not possible, students should contact instructors immediately upon their return to class.

Students are expected to attend at least 90 percent of all scheduled class meetings. If a student's absences in a class **exceed 10 percent** and are not justified to the satisfaction of the instructor, that instructor will submit an online withdrawal form to Registration and Student Records documenting the student's last date of attendance.

For information on grading and attendance policies, see Assignment of Grades for Attendance Policy Violations and Withdrawal.

Tardiness and Early Departure

Students are expected to arrive to class on time and to remain in class for the entire class period. Arriving late or leaving early disrupts the learning environment; however, extenuating circumstances may necessitate late arrivals or early departures. Classroom doors are not generally locked. If doors are locked for security or other reasons, they will be opened for students who are justifiably late or have a justifiable reason for leaving early.

Patterns of tardiness or early departure that cannot be justified to the satisfaction of the instructor will be considered violations of the attendance policy, as follows: two tardies or early departures will equate to one absence. Students should consult course handouts or instructors for more specific details.

ABSENCES FOR RELIGIOUS OBSERVANCES

Wake Tech recognizes its legal and ethical responsibilities to accommodate students who must miss classes to participate in religious observances. North Carolina law requires that students be permitted at least two excused absences per year for these purposes. Wake Tech students are allowed up to two class days of excused absences per academic year for religious observances.

It is the student's responsibility to contact the instructor for each course in which work will be missed. The student must provide written notification to the instructor within the first two weeks of the semester, identifying the religious observance and date of the planned absence.

Faculty members must provide a suitable accommodation for affected students. Specific accommodations may vary, depending on course content, mode of instruction, and size of class.

Examples of suitable accommodations include but are not limited to:

- Establishing a class policy allowing all students to drop one exam or assignment grade;
- Providing an opportunity for a makeup exam or equivalent assignment;
- Allowing extra-credit assignments to substitute for missed class work; and
- Other reasonable accommodations determined by the course instructor.

Students are responsible for missed class content. Students must request and should be provided with any instructional materials given out during their absence.

ADD, AUDIT & WITHDRAWAL POLICY

Adding a Course

Students may add a course via Self Service, through the last day to add as published in the academic calendar. Students who find it necessary to add a course should confer with their advisors. In rare instances, after the registration systems close, courses may be added by the Registration and Student Records Services Division upon receipt of a completed Request for Registration Override form. Students must obtain this form and the required signature from the academic department offering the course.

ACADEMIC INFORMATION

Dropping a Course
Students may drop a course through the last day to drop as published in the academic calendar online (date subject to change). Students who find it necessary to drop a course should confer with their advisors. Students may drop classes via Self Service until the end of the published drop deadline.

Courses dropped after the last day to drop for the term and on or before the 60% date of the semester or term are considered withdrawals. Courses dropped during this period will result in a grade of "W."

Student who drop a class are advised that doing so may affect their financial aid. Students may contact the Financial Aid office to determine whether funds will be affected.

Audits
Students who wish to audit courses may do so by submitting a Request to Audit form to the Registration and Student Records Services Division no later than the last day to add classes. Departmental approval is not required to audit courses during the published schedule period. After the last day to add, students may request to audit by submitting the form with signatures from the instructor and the dean of the division offering the class (or designee). Requests are not accepted after the mid-point of the term.

Audited courses provide no credit hours or grade points. Registration fees and tuition for audited courses are the same as those for courses taken for credit.

Withdrawals
A student who finds it necessary to withdraw from a course, courses, or from the college must initiate the withdrawal process by contacting the instructor of each course, and declaring his or her intent to withdraw. The instructor will then submit the necessary information to the Registration and Student Records Services Division via the online withdrawal form. Students enrolled in courses offered on schedules other than the standard 16-week semester and the regular summer term should consult the Wake Tech Academic Calendar to determine the last day to withdraw and receive a grade of "W." Students may also initiate a withdrawal form accessible from the student portal my.waketech.edu.

Assignment of Grades for Attendance Policy Violations and Withdrawals
Faculty assign grades according to methods which are professionally acceptable, communicated to everyone in the class, and applied to all students equally.

Grade of W:
Students who withdraw or who are withdrawn for any reason, including attendance policy violations, on or before the 60% point are assigned a grade of W. In accordance with the state refund policy for community colleges, tuition refunds are allowable after the drop deadline for the term only in the case of military deployment or death of the student.

Grade of WP:
Students who withdraw or who are withdrawn after the 60% point with legitimate, extenuating circumstances, will be assigned a grade of WP. It is the student's responsibility to explain the circumstances to the satisfaction of the instructor. The grade of WP counts the same as a grade of W in the determination of the student's GPA. In accordance with the state refund policy for community colleges, tuition refunds are allowable after the drop deadline for the term only in the case of military deployment or death of the student.

Grade of WF:
Students who withdraw or who are withdrawn after the 60% point with no legitimate, extenuating circumstances will be assigned a grade of WF. If a student stops attending class before the last test, final project, or final exam and has violated the attendance policy, that student will receive the grade of WF. The grade of WF counts the same as an F in the determination of the student's GPA. In accordance with the state refund policy for community colleges, tuition refunds are allowable after the drop deadline for the term only in the case of military deployment or death of the student.

Grade of F:
A grade of F indicates that the student completed the class but earned the F (failing) grade. If a student stops attending class before the last test, final project, or final exam but has not violated the attendance policy, that student will receive the grade earned, including zeroes for the work missed.

Grade of I (Incomplete):
A grade of I may be given at the discretion of the instructor if the instructor decides that the student (who has contacted the instructor to request an incomplete) has a legitimate reason for missing the last test, final project, final exam, or other assignment. The instructor must make arrangements for the student to make up the work for the final grade(s) within the time allowed for completion of incompletes (by the end of the fifth full week of the following semester). A grade of I will automatically revert to a grade of F unless the work is made up and a Grade Change form is submitted to the office of Registration and Records by the instructor.

ACADEMIC INFORMATION

ENROLLMENT STATUS

A **full-time student** is a person enrolled for twelve or more semester hours of credit in the fall or spring semesters and nine or more semester hours of credit in the summer term.

A **part-time student** is a person enrolled for less than twelve semester hours of credit pursuing a degree, diploma, or certificate program in the fall or spring semesters and less than nine semester hours of credit in the summer term.

A **visiting student** is any student who is enrolled in a credit course, but is not working toward a degree, diploma, or certificate.

For financial aid purposes only, full-time status is 12 hours credit or more each semester.

ACADEMIC FOUNDATIONS PURPOSE

The Academic Foundations courses are designed to prepare students for college-level coursework by helping them develop the reading, English, and mathematics skills required for entry into curriculum courses. Students are placed in Academic Foundations courses based on the basis of their unweighted high school GPA, admissions test scores for students who have been out of high school for more than 10 years, the recommendation of their advisor or instructor, or their own voluntary selection.

Students who require the Transition Math and/or the Transition English course will be required to take a study skills course, ACA 090. This course has been designed to improve student success in both Academic Foundations and curriculum courses. Depending on individual circumstances and pending advisor approval, students may take Academic Foundations and curriculum courses during the same term. Most Academic Foundations courses are offered every term, both day and evening.

A student taking required Academic Foundations courses must earn a passing grade of "C" or better. A grade of "R" or "F" may require the student to repeat the course.

Academic Foundations Courses:
ACA 090, ENG 002, ENG 011, MAT 003, MAT 010, MAT 021, MAT 043, MAT 052, MAT 071

PREREQUISITES

Some courses may have pre-requisite or co-requisite course requirements, which ensure that the student is ready to move on to a higher level course. All students are required to successfully complete the course prerequisites and co-requisites listed before enrolling. Students who do not have confirmed prior credit, equivalency via placement test scores, or transfer equivalency that satisfies the stated prerequisites and co-requisites may be administratively dropped from the course. Course prerequisites and co-requisites may be found by clicking on the course number on Self-Service course schedules.

As this information is public and available, students who drop on their own or due to a faculty-requested drop after the first day of class and before the published 10% date, are only eligible for a 75% refund. Therefore, students are advised to review course prerequisites and co-requisites carefully before enrolling.

GRADES

Grade Point Averages (GPA)

Students are graded according to the following grade-point system in all courses, **except** Academic Foundations courses.

GRADE POINTS

Grade	Per Credit	Explanation
A	4	Excellent
B	3	Very Good
C	2	Satisfactory
D	1	Poor
F	0	Failing
W	0	Withdrawal (prior to 60%)
WF	0	Withdrawal – Failing (after 60%)
WP	0	Withdrawal – Passing (after 60%)

ACADEMIC INFORMATION

Students in **Academic Foundations** Math and English courses are graded according to the following system.

Grade	Explanation
P	Passing
F	Failing
W	Withdrawal (prior to 60%)
WF	Withdrawal – Failing (after 60%)
WP	Withdrawal – Passing (after 60%)

Students in **Academic Foundations** Transition Math and English courses are graded according to the following system.

Grade	Explanation
P	Pass
P1	Pass first tier of course
P2	Pass second tier of course
P3	Pass third tier of course (Math only)
R	Repeat (Maps to an F grade)
W	Withdrawal (prior to 60%)
WF	Withdrawal – Failing (after 60%)
WP	Withdrawal – Passing (after 60%)

The following grades will **not** be used in computing the grade-point average.

Grade	Explanation
AU	Audit
SR	Senior Citizen Audit
FG	Forgiven
I	Incomplete
IE*	Incomplete Emergency
IP	In Progress (Multi-entry/multi-exit classes only)
P	Pass (Transition Math, Transition English, Corequisite Math and English, and Work Based Learning Use Only)
R	Repeat (Transition Math and English Use Only)
W	Withdrew
WE*	Withdrew Emergency
WP	Withdrew Passing (after 60%)
T	Transfer Credit (includes TA, TB, TC, TP1, TP2, TP3)
X	Credit by Examination

*IE and WE grades are temporary grades implemented for the Covid-19 pandemic.

A grade of Incomplete (I) will be given only when circumstances justify additional time for the completion of a course. Except for IE grades, an Incomplete must be removed by the end of the fifth full academic week of the term immediately following the term in which the Incomplete was incurred. If it is not removed by this date, the Incomplete will be recorded as an "F" in the student's permanent record.

The grade awarded for participation in Cooperative Education will be either "P" (Pass) or "F" (Fail). These grades are not used in computing the grade-point average. Grades are available online approximately one business day after the deadline for faculty to submit final grades. To view grades, access Self Service. Click on Grades and view grades by term. Information regarding grade appeals is listed within the Student Rights and Responsibility policy.

Computation of Grade-Point Average
The following process is used to determine a student's grade-point average (GPA):

1. Multiply the number of semester hour credits assigned a course by the number of grade points for the grade received.
2. Add all the grade points together.
3. Divide the total grade points by the total number of semester hours attempted including grades of "F" and "WF."
4. Whenever a course is repeated the best grade (except when the repeat results in a grade of I, IP, AU, or X) will be used in the grade-point average computation.

Example of Grade-Point Average Computation

Subject	Hours Credit	Grade Received	Per Semester Hour	Grade Points
English	3	A	4	12
Physics	3	D	1	3
Economics	3	B	3	9
Chemistry	5	F	0	0
Psychology	3	C	2	6
Total	17			30

Thirty grade points divided by 17 hours attempted equals a 1.76 grade-point average for work attempted in this example. A GPA of 2.0 constitutes a "C" average. Hours attempted and grade points earned in previous terms should be included in the above procedures to determine the cumulative grade-point average.

COURSE REPETITION

A student may enroll in the same course up to three times during his or her academic career. Each attempt will be recorded on the student's official academic record. The best grade earned in all the attempts is calculated in the GPA. Exceptions to this policy may be approved by the dean, department head, or designee responsible for supervising completion of the course.

Students will receive a **registration error message** on their third attempt to repeat a course and must contact the appropriate department in order to proceed. The error message allows Curriculum Education Services to intervene before a student risks violating the repetition policy.

GRADE POSTING BY FACULTY

The Family Policy Compliance Office (FPCO), which is responsible for the administration of the Family Educational Rights and Privacy Act (FERPA) at schools and colleges, has issued a technical letter stating that grades may not be posted by Social Security Number (SSN), or part thereof, without the written consent of the student.

Wake Tech faculty are neither required to post grades nor prohibited from posting them; however, faculty may post grades only for those students who have given their written consent. Even with student consent, full social security numbers must never be used as identifiers.

Faculty should distribute **FERPA Consent to Post Grades** forms to students in classes for which they intend to post grades. The consent forms should be turned in to the faculty member's dean with the final grade report and maintained for no less than three years. After three years, grade report records may be destroyed provided no litigation, claim, audit, or other official action involving the records has been initiated. If any official action has been initiated, the records should be destroyed in office after the official action is complete and attendant issues resolved.

For faculty posting grades electronically on Blackboard, written consent is **not** required provided a student's grade is posted where **only the student** can access it with a secure password (i.e., individual grade books). Faculty **may not** post grades on a Blackboard site to which all class members have access; such an action would constitute the disclosure of personally identifiable information without student consent.

Faculty **may** send grades to individual students via email only when there is written authorization from the student on file. Authorization should be maintained by the instructor; Self Service will be the official means of final grade notification.

GRADE FORGIVENESS

A student who has not been enrolled in curriculum courses in the College for 60 consecutive months (five years) or longer may submit a Grade Forgiveness request to the Registration and Student Records Services Division. Under this policy, the student may request that previous grades of "WF" or "F" not be used in calculating the cumulative grade point average. A grade of FG will replace the original grade on the transcript: however, the FG grade is not included in the GPA. This ruling has no bearing on any other institutions or how they calculate GPA.

Prior to re-evaluation for grade forgiveness, the student must be re-admitted to the college, register for courses, and complete at least 12 credit hours of course work at the 100 level or above, with a minimum quality point average of 2.0. Requests for re-evaluation are processed weekly, and the student will be notified in writing at the mailing address on file. A student may request grade forgiveness only once while at Wake Tech.

ACADEMIC INFORMATION

SATISFACTORY ACADEMIC PROGRESS

At the end of each academic term, students' semester and cumulative grade point averages (GPAs) are calculated. Each student is expected to make satisfactory progress, defined as a cumulative GPA of at least 2.0, based on credit hours attempted. Students with the minimum cumulative GPA are considered to be in good standing.

Credit hours for Academic Foundations courses are not counted in credit hours attempted; thus, grades from Academic Foundations classes are not counted toward cumulative GPA. Likewise, courses with a grade of AU (audit), SR (senior audit), X (challenged), W (withdrawn), or WP (withdrawal passing) are not considered in credit hours attempted and are not counted toward cumulative GPA.

Satisfactory Progress in Health Sciences Curricula

Certain policies pertaining to student progress in the Health Sciences curricula differ from general College policies. These policies will be given to each student enrolled in a Health Sciences curriculum.

Satisfactory Progress in Academic Foundations Courses

The objective of the Academic Foundations program is to assist students in obtaining the academic skills they need to succeed in a curriculum program. Therefore, a student taking required Academic Foundations courses must earn a passing grade to progress to a curriculum program or to the next level in an Academic Foundations course. A grade of "R" or "F" may require the student to repeat the course.

ACADEMIC STANDING LEVELS

A student's academic standing is determined at the end of each fall and spring semester based upon previous academic standing and cumulative grade point average. Academic standing is applied to curriculum, credential-seeking (degree, diploma, and certificate) students; it is not applied to visiting students or career and college promise students. Students will receive e-mail notification of their academic standing at their college-issued address.

Warning

Students will be placed on Academic Warning the first fall or spring semester their cumulative GPA is below 2.0.

A restriction will be placed on their record to prevent access or continued access to the registration system. Upon successful completion of College Strong, a free online academic support course located in Blackboard, the restriction will be lifted and access to the registration system will be restored.

Suspension

Students will be placed on Academic Suspension the second consecutive fall or spring semester their cumulative GPA is below 2.0. The period of Academic Suspension is one semester. Students on Academic Suspension will not be allowed to enroll in courses for one full semester and will not be allowed to participate in college functions during that time. Students on Academic Suspension will be blocked from registering for classes and may not remain in any classes for which they have pre-registered. A refund of any tuition and fees paid will be authorized, and any applicable financial aid will be canceled for the term.

If a student's cumulative GPA is below 2.0 but their most current term GPA is above 2.0 or if they earned a grade of C or better in all Academic Foundations courses for the most current term, this indicates progress toward improving the cumulative GPA. As such, a student will be allowed to continue their enrollment for the immediate next semester. The student is expected to utilize the immediate next semester as an opportunity to continue making progress and improve their cumulative GPA.

Reinstatement following Suspension

After a one semester suspension, a student will be reinstated by completion of the following steps:

1. Attend a success workshop sponsored by the Individualized Learning Center (ILC)
2. Meet with an Academic Advisor to develop a contract for success

Upon completion, the restriction will be lifted, and access to the registration system restored. The reinstatement steps must be completed no less than one month prior to the start of the term for which the student wishes to be reinstated.

Probation

After a one semester suspension, students that are reinstated will be placed on Academic Probation for the enrolled term immediately following the suspension. Students on Academic Probation must adhere to the success contract developed with their Academic Advisor. At the conclusion of the probation period, students whose cumulative GPA improves to a 2.0 or higher move to Good Standing. Students whose cumulative GPA remains below 2.0 return to Academic Suspension.

Appeal Process for Students on Academic Suspension

Students on Academic Suspension may submit a written appeal in order to continue their enrollment. The appeal will be considered if the student's transcript indicates that while the cumulative GPA of 2.0 has not been achieved, significant progress has been made. Significant progress is defined as a minimum 2.0 GPA for the most current term and/or a grade of C or better in all Academic Foundations courses for the current term.

If the appeal is approved, the student must meet with an academic advisor to develop an Academic Success Contract; the registration hold will then be removed to restore the student's access to the registration system. Course availability may be limited.

If the appeal is denied, the student will not be able to take any classes for one semester and must follow the reinstatement process as outlined above.

GRADE REQUIREMENTS TO GRADUATE

To be eligible for graduation, students must complete all prescribed courses for the curriculum in which they are enrolled, with a cumulative grade point average (GPA) of 2.0 in their program of study.* They must complete at least 25 percent of the hours required for a degree, diploma, or certificate **in residence** at Wake Technical Community College.

To graduate, students must fulfill all financial obligations to the college.

* GPA is calculated by dividing the total number of grade points earned by the total number of credit hours attempted. Courses used in this calculation are those completed at Wake Technical Community College and listed in the student's curriculum outline as "minimum requirements," along with any additional courses approved by the appropriate academic dean.

ACADEMIC RECOGNITION

President's List

The college publishes a "President's List" at the end of each academic term, composed of credential-seeking students who have achieved a grade-point average of 4.0 at the end of that particular term, based on a minimum of 12 curriculum credit hours attempted in fall and spring semesters and a minimum of 8 hours in summer term. "President's List" recognition is not applied to visiting students or career and college promise students.

Dean's List

The College publishes a "Dean's List" at the end of each academic term, composed of credential-seeking students who have achieved a minimum grade-point average of 3.50 at the end of that particular term, based on a minimum of 12 curriculum credit hours attempted in fall and spring semesters and a minimum of 8 hours in summer term. "Dean's List" recognition is not applied to visiting students or career and college promise students.

President's Award for Excellence

The President's Award for Excellence is the top academic award presented by Wake Tech, to recognize students who excel in academic achievement, attitude, attendance, and motivation. Six students (one from each academic division) are selected to receive the President's Award for Excellence each calendar year. Division deans and instructors select award recipients. Each recipient receives a personal plaque of commendation from the college president. Recipients' names are engraved on a trophy that is on permanent display at the college.

Who's Who Among Students in American Junior Colleges

Each spring, second-year students are nominated for Who's Who Among Students in American Junior Colleges, based on the student's scholarship, participation and leadership in academic and extracurricular activities, citizenship and service to the college, and potential for future achievement.

GRADUATION

Graduation exercises are held at the end of the fall and spring semesters for all students who have completed degree or diploma requirements since the last graduation. Prospective graduates must request a graduation clearance by submitting an online Self-Service Graduation Application via Graduation Overview. Deadlines are posted on the Registration and Records website: http://www.waketech.edu/student-services/registration-student-records/graduation

Prospective summer graduates who will enroll in their final coursework are allowed to participate in May graduation ceremonies. Prospective graduates must request a graduation clearance by submitting an online Self-Service Graduation Application via Graduation Overview. Deadlines posted on the Registration and Records website: http://www.waketech.edu/student-services/registration-student-records/graduation

Persistence Toward Graduation
The rate of persistence toward graduation for Wake Tech students is available from the counseling staff.

WE ARE HERE TO HELP!

Locations
Registration & Student Records Services (401 Southern Wake Campus)
9101 Fayetteville Rd., Raleigh, NC 27603
Student Services Building, Room 243A
Monday-Thursday from 8:00 a.m. - 6:00 p.m.
Friday from 8:00 a.m. - 5:00 p.m.

Phone
919-866-5700

Registration & Student Records Services (401 Scott Northern Wake Campus)
6600 Louisburg Rd., Raleigh, NC 27616
Building NC, Room 218F
Monday – Thursday from 8:00 a.m. – 6:00 p.m.
Friday from 8:00 a.m. – 5:00 p.m.

Phone
919-532-5502

Website
http://www.waketech.edu/student-services/registration-student-records

Remember to check the online College Catalog for the most up-to-date information at
http://www.waketech.edu/student-services/catalog

ACADEMIC INFORMATION

2021 Critical Success Factors Eight Performance Measures for Accountability

A. Basic Skills Student Progress 2019-2020
Percentage of Periods of Participation (PoP) with at least one Measurable Skill Gain (MSG).

System Goal (Excellence Level)	System Baseline (Baseline Level)	Average College Percentage
42.5%	15.7%	33.5%

Wake Technical Community College		
Total Students	Number of Students with MSG	Measurable Skill Gain (MSG) 2019-2020
4,601	1,975	**42.9%**

B. Student Success Rate in College-Level English Courses. Fall 2017 Cohort
Percentage of first-time Associate Degree seeking and transfer pathway students passing a credit-bearing English course with a "C" or better within three years of their first fall term of enrollment.

System Goal (Excellence Level)	System Baseline (Baseline Level)	Average College Percentage
70.4%	47.1%	62.6%

Wake Technical Community College	# Students	College Level Eng Enrollment	Enrolled and Successful		
			2017	2016	2015
	4,076	76%	**60.5%**	62.2%	60%

C. Student Success Rate in College-Level Math Courses. Fall 2017 Cohort
Percentage of first-time Associate Degree seeking and transfer pathway students passing a credit-bearing Math course with a "C" or better within three years of their first term of enrollment.

System Goal (Excellence Level)	System Baseline (Baseline Level)	Average College Percentage
54.5%	29.9%	46.3%

Wake Technical Community College	# Students	College Level MAT Enrollment	Enrolled and Successful		
			2017	2016	2015
	4,076	61%	**44.8%**	44%	43.2%

D. First Year Progression. Fall 2019 Cohort
Percentage of first-time fall credential-seeking students who graduate prior to or enroll in postsecondary education during the subsequent fall term.

System Goal (Excellence Level)	System Baseline (Baseline Level)	Average College Percentage
71.8%	56.8%	66.8%

ACADEMIC INFORMATION

Wake Technical Community College	Cohort	Graduated	Enrolled NCCCS (Non-Graduate)	Enrolled Other (Non-Graduate)	Graduated or Still Enrolled		
					2019	2018	2017
	5,519	2.7%	55%	9.9%	67.8%	69.8%	71%

E. Curriculum Completion, Fall 2016 Cohort

Percentage of first-time fall credential-seeking curriculum students who have graduated, transferred, or are still enrolled during the fourth academic year with at least 42 successfully completed non-developmental hours.

System Goal (Excellence Level)   System Baseline (Baseline Level)
61.3%   43.1%

Average NC System Percentage Graduate and University Transfer – 10.0% (2016)
Average NC System Percentage Graduate, Not University Transfer – 17% (2016)
Average NC System Percentage University Transfer, Not CC Graduate – 22% (2016)
Average NC System Percentage Retained (42 Hrs), Not Graduate or University Transfer – 5% (2016)
Average NC System Percentage Graduate, University Transfer or Retained (42 Hrs) – 54.1% (2016)

Wake Technical Community College	# Cohort	% CC Graduates and University Transfer	
		2016	2015
	4,333	14.8%	13%

Wake Technical Community College	% CC Graduate, Not University Transfer	
	2016	2015
	16%	17%

Wake Technical Community College	% University Transfer, Not CC Graduate	
	2016	2015
	17%	16%

Wake Technical Community College	% Retained (42 Hrs), Not CC Graduate or University Transfer	
	2016	2015
	4.4%	5%

Wake Technical Community College	% Graduate, University Transfer, or Retained (42 Hrs)	
	2016	2015
	51.8%	51.0%

F. Licensure and Certification Passing Rate 2019-2020

Aggregate institutional passing rate of first time test-takers on licensure and certification exams. Exams included in this measure are state mandated exams which candidates must pass before becoming active practitioners.

Weighted System (Excellence Level)   Weighted System (Baseline Level)
1.09   0.75

ACADEMIC INFORMATION

Weighted Index Score (NC System)   1.00   (** means less than 5 students)

Wake Technical Community College		
Number of Test Takers	Number Passing	Weighted Index Score 2019-2020
815	680	**1.08**

2019 – 2020 Licensure and Certification Rate by Exam

BLET				
2020	2020	Weight	2019	2018
# Tested	% Passed	Index 2020	% Passed	% Passed
28	**96%**	1.13	97%	93%

Cosmetology				
2020	2020	Weight	2019	2018
# Tested	% Passed	Index 2020	% Passed	% Passed
16	**75%**	0.94	84%	94%

Dental Hygiene				
2020	2020	Weight	2019	2018
# Tested	% Passed	Index 2020	% Passed	% Passed
18	**100%**	1.03	82%	87%

Esthetician				
2020	2020	Weight	2019	2018
# Tested	% Passed	Index 2020	% Passed	% Passed
10	**90%**	1.10	83%	94%

Massage & Body Work				
2020	2020	Weight	2019	2018
# Tested	% Passed	Index 2020	% Passed	% Passed
10	**90%**	1.21	96%	86%

EMT - Basic				
2020	2020	Weight	2019	2018
# Tested	% Passed	Index 2020	% Passed	% Passed
84	**87%**	1.07	75%	93%

Radiography				
2020	2020	Weight	2019	2018
# Tested	% Passed	Index 2020	% Passed	% Passed
27	**100%**	1.05	97%	97%

EMT - A				
2020	2020	Weight	2019	2018
# Tested	% Passed	Index 2020	% Passed	% Passed
12	**58%**	0.72	**	**

Registered Nursing				
2020	2020	Weight	2019	2018
# Tested	% Passed	Index 2020	% Passed	% Passed
114	**98%**	1.08	97%	98%

EMT - P				
2020	2020	Weight	2019	2018
# Tested	% Passed	Index 2020	% Passed	% Passed
**	**100%**	1.00	46%	46%

Manicurist				
2020	2020	Weight	2019	2018
# Tested	% Passed	Index 2020	% Passed	% Passed
0	**0**	0	**	**

Detention Officer				
2020	2020	Weight	2019	2018
# Tested	% Passed	Index 2020	% Passed	% Passed
25	**92%**	1.00	88%	92%

Fire Inspector		
2020	2020	Weight
# Tested	% Passed	Index 2020
34	68%	1.10

Plumbing Inspector		
2020	2020	Weight
# Tested	% Passed	Index 2020
**	100%	1.08

Building Inspector		
2020	2020	Weight
# Tested	% Passed	Index 2020
**	50%	0.81

Mechanical Inspector		
2020	2020	Weight
# Tested	% Passed	Index 2020
8	100%	1.25

Nurse Aide		
2020	2020	Weight
# Tested	% Passed	Index 2020
339	83%	1.08

Real Estate Sales		
2020	2020	Weight
# Tested	% Passed	Index 2020
72	58%	1.18

G. College Transfer Performance, 2018-2019 Community College Students

Among community college Associate Degree completers and those who have completed 30 or more articulated transfer credits who subsequently transfer to a four-year university of college during the fall semester, the percentage who graduate prior to or remain enrolled at any four-year college or university the subsequent fall semester.

System Goal (Excellence Level) 91.1%   System Baseline (Baseline Level) 79.4%

Average NC System Percentage Total 30 or More Hours Persist: 87%
Average NC System Percentage Total Associate Degree Recipients Persist: 89%
Average NC System Percentage Persist Total: 87.8% (2018-2019)

Wake Technical Community College	30 or More Semester Hours		Associate Degree Recipients	
	Students	% Persist	Students	% Persist
	1,096	90%	975	91%

Wake Technical Community College	2018-2019 Totals		Percentage Persisting	
	Students	% Persist	2017-18	2016-17
	2,071	90.3%	90%	90.1%

STUDENT RELATED SERVICES AND ACTIVITIES

STUDENT SERVICES VISION, VALUES, AND MISSION

Our **vision** is to eliminate barriers and create opportunities that enable all students to experience success. Our actions are guided by these **values**:

- The well-being of all students
- Innovation in problem solving
- The positive affirmation of student achievement
- Professionalism and ethical behavior
- Cooperative and collaborative efforts that include enthusiasm, respect, and humor

Our **mission** is to advance the overall mission of the college by providing programs and services that foster academic success, student development, and campus community.

STUDENT CENTERS

Student Centers have been established on all Wake Tech campuses for students to study, relax, and get refreshments. The centers may include televisions, vending machines, computers, and other services, depending on the needs of the campus. Student Centers are located on the Southern Wake Campus (Building L), the Scott Northern Wake Campus (Building B), the Perry Health Sciences Campus (Health Education Building 2), Western Wake Campus (2nd floor), the Public Safety Education Campus (room 1420) and the RTP Campus (RTP1).

When using the Wake Tech Student Centers:

Keep noise of all kinds to a minimum.
- Talk quietly
- Use earphones for electronic devices
- Do not play musical instruments unless authorized for a special event

Help to keep centers clean and accessible for all.
- Place trash and recyclables in appropriate receptacles
- Do not move furniture or tamper with equipment not designated for student use

Respect yourself and others.
- Wear appropriate clothing, including shirts and shoes (See Student Dress and Hygiene Policy)
- Refrain from profane or obscene language and behavior
- Do not engage in violent or aggressive behavior of any kind, including, but not limited to the following: hitting, wrestling, play fighting, or throwing objects

Failure to comply with the guidelines above will result in the loss of student center privileges for a period of time and the incident reported to the Student Conduct Officer. A second offense will result in loss of privileges for an extended period of time and additional sanction(s) from the Student Conduct Officer.

PUBLIC TELEPHONES

Public telephones are conveniently located on all campuses for students desiring to make telephone calls. A courtesy phone for student use is located on the Southern Wake Campus in the Student Services building, in the Student Development Office, 128. On the Scott Northern campus a courtesy phone is located at the front desk in the lobby of Building A.

Students are not permitted to use any other office telephones for personal calls. Since the College does not have access to an intercom system or a messenger service, staff members will not deliver a message to a student unless it is determined to be an emergency. In an emergency, an individual who calls for a student must state the nature of the emergency; someone in Security Services will look up the student's schedule and attempt to contact him/her immediately.

LOST AND FOUND

The purpose of this policy is to provide standard procedures for the storage and disposal of lost or unclaimed items on the premises of Wake Technical Community College. Whenever possible, the owner of such items will be contacted first.

The following guidelines apply:
- Any lost or unclaimed item deemed unsafe or unsanitary will be discarded immediately.
- Food and other perishable items, lunch bags, and thermoses will be discarded after 24 hours.
- State ID cards, credit or debit cards, or anything with an identifying name will be shredded and discarded after two (2) business weeks. Attempts will be made to contact the student/individual by Wake Tech e-mail and/or phone number on record. Cards turned in will be kept in a secure location.

- College Student ID's are turned into the Campus Police/Student ID Office within two (2) business days.
- Clothing, backpacks, and other personal items will be donated to charity or discarded after 30 business days.
- Cell phones and other personal electronic devices will be recycled after 30 business days.
- USB's will be checked for personal data to locate the owner. After 30 business days, the USB will be cleared of all data and donated.
- Keys will be discarded after 30 business days.
- Cash will be documented and donated to the Nest/Food Pantry on the campus where found after 30 business days.

Items valued at more than $200 (laptops, purses, jewelry, etc.) will be recorded in a log and locked in a secure storage area accessible only to an authorized WTCC employee. Items may be reclaimed only by someone providing identification and proof of ownership.

"Lost and Found" repositories are located in the reception areas on most campuses, with these exceptions: Southern Wake Campus repository is in Building L, Room 137-G; the Scott Northern Wake Campus repository is located in Building B, Room NB 150; Research Triangle Park Campus repository is located in RTP1, Room 150.

STUDENT GOVERNMENT ASSOCIATION

The **Student Government Association (SGA)** is the campus organization that represents the interests of all Wake Tech students. Each curriculum student enrolled at Wake Technical Community College is required to pay the Student Administration Fee and shall be a member of the Wake Technical Community College Student Government Association and governed by its rules and regulations.

Visit http://www.waketech.edu/student-life/student-government-association to learn more about Wake Tech's SGA.

CLUBS AND ORGANIZATIONS

The Office of Student Development supports and encourages professional organizations and clubs at Wake Technical Community College. Professional organizations and clubs give students a unique opportunity to develop leadership skills, network with professionals in a given field of study, and get involved. Students interested in joining a club should visit the Office of Student Activities in the Student Services Building on Southern Wake Campus.

A complete listing of clubs is available online at http://studentactivities.waketech.edu/clubs/.

Guidelines for Organization Approval

All student organizations must be approved by the college through the Office of Student Development. The following are procedural guidelines for obtaining new student organization approval:

- Students wishing to create a new organization must request an application from the Director of Student Activities. The application period for establishing a new organization is spring semester; applications received during the fall semester will be considered for approval for the following academic year. The application must include the name of the organization, its purpose, objectives, recommendation for a faculty advisor, procedures for electing officers, means and methods for financing, and other information as requested by the Dean of Student Development.

- The organization must receive approval from the Director of Student Activities, the Dean of Student Development, the Senior Vice President of Student Services, and the President of the College before becoming an official college organization

ATHLETICS

The mission of Wake Tech's athletics program is to enhance the college experience for all students by promoting fitness, building awareness of the importance of lifelong physical activity, and developing character and leadership ability through athletic activities and events. Wake Tech encourages all students to participate in athletics, develop athletic skills and abilities, and strive to realize their full potential.

The program offers high-quality instruction and support services with the collaborative efforts of faculty, staff, administration, trustees, and the community. Wake Tech offers equal opportunity for all in compliance with the regulations of Title IX and adheres to an established code of conduct for all athletes and program participants.

Wake Tech is a proud member of the National Junior College Athletic Association (NJCAA), Region X.

Support Wake Tech athletics: Become an Eagle Club member! Learn more at athletics.waketech.edu.

STUDENT RELATED SERVICES AND ACTIVITIES

VETERANS ZONES
Website: https://www.waketech.edu/student-services/veterans-services/resource-center

The Veterans Zones (located at RTP (RT1-MB332); SNWC (C206); and SWC (L133)), provide Wake Tech student veterans and their family members with a "safe zone," a unique academic and social environment in which they can engage and interact. The Veterans Zones offer a variety of resources and services to assist and support veterans, to ensure their success in academic and other endeavors. These resources and services include a computer lab, an activity center, counseling services, and connections to programs such as Veterans Upward Bound, SALUTE: Veterans National Honor Society, Hire Heroes USA, Student Veterans of America, and USO of North Carolina. Wake Tech is proud to support Veterans and are thankful for their service to our country.

VETERAN AFFAIRS EDUCATIONAL BENEFITS
Website: http://veterans.waketech.edu

All Wake Tech curriculum programs, as well as Workforce Continuing Education's Basic Law Enforcement Training (BLET) and Barbering programs, are approved by the North Carolina State Approving Agency for use of GI Bill® benefits. Students who are currently serving on Active duty, Retired, Ready Reservists, North Carolina National Guard members, spouses and children of deceased or 100-percent disabled Veterans or dependents in receipt of transferred Post 9/11GI Bill entitlement, are all classified as "Veteran Students." Veterans who wish to use their G.I. Bill education benefits must first establish their eligibility with the Department of Veterans Affairs (VA) by submitting the appropriate application form at www.gibill.va.gov. Veterans separated from service with an Honorable Discharge usually qualify for education benefits which provide, in general, 36 months of full-time training.

Veterans who have served on active duty on or after September 10, 2001, may be eligible for Post 9/11 GI Bill benefits. More information about these benefits is available at www.va.gov/education/how-to-apply.

Active duty military personnel are also eligible for education benefits under the G.I. Bill. Interested persons should contact their duty station Education Officer for details before applying for admission to the college.

Veterans will not be certified for VA benefits until all entrance/admissions criteria are met. Wake Tech Certifying Officials require "official" transcripts from high school and all other institutions of higher learning to expedite the certification process. Additionally, we request copies of the DD-214 and VA Certificate of Eligibility. Reservist and members of the National Guard are asked to submit the Notice of Basic Eligibility (NOBE). Veterans using GI Bill benefits are encouraged to apply for Federal Financial Aid. Veterans attending Wake Tech under the G.I. Bill receive a monthly reimbursement from the Department of Veterans Affairs. The reimbursement is based on course load; for example, a veteran carrying a full-time load would be eligible for the full benefit. To receive the full benefit, the veteran must be enrolled at the full time rate for the particular semester. Veterans should contact a Wake Tech VA Certifying Official, located on Southern Wake Campus in the Student Services Building, Suite 143, or Scott Northern Wake Campus, Building C, room 206, for more information.

Per Title 38 United States Code Section 3679(e), any individual who is entitled to educational assistance under chapter 31, Vocational Rehabilitation and Employment, or chapter 33, Post-9/11 GI Bill benefits is permitted to attend or participate in the course of education during the period beginning on the date on which the individual provides to the educational institution a certificate of eligibility for entitlement to educational assistance under chapter 31 or 33 (a "certificate of eligibility" can also include a "Statement of Benefits" obtained from the Department of Veterans Affairs' (VA) website or a VAF 28-1905 form for chapter 31 authorization purposes) and ending on the earlier of the following dates:

1. The date on which payment from VA is made to the institution.
2. 90 days after the date the institution certified tuition and fees following the receipt of the certificate of eligibility.

VA SAP POLICY
Per federal regulations, a veteran student's cumulative GPA must be reviewed at the end of each semester of attendance, including summer. As such, a veteran student failing to receive a 2.0 or higher cumulative GPA at the end of a semester will have their ability to use GI Bill benefits place on probationary status. A veteran student failing to meet the required 2.0 standard at the end of the next term in attendance will have their VA enrollment terminated and benefits temporary suspended. Enrollment certification will not be restored until GPA standards are met, or upon approval of a Satisfactory Academic Progress Appeal (SAP) application.

Any changes to a veteran's enrollment must be immediately reported to Wake Tech Veteran Services. Veteran students dropped or withdrawn for any reason will be immediately reported to the VA, and appropriate adjustments will be made. Reporting delays or omissions can adversely affect future benefit payments.

ENROLLMENT OF VETERANS IN NON-TRADITIONAL COURSES
Veterans receiving VA education benefits may enroll in non-traditional courses (including Internet, online or hybrid courses) provided that:
- The course or courses are required by their current program of study.
- The veteran has met with the VA Certifying Official to discuss policies and procedures before registering for a course.
- The veteran has reviewed the Distance Education Student Self-Assessment on the Wake Tech website (or in the schedule of classes) to determine if suited for distance learning.

NOTE:
There is no additional charge for enrolling in non-traditional courses, however, online remedial courses cannot be certified for GI Bill benefits unless otherwise specified by the VA.

RESIDENCY WAIVERS
Wake Technical Community College will waive the 12 month state residency requirement for any student who meets the following criteria as outlined in NC Senate Bill 478:

1) The veteran student has applied and enrolled in Wake Technical Community College within three (3) years of the veteran's discharge or release from the Armed Forces, the Commissioned Corps of the U.S. Public Health Service, the National Oceanic and Atmospheric Administration.

2) The veteran student qualifies for and uses educational benefits pursuant to 38 U.S.C. Chapter 30 (Montgomery G.I.Bill® or 38 U.S.C. Chapter 33 (Post-9/11 GI Bill), as administered by the U.S. Department of Veterans Affairs. This includes veteran students in receipt of Chapter 33 Post 9/11 GI Bill Transfer of Entitlement.

3) The student's abode is North Carolina.

Residency applications can be found at: https://go.waketech.edu/student/public/forms/Documents/1500 SS ResidencyWaiverForm.pdf

PRIORITY REGISTRATION
A Veterans Priority Registration (VPR) system has been established to allow veterans using GI Bill® benefits to register for courses before the general registration period opens. If you have completed less than two (2) semesters here at Wake Tech, you will be required to attend a mandatory information session to receive VPR. Contact Veterans Services for more information.

FORMAL COMPLAINT POLICY
Any veteran student may submit a complaint through the GI Bill Feedback Tool if Wake Tech failing to follow the Principles of Excellence. The GI Bill Feedback Tool can be found at: http://www.benefits.va.gov/GIBILL/Feedback.asp. You can submit a complaint for yourself or anonymously on behalf of someone who does not wish to be identified. You will need to identify which education benefit you're using, select an issue category, and provide your complaint in a narrative with the desired outcome. You will also be asked to identify the school and provide your contact information. VA will review the following types of complaint:

Recruiting/Marketing Practices
Quality of Education
Accreditation
Grade Policy
Financial Issues (e.g. Tuition/Fee charges)
Release of transcripts
Student Loans
Transfer of Credits
Post-Graduation Job Opportunities
Refund Issues
Change in Degree Plan/Requirements

Complaints are sent from VA to Wake Tech Veteran Services for our review and to provide a response to your complaint. If VA determines another government agency would be better able to assist, they will forward your complaint to them and provide you an update. Please note, complaints submitted anonymously will not be sent to the college to prepare a response but submitted for the record to the Federal Trade Commission's Consumer Sentinel Network.

Upon receiving a formal complaint, Wake Tech Veteran Services will review your complaint, communicate with you as needed and prepare a response to the VA.

For more information about veterans' educational benefits, visit http://veterans.waketech.edu.

Veteran Services Office Hours and Locations

Southern Wake Campus
Student Services Building (SL), Suite 143
Monday-Thursday, 8:00 a.m. - 5:00 p.m.
Friday 8:00 a.m. - 5:00 p.m.

Scott Northern Wake Campus
Building C, Room 206 (Veterans Zone)
Monday-Thursday, 8:00 a.m. - 5:00 p.m.
Friday 8:00 a.m. - 5:00 p.m.

RTP Campus
Room 326 M
Thursday 9:00 a.m. – 1:00 p.m.

Virtual appointments available
Monday, Wednesday, Thursday and Friday 8:00 a.m. – 5:00 p.m.
Tuesday 8:00 a.m. – 8:00 p.m.
Veteran Services appointments available at: https://www.waketech.edu/student-services/eagleq

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at http://www.benefits.va.gov/gibill.

ALUMNI
Wake Tech appreciates alumni! We have created a web page especially for you – a convenient place to get news; learn more about benefits, career services, and other resources available to alumni; and contribute to the college.
Visit http://www.waketech.edu/student-life/alumni to learn more.

Please also consider sharing your Wake Tech story! Tell us about your personal and professional accomplishments on our Success Stories page.

We'd love to hear from you!

Remember to check the online College Catalog for the most up-to-date information at
http://www.waketech.edu/student-services/catalog

STUDENT CODE OF CONDUCT, RIGHTS AND RESPONSIBILITIES

I. GENERAL INFORMATION

This section covers student conduct, rights, and responsibilities while pursuing an education at Wake Technical Community College. Wake Tech is a learning community with specific expectations regarding student conduct. The college seeks to provide a safe and healthy environment that facilitates teaching, learning, and student success by adhering to the college's core values of respect, responsibility, communication, collaboration, critical thinking, and accountability. When a student's conduct adversely affects the college community or the pursuit of Wake Tech's educational objectives, disciplinary action will be taken – first, to resolve the problem, and then to help students learn from mistakes. Discipline issues will be resolved informally whenever possible.

All Wake Technical Community College policies (academic; student services; administrative) apply to all students, regardless of campus and center locations or mode of instructional delivery, unless expressly defined by the college.

II. RIGHTS AND RESPONSIBILITIES

The submission of an application for admission to Wake Technical Community College represents a voluntary decision on a prospective student's part to participate in the programs offered by the college pursuant to its policies, rules, and regulations. College acceptance of the application represents the extending of the privilege of joining the college community, and of remaining a part of it as long as established standards for academics and conduct are met.

Students who enroll accept college policies and procedures and acknowledge the right of Wake Technical Community College to take action, up to and including suspension or expulsion, when a student is found responsible for misconduct. Students are responsible for becoming familiar with Wake Tech policies and procedures.

Students have the following rights, and the privilege of exercising those rights without fear or prejudice, as long as they respect state and federal laws, college policies, and the rights of others on campus. Wake Technical Community College strives to create an atmosphere where students have the following rights:

Education
Students are free to pursue educational goals through appropriate opportunities for learning in the classroom and on the campus. Student performance will be evaluated on an academic basis, not on opinions or conduct matters unrelated to academic standards.

Freedom of Expression
Students can freely study and discuss various ideas in a courteous manner in and outside of the classroom.

Participation
Students have the right to inquire about and to propose improvements to policies, regulations, and procedures affecting their welfare through established student government procedures, campus committees, and college offices.

Safe Environment
Students have the right to expect a safe environment that ensures the continuity of the educational process.

Privacy
Students have the right to expect that their official college records will be safeguarded. The Family Educational Rights and Privacy Act of 1974 (as amended) provides safeguards regarding confidentiality of and access to student records. Other than directory information, no records shall be made available to unauthorized personnel or groups inside or outside the college without the written consent of the student involved, except under legal obligation.

Record Review
Students and former students have the right to review their official records and to request a hearing if they wish to challenge the contents of those records.

Academic Integrity Appeal
1. Students have the right to appeal academic integrity policy penalties. See Section III. D.
2. Students have the right to appeal course grades. See Section III. E.

STUDENT CODE OF CONDUCT, RIGHTS AND RESPONSIBILITIES

Grievance Process
Students have the right to grieve student code of conduct sanctions. See Section IV.E.

Due Process
Students have the right to receive reasonable notice to be heard, prior to conduct sanctions being given, and the opportunity to grieve sanctions. See Sections III. D. & VI. E.

Freedom from Discrimination
Students can expect to engage in the college community without discrimination as defined by federal and state laws and college regulations.

Students also have responsibilities, as part of the college community, including but not limited to:

Civility
Respecting the rights of others and exercising courtesy and politeness in all situations.

Academic Integrity
Respecting the highest standards of academic integrity and reporting any violations of those standards to the Student Conduct Officer or any other college official for appropriate investigation and disposition.

Safety
Refraining from actions that endanger the health, safety, or welfare of any member of the college community or college visitors.

Compliance
Adhering to the normal standards, rules, and regulations of the college as well as with federal, state, and local laws.

ARTICLE A: DEFINITIONS (AS APPLICABLE TO STUDENT CODE OF CONDUCT, RIGHTS, AND RESPONSIBILITIES)

Word/Term	Definition
Academic Integrity	All academic assignments turned in shall be one's own work unless otherwise stated by the instructor.
Appeal	An official request that a currently-enrolled student would make to a faculty member regarding a final course grade or academic integrity penalty given by that faculty member; or a decision made by the DRGC.
Board of Trustees	The group of appointed officials charged with oversight of the college.
Business Days	All days except Saturday, Sunday and college holidays.
College	Refers to Wake Technical Community College.
College Official	Any person employed by the college performing assigned administrative or professional responsibilities.
College Premises	All land, buildings, facilities, and other property in the possession of and controlled by the college, including adjacent streets and sidewalks.
Complaint	An expression of dissatisfaction from a currently-enrolled student about an issue related to the college and its mission, for which there is no formal or established grievance or appeals process; including but not limited to curriculum, class scheduling, registration, financial aid, facilities, or any college official.
Complainant	Any person who submits a charge alleging that a student has violated the Student Code of Conduct.
Disciplinary Review Grievance Committee (DRGC)	A judicial body designed to provide due process and participatory justice to students for college incidents, which resulted in sanctions or penalties.
Disciplinary Review Grievance Committee Chairperson	An individual selected by the Student Conduct Officer to facilitate a Disciplinary Review Grievance Committee proceeding.
Discrimination	Discrimination is the unlawful and intentional act of unfair treatment of a person based on race, ethnicity, sex (gender), sexual orientation, religion, national origin, physical or mental disability, or age.

Due Process	A reasonable notice to be heard, prior to conduct sanctions being given, and the opportunity to grieve sanctions received.
Educational Assignment	A sanction designed to promote self-awareness of the appropriate/inappropriate behavior and awareness of institutional expectations, and to educate the student in the specific area of his or her violation.
Faculty Member	Any person hired by the college to conduct classroom or teaching activities.
Grievance	A formal objection that a currently-enrolled student may wish to have addressed, regarding a disciplinary action placed upon the student by a college official or DRGC.
May	Term used to indicate permission.
Member of College Community	Any person who is a student, faculty member, college official, or any other person employed by the college.
Organization	Any group who has complied with the formal requirements for college recognition of sanctions.
Policies	The written regulations of the college as found in but not limited to the college catalog, the college website and web pages, and the computer use guidelines.
Preponderance of Evidence	A standard of proof in which the evidence strongly suggests the student code has been violated.
Respondent	Any student alleged to have violated the Wake Tech Student Code of Conduct.
Shall	Term used to indicate an imperative (mandatory).
Student	Any person taking courses at the college, full-time or part-time, seated or online.
Student Conduct Officer	The college official charged with the responsibility of administering the college's Student Code of Conduct.
Victim	Any person who is acted on and usually adversely affected by a force or agent.
Witness	One who gives evidence; a person who is present at an event and can speak to what happened.

III. ACADEMIC INTEGRITY POLICY

A. **Expectations**

When college officials award course credits, degrees, diplomas, and certificates, they assume integrity on the part of the student who has completed the work. Wake Technical Community College expects students to demonstrate the highest personal integrity in all academic work and behavior. Effective education depends on an atmosphere that is conducive to learning, based on a commitment to honesty, trust, fairness, respect, and individual responsibility. Creating such an atmosphere is the responsibility of students and instructors and requires integrity on the part of both. Students may be asked to sign a statement of academic integrity upon entering Wake Tech classes.

Faculty are responsible for the assignment of student grades according to methods that are professionally acceptable, communicated to everyone in the class, and applied to all students equitably.

A student who has a disagreement with an instructor's professional judgment in grading should attempt to resolve the matter through dialogue with the instructor who issued the grade. Wake Tech's Academic Integrity Policy requires that the college ordinarily refrain from review of or participating in an instructor's evaluation of student performance in cases where the instructor is merely using his or her professional judgment.

However, the college acknowledges that, on occasion, exceptional circumstances may arise in which a student should have the opportunity to appeal the grade for a course. When circumstances warrant, a student may make use of the following appeals process listed in Section E. Final Course Grade Appeal Procedure. In the event the student is contending that the disputed grade was rendered on account of or was influenced by the student's age, race, sex, national origin, religion, veteran status, or disability, the student must use the Complaint Form in lieu of the procedure described in Section E. Final Course Grade Appeal Procedure below.

B. **Violations of the Academic Integrity Policy**

Cheating and plagiarism, as defined below, are forms of academic dishonesty that violate the Academic Integrity Policy. Students found responsible for violating academic integrity policies are subject to penalties from Instructors and sanctions from Student Conduct Officers.

Academic Violations	Definitions
Cheating	Receiving or giving another student any unauthorized information or material during or after a quiz, test, exam, or assignment; working with others, either virtually or in person, to complete a quiz, test, exam, project, or assignment without prior approval from the instructor or the use of unauthorized resources.
Plagiarism	Taking or passing off as one's owns the ideas, words, or work of another person. When students present others' ideas, words, or work in a written or oral assignment, they must document the source(s) as directed by the instructor of the course. Plagiarism also includes buying or selling work to others, as well as providing false information about submitted work.

C. Academic Integrity Violation Penalties

The following academic penalties may be imposed by an instructor, a department head, or a division dean for violation of the Academic Integrity Policy.

Academic Penalties	Possible Sanction Imposed
Loss of Grade	A "0" for an assignment, quiz or test.
Loss of Credit	An "F" for the course and loss of the right to attend remaining class sessions if the student appeals and the instructor's decision is upheld.

D. Academic Penalty Appeal Procedures (Loss of Grade)

A student who wishes to appeal an Academic Integrity Violation Penalty resulting in the loss of grade points on an assignment, quiz or test should communicate with the instructor immediately to discuss the matter. *The instructor's decision is final*.

E. Final Course Grade Appeal Procedures (Loss of Credit)

The following procedure must be followed to contest a final grade:

1. The student is responsible for contacting the instructor within **two (2) business days** of the student's grade being posted to seek a resolution. The instructor will notify the student within **three (3) business days** of contact made by the student. If not satisfied with the instructor's decision, the student must initiate the Final Course Grade Appeal Procedure within **ten (10) business days** following the posting of final grades.
2. The instructor's supervisor, typically a "department head" will review the appeal and communicate the decision to the student through Wake Tech email within **three (3) business days**. If the student is not satisfied with the decision of the instructor's supervisor, an appeal to the academic dean of the division must be made within **five (5) business days**.
3. The academic dean will investigate and return a decision to the student through Wake Tech email within **five (5) business days**. *The academic dean's decision is final*.

The college recognizes that under certain circumstances, students may be justified in initiating their appeal at the department head level. Students who choose to communicate their appeal to the department head first, instead of to the instructor, must include their justification for doing so.

F. Recordkeeping

Documentation of all Academic Integrity Violations resulting in the Loss of Credit will be retained by a Student Conduct Officer. Multiple violations of the Academic Integrity Policy may result in additional student conduct sanctions.

STUDENT CODE OF CONDUCT, RIGHTS AND RESPONSIBILITIES

IV. STUDENT CODE OF CONDUCT

The purpose of the Student Code of Conduct (Student Code) is not to restrict freedom, but to protect the rights of all students in their academic pursuits.

Students are expected to conduct themselves in accordance with generally-accepted standards, while appropriately incorporating the College's Core Values of: Accountability, Respect, Responsibility, Critical Thinking, Communication and Collaboration.

A. **Prohibited Conduct**

Students are prohibited from engaging in any conduct which materially and adversely affects the educational process, including the following:

Code Number	Student Code Violation
1.	Violation of Academic Integrity Policy
2.	Disruptive, disrespectful behavior in any form of conduct by an individual or group of individuals that interferes with the educational opportunities of another student on college premises or at college-sponsored events. Disruption or obstruction of learning environment administration, disciplinary proceedings, or other college-authorized activity and events.
3.	Attempted or actual theft of, misuse of, or damage to college property; or theft of or damage to property of a member of the college community or campus visitor, on college premises or at college-sponsored activity and events.
4.	Trespassing, including unauthorized entry or presence on the property of the College or in a college facility or any portion thereof to which entry or presence has been restricted.
5.	Violation of the Drug and Alcohol Policy.
6.	The use of profane, lewd, or obscene speech or like expressive behavior (including the wearing of clothing displaying such language, pictures, or symbols); the use of defamatory or racist speech or like expressive behavior; or the use of any speech or behavior implying a physical threat or likely to provoke violence or retaliation in person or via electronic means, including but not limited to blogs, texts, emails, and social media platforms. Lewd or indecent conduct online, on college premises, or at college-sponsored activities and events.
7.	Verbal, mental or physical abuse of any kind, of any person on college premises, online, or at college-sponsored or supervised events, including but not limited to coercion, bullying, hazing, stalking, intimidation, or conduct that threaten or endanger an individual's health or safety.
8.	Violation of the Sexual Harassment Policy.
9.	Occupation of, refusal to depart from, or seizure of college property or any portion thereof (or threatening such in any manner) for a use inconsistent with prescribed, customary, or authorized use.
10.	Participating in or conducting an assembly or demonstration, in a manner which threatens or causes injury to persons or property; which interferes with free access to entrances or exits of college facilities; or which is harmful, obstructive, or disruptive to the functions of the College.
11.	Possession, storage, use of or manufacture of firearms, fireworks, explosives, knives of any kind, and other destructive devices on college property, or at college-sponsored activities and events (except by persons specifically authorized by the college and in accordance with G.S. 14-269.2) in connection with college-approved activity.
12.	Tampering with fire safety equipment or setting off a fire alarm on college premises or at college-sponsored activities or events, except with reasonable belief for the need of such equipment or alarm.

13.	Gambling, including unlawful games of chance for money or anything of value, and the sale, barter, or other disposition of a ticket, order, or any interest in a scheme of chance by any name, on college premises or at college-sponsored activities or events.
14.	Smoking and/or use of any products, including tobacco but not limited to cigarettes, e-cigarettes and vaporizers, on all properties owned or rented by the college, except in college-approved designated smoking areas.
15.	Violation of state or college regulations regarding the operation and parking of motor vehicles.
16.	Tampering with the election of any college-recognized student organization, forgery, alteration, or misuse of college documents, records, or instruments of identification with intent to deceive.
17.	Failure to comply with instructions of college officials acting in performance of their duties and/or failure to identify oneself to these persons when requested to do so.
18.	Fiscal irresponsibility, such as, failure to pay college-levied fines, failure to repay college-funded loans, or the passing of worthless checks to college officials.
19.	Violation of any college policy, rules and/or local, state, or federal criminal law on college premises adversely affecting the college community's pursuit of its educational purposes. Conducting oneself in a manner that threatens or endangers the health and/or safety of a person, other members or visitors within the college community or at college sponsored or related events is prohibited.
20.	The unauthorized access or attempt to access, manipulate, or retrieve files, programs, or data from any college computer system. Use of computing facilities to send or view obscene or threatening messages. The falsification of documents, impersonation of another individual or willfully encouraging others to commit such acts is prohibited.

B. **Disciplinary Penalties for Violations of the Student Code**
The following disciplinary actions may be imposed by a college official for violation of the Student Code. A copy of any written warnings or reprimands must be forwarded to a student conduct officer for appropriate recordkeeping. Please note that all sanctions given do not necessarily follow the order below.

1. **Educational Conversation:** An educational conversation may take place between the student and the Student Conduct Officer. No determination will be made regarding if the student is responsible for violation of the Student Code of Conduct. The student will not be given a sanction. The purpose of this action will be to give the student an opportunity to learn about College policies and expectations to stop any behavior that may violate the Student Code of Conduct in the future. A record of the educational conversation will be kept with the Student Conduct Officer using the conduct management system.

2. **Written Warning:** A written communication giving official notice to the student that a violation of the Student Code has occurred and that any subsequent violation of the Student Code may carry heavier penalties because of this infraction.

3. **Emergency (Interim) Suspension:** Instructors or college officials may impose an interim suspension for conduct that poses a threat to the health or well-being of any member of the academic community or the activities of the College.

    a. Interim suspension will not exceed more than two class periods. Instructors must notify their department head or next ranking available supervisor immediately upon suspension of a student.
    b. A completed Student Code Violation form must be submitted electronically to the appropriate Student Conduct Officer within 24 hours of the suspension. The form is available online at go.waketech.edu, under the Links heading, listed under the Maxient Conduct Reporting Forms tab.
    c. Any student who receives an interim suspension must meet with a Student Conduct Officer or designee prior to returning to class.
    d. If class readmission is approved, the Student Conduct Officer will give the student a class readmission notice. Instructors who have not received notification of a suspended student's return to class may deny entry until such notification is received.

STUDENT CODE OF CONDUCT, RIGHTS AND RESPONSIBILITIES

Disciplinary sanctions may be modified only by the Disciplinary Review and Grievance Committee (DRGC). The AVP of Student Services, Sr. Vice President for Enrollment & Student Services, Student Conduct Officer, or Registrar may impose and modify disciplinary sanctions. See the chart and sanctions below:

Level of Violation	Minimum Sanction	Maximum Sanction
Minor	Educational Conversation Educational Sanction	No Contact Behavior Contract Written Warning
Moderate	Written Warning Educational Sanction Restitution	Probation Suspension
Major	Suspension Delayed Registration Withholding	Expulsion Revocation

1. **Educational Sanctions:** Educational sanctions may include work assignments, essays, community service, participation in college-sponsored programs or activities, behavioral contract, alcohol and/or drug education and counseling, with a certified counselor, and other related educational assignments.

2. **General Probation:** An individual may be placed on general probation when involved in a substantive disciplinary offense. General probation has two (2) important implications: 1) the individual is given a chance to show capability and willingness to observe the Student Code without further penalty; and 2) if the student errs again, additional sanctions will be imposed for this violation. This probation will be in effect for no more than two (2) terms.

3. **Restrictive Probation:** Restrictive probation results in loss of good standing, and notation of such is made in the student's conduct record. Restrictive conditions may limit activity in the college community and/or access to specified college facilities. The student will not be eligible for initiation into any local or national organization, and may not receive any college award or other honorary recognition. The student may not occupy a position of leadership or responsibility with any college or student organization, publication, or activity. This probation will be in effect for not less than two (2) terms. Any violation of restrictive probation may result in immediate suspension.

4. **Restitution:** Paying for damaging, misusing, destroying, or losing property belonging to the college, college personnel, students and visitors.

5. **Delayed Registration:** A student may be required to meet with a Student Conduct Officer before registering for classes if the student has not complied with a sanction or contacted the Student Conduct Officer as required.

6. **Revocation of Admission and/ or Degree:** Admission to or a degree awarded from the college may be revoked for fraud, misrepresentation, or other violation of college standards in obtaining the degree, or for other serious violation committed by a student prior to graduation.

7. **Agreed-Upon Behavior Contract:** In situations where a student and the Student Conduct Officer can agree on the consequences that should result from the student's Code of Conduct violation, the agreed-upon consequences can be set out in a document titled "Behavior Contract."

8. **Withholding:** Transcript, diploma, or right to register will be withheld (denied) when financial obligations are not met.

9. **Emergency (Interim) Suspension:** Instructors or college officials may impose an interim suspension for conduct that poses a threat to the health or well-being of any member of the academic community or the activities of the College.

10. **Suspension:** Exclusion from a class, program of the college, or all college activities for a specified period of time. This sanction is reserved for those offenses warranting discipline more severe than probation, or for repeated misconduct. Students who receive this sanction must get specific written permission from a Student Conduct Officer before returning.

11. **Expulsion:** Dismissing a student from campus for an indefinite period. The student loses his/her student status.

12. **Group Probation:** This is given to a college club or other organized group for a specified period of time. If group violations are repeated during the probationary period, the group's charter may be revoked or activities restricted.

13. **Group Restriction:** Removing college recognition during the term or semester in which the offense occurred or for a longer period (usually not more than one additional term). While under restriction the group may not seek or add members, hold or sponsor events in the college community, or engage in other activities as specified.

14. **Group Charter Revocation:** Removal of college recognition from a group, club, society, or other organization for a minimum of two years. Re-charter after that time must be approved by the Vice President of Student Services.

15. **No Contact:** There is to be no communication with the party or parties by any means, including but not limited to electronic or digital, in person, or through a third party (other than an attorney).

Other than college probation, suspension, expulsion, or the revoking or withholding of a degree, disciplinary sanctions will not be made part of the student's permanent academic record but will become part of the student's conduct record maintained by the Student Conduct Officer.

Release of Student Conduct Records
As directed by the requirements of the Family Education Rights and Privacy Act (FERPA) the Office of Student Conduct does not issue student conduct information about current or former students without receiving a completed Release of Student Conduct Information Form. Unless required by law, Student Conduct records will not be released without the expressed permission from the student. Requests for student conduct information may include but is not limited to transfer requests to other colleges, licensing agencies, and security clearances for employment.

Please note that we do not provide character references as a part of a conduct record. If the college/agency inquires if a student is in good standing academically those requests will be forwarded to the office of Registration and Records for completion. If the college/agency provides their own form(s) they should be left with the student's request for completion in the appropriate areas by our office.

If the student is unsure of their prior conduct history, please submit a Release of Student Conduct Information Form. Once submitted, allow (3) to (5) business days for completion of the request during the college's normal operating hours. Ensure that the information requested on the Release of Student Conduct Reporting Form is accurate and completed in its entirety. Failure to do so may result in the request not being completed.

Release of Student Conduct Reporting Form

Student Conduct Records Retention
Student conduct records will include copies of all cases in which a student is found responsible for violating at least one Student Conduct Policy, as well as copies of correspondence and documentation related to the case. The Office of Student Conduct may redact information pertaining to other individuals listed in a case.
The policies regarding retention of Student Conduct records are as follows:
1. The College will maintain Student Conduct files for a period of no less than (7) years following the most recent finding of violation, as determined by the rules governing reporting under the Clery Act.
2. The College will maintain Student Conduct files of students who have been dismissed from the college indefinitely.
3. The College will retain, as required, statistical information connected to Student Conduct Policy violations in order to comply with mandated reporting requirements.

C. **The Conduct Process**
The Student Conduct Officer will request an initial meeting with the student in order to determine whether disciplinary charges should be initiated. During the meeting, the Student Conduct Officer will advise the student of the allegation(s), explain the student conduct process, and clarify the student's rights and responsibilities. Every effort will be made to resolve the matter by mutual agreement. Following the preliminary meeting the Student Conduct Officer will take one of the following actions:
1. If the student fails to appear, the Student Conduct Officer may find the student responsible and impose sanctions. If the student does not accept responsibility, the Student Conduct Officer will initiate formal

disciplinary charges. The student will be notified of the sanction via their official Wake Tech email address or US postal service. The student will be granted (**15**) business days to grieve the sanction.

2. If there is no basis for the allegation or if it does not warrant disciplinary action, the Student Conduct Officer will dismiss the allegation.

D. **Disciplinary Procedures for Violations of Student Code**

Instructor or College Official
The instructor will issue a report to the Student Conduct Officer for the first time a student violates the Academic Integrity violation in their class. The Student Conduct Officer will file the first report received as a For Information Only (FIO) report. Please note that there will only be (1) FIO report filed, even if it is a first offense in multiple classes. The instructor may issue a penalty for any academic integrity violation and should notify the student of the penalty and any report sent to the Student Conduct Officer. Any subsequent reports filed will be addressed by the Student Conduct Officer and sanctions may be given if the student is found responsible.
When a student is alleged to have violated any portion of the Student Code of Conduct, the instructor or college official reporting the incident must follow these steps:

1. Have an educational conversation with the student or issue a verbal warning in person, via e-mail or by telephone.
2. Refer the student to a Student Conduct Officer using the steps outlined below.
3. Prior to reporting, follow the following steps:

Validation	Validating the Suspected Conduct (review the Student Code of Conduct Violations)
Notification	Notify the Student in person, by e-mail or telephone within five (**5**) business days
Submission	Submit the appropriate violation form, i.e., Academic Integrity, Student Code of Conduct within five (**5**) business days to the Conduct Officer

4. Failure to notify the student may result in no further action being taken regarding the alleged violation. Forms are available at go.waketech.edu, under the Links heading, listed under the Maxient Conduct Reporting Forms tab.
5. If an instructor or college official who is considering reporting a student violation believes that the student poses an **immediate** harm to self or others, that instructor or college official should contact **Campus Police**. Other behaviors that are not considered a Wellness report, should be reported on the Behavior of Concern Threat reporting form for review by the Behavioral Assessment Team.

E. **Student Code of Conduct Sanction Grievance Procedures**
A student who wishes to grieve a **Student Code of Conduct Sanction** issued by a Student Conduct Officer or an Interim Suspension issued by an instructor may request a hearing with the Disciplinary Review and Grievance Committee (DRGC) within fifteen (**15**) business days after the sanction is issued. Whenever possible, a Student Conduct Officer will attempt to resolve such incidents informally. Request for a hearing must be made using a Student Conduct Grievance Request Form. The student will need to inform the Student Conduct Officer at this time if reasonable accommodations are needed.

If the student cannot attend the scheduled hearing because of an emergency, they must contact the Student Conduct Officer who issued the sanction as soon as possible or up to (1) hour prior to the hearing. The student will have only one opportunity to reschedule a cancelled hearing due to an emergency. Hearings that have been rescheduled due to the absence of the student will assemble, and the committee will make a decision on the case based on evidence provided by the Student Conduct Officer.

Note: If the Student Conduct Officer determines that the complainant or witnesses may be harmed emotionally by testifying in the presence of the respondent at the hearing, other arrangements will be made to allow participation without depriving the respondent of access to the testimony, evidence, or information. The College will provide support to students in cases of sexual or physical assault, as appropriate and upon request.

The Student Conduct Grievance process and the Final Grade Appeal process are two (2) separate processes. If the DRGC overturns a Student Conduct Officer's sanction, it does not negate the penalty given by the academic instructor or designee.

Composition of the DRGC: The committee is composed of three members, – a student in good standing academically and otherwise, a staff member, and a faculty member – plus a presiding Chairperson, who may serve a three-year term.

1. **Powers and functions of the DRGC**: The committee may confirm, or modify the sanction. The committee will use the preponderance of the evidence standard when determining the outcome of a case. The AVP of Student Services reserves the right to review the decision of the DRGC and make modification. In cases where there is alleged discrimination or denial of due process, the AVP of Student Services will review and make a determination. The decision of the AVP of Student Services is final.

F. **The DRGC Hearing Process**

The hearings are closed to the public and the media. Hearings are primarily scheduled on Thursday afternoons, or as announced. The Student Conduct Officer's role is to provide information when needed and to answer any questions.

1. At the hearing the DRGC chairperson will initiate introductions of all present for the record. The chairperson will read the charges and ask the student to respond to the charges. If the student acknowledges responsibility, they will be given an opportunity to provide any justifying information. If the student denies the charges, the hearing will continue.
2. Complainant and eyewitnesses will be allowed to give testimony on what they saw as related to the incident in question. Witness statements will be permitted based on the incident in question. The respondent will be given an opportunity to ask questions of the complainant and eye witnesses when present.
3. Committee members will be able to ask questions of all involved in the incident in question.
4. The burden of proof rests with the complainant. The DRGC will make a decision based on the preponderance of the evidence (more likely than not).
5. The chairperson will record the hearing except during deliberations. The recordings will be kept in the office of Student Conduct.
6. The DRGC will deliberate in private and provide the chairperson with their decision. The chairperson is not a voting member. Their role is to maintain order, and to advise on points of order and procedure.
7. The chairperson will give the decision of the DRGC to the AVP of Student Services within two (**2**) business days.
8. The decision of the DRGC can be modified by the AVP of Student Services when warranted. The only allowable basis for appeal is consideration of:
   a. alleged violation of college procedures in the conduct of the hearing or investigation, discrimination or lack of due process.
9. Grievances may not be heard by the president or the board of trustees if related to individual grades or the result of reported disciplinary action.
10. The AVP of Student Services will send students official notification through their Wake Tech e-mail address or through the U.S. postal service within three (**3**) business days after receiving the recommendation from the DRGC committee.

G. **DRGC Hearing Guidelines**

1. Students will be sent via their official Wake Tech e-mail, notice of the DRGC hearing at least five (**5**) business days before the hearing date. All persons involved in the hearing, with the exception of the witnesses will be sent incident documents. All persons will be given the location, time and place of the hearing. When Wake Tech e-mail is not available, students will be contacted in person, by phone or by certified mail via U.S. postal service.

2. Confidentiality will be maintained with information discussed in the hearings except as permitted or required by law. All decisions of the hearing will be given to the complainant and respondent, and to other College officials on a need-to-know basis.
3. Any information and or eyewitnesses related to the incident in question, including names, and contact information and importance of the eyewitnesses must be submitted to the Student Conduct Officer in writing, at least three **(3)** business days before the scheduled hearing.

The following rights are available to the complainant and respondent:

1. The right to know the identity of the person bringing charges against them.
2. To provide an explanation of their part with the incident that led to the charges. Students will be able to provide this information in writing at least three **(3)** business days prior to the hearing. This information will be reviewed and considered in the examination of the case, whether the student is present for the hearing or not.
3. To present information, witnesses and proof on their behalf. All information must relate directly to the incident in question.
4. To question any witnesses or deny any proof on their behalf.
5. To have an advisor at the hearing.
   a. A student who intends to have an advisor present at the hearing must notify the Student Conduct Officer in writing at least three **(3)** business days before the hearing, and include the name of the advisor, contact information and relationship to the student.
   b. The role of the advisor is not to represent the complainant or respondent. The advisor cannot ask questions of anyone participating in the hearing.
   c. Before the advisor can be given permission to attend the hearing, a confidentiality agreement must be signed. The Student Conduct Officer will provide the agreement document. Failure to sign this agreement will result in the advisor being denied entry to the hearing.

V. OTHER COMPLAINTS

Concerns involving harassment or discrimination by a college faculty member or staff member on the basis of race, color, religion, sex, sexual orientation, age, national origin, disability, or veteran status should be directed to the college's affirmative action officer and or Title IX officer.

Currently enrolled students may wish to complain about an issue related to the mission of the college for which there is no formal or established grievance or appeals process, including but not limited to curriculum, class scheduling, registration, financial aid, facilities, or faculty. In accordance with federal consumer information and accreditation requirements, all units that receive and resolve such complaints will maintain a log of the complaints and their resolution. In such cases, the student should follow the procedures below:

1. The student should submit a [Student Complaint Form](#).
2. The complaint form will be routed to the Sr. Dean/Student Conduct Officer and assigned to the appropriate administrator, based on the nature of the complaint.
3. The assigned administrator will follow up with resolution to the complaint within five **(5)** business days.

If you are a currently enrolled student who have exhausted the college's complaint procedures, and the matter is unresolved, you may file a formal complaint through the Licensure Division of the University of North Carolina System Office. All community college student complaints will be forwarded to the North Carolina Community Colleges System Office (NCCCSO). Please follow the directions on the following links.

[Filing a Complaint Against the College After Completing the College's Complaint Procedure](#)

[NCCC Complaint Form](#)

VI. FINAL STUDENT CONDUCT APPEALS PROCESS

A student who is not in agreement with the decision of the Disciplinary Review and Grievance Committee may appeal in writing to the Associate Vice President for Student Services within five **(5)** business days of official notification of the decision. The only allowable basis for appeal to the AVP for Student Services is consideration of alleged violation of college procedures in the conduct of the hearing or investigation. It is the student's responsibility to clearly define and substantiate their grounds for appeal in the letter sent via e-mail to the AVP for Student Services requesting an appeal.

The AVP for Student Services will:
1. Review the findings and proceedings of the DRGC
2. At their discretion, hear from the student, the members of the DRGC, or any other employee or witness who may provide information on the facts, before ruling on an appeal.
3. Uphold, modify, or overturn the decision of the DRGC
4. Inform the student, DRGC chair, and Student Conduct Officer of the final decision within ten (**10**) days of the receipt of the appeal.

The decision of the Associate Vice President is final.

VII. ATTORNEY INVOLVEMENT IN PROCEEDINGS
1. **Student Initiation**
   A student may engage legal counsel, for advising only, at any point in his or her disciplinary, academic appeal, or grievance proceeding. The student must give advance notice of three (3) business days of their decision to engage counsel.
2. **College Initiation**
   The DRGC or a college official may elect to be advised by legal counsel at any time in any disciplinary, academic appeal, or grievance proceeding.
3. **Staff/Faculty Initiation**
   Any staff or faculty member involved in any disciplinary, academic appeal, or grievance proceeding may avail themselves of legal counsel, at their expense, as they deem necessary. The college attorney is not automatically bound to represent any individual staff or faculty member.

***Remember to check the online College Catalog for the most up-to-date information at
http://www.waketech.edu/student-services/catalog***

BOOKSTORE
Website: http://waketech.bncollege.com/

Bookstore Information & Policies
Wake Tech bookstores are operated by Barnes & Noble College and are located on four physical campuses: Southern Wake, Scott Northern Wake, Perry Health Sciences and RTP. As hours vary by campus, please visit the bookstore website to check your individual campus. Your Wake Tech bookstore is your one-stop shopping for new, used, rental and e-Textbooks as well as College supplies, clothing, gifts and sundry items.

Students should bring course schedules to the bookstore as they contain important course information which is needed to locate the accurate materials. Students may also purchase their books 24/7 on our website.

Payment Methods
- Credit Cards: Master Card/Visa/Discover/American Express
- Barnes & Noble Gift Card
- Student Financial Aid
- Cash

Cash for Books
Your campus bookstore buys back used books every day. However, the best time to sell back used books is when final exams begin. The Bookstores will pay up to 50% of the book's selling price if professors have assigned it again for the next term and if the bookstore is not overstocked. If the book does not meet these criteria, prices are determined by the current national demand. Study guides and workbooks must be "like new", without any writing on any of the pages. All books must be in good condition. Some books have little or no monetary value. One-time use, out-of-print books, and old editions not in national demand will not be purchased. For students' protection, a current student ID is required for all buyback transactions.

Refund Policies
Textbooks
- A full refund will be issued in your original form of payment if textbooks are returned with an original receipt during the first week of classes.
- With a proof of a schedule change and an original receipt, a full refund will be issued in your original form of payment during the first 30 days of classes.
- No refunds on unwrapped, loose leaf books or activated eBooks.
- Textbooks must be returned in their original condition.
- No refunds or exchanges without an original receipt.

General Reading Books, Software, Audio, Video, & Small Electronics
- A full refund will be issued in your original form of payment if merchandise is returned with an original receipt within 14 days of purchase.
- Opened software, audio books, DVDs, CDs, music, and small electronics may not be returned. Instead, each can be exchanged for the same item, but only if defective.
- Merchandise must be returned in its original condition.
- No refunds or exchanges without an original receipt.

Laptops
- An exchange for the same item will be granted within 14 days of the item pickup if the product is found to have a manufacturer's defect. All original components, including the box, must be present for the exchange.
- Merchandise damaged by the customer does not qualify as defective merchandise.

All Other Merchandise
- A full refund will be issued in your original form of payment with an original receipt.
- Without a receipt, a store credit will be issued at the current selling price.
- Cash back on merchandise credits or gift cards will not exceed $1.
- No refunds on gift cards, prepaid cards, phone cards, newspapers, or magazines.
- Merchandise must be returned in its original condition.

COLLEGE ID

Employees and Volunteers
A college ID card will be provided to each employee and volunteer. The college ID card or another name badge must be worn or carried by the employee or volunteer at all times while on any Wake Tech campus or when conducting official Wake Tech business off campus.

Attention Students:
- All Curriculum Wake Tech students must have an official, college-issued ID badge
- Veteran Student ID badges are available

Your Wake Tech issued ID badge is required for using the following campus services:

- **ILC Tutoring Center (ILC)**
- **Campus libraries**
- **Book purchases with Financial Aid**
- **E-learning Testing Center**
- **Wake Tech bus service**
- **Student Lounge/Center**
- **Supplemental testing**
- **Wake Tech equipment and resources**

New Students:
Obtain your ID Badge by visiting one of our offices listed below:
1. Complete registration
2. Pay your tuition
3. Present another form of photo identification (driver's license, passport, military ID (DD214), etc.)

College ID Office Hours of Operation

Southern Wake Campus (SA102)
Mon & Tue: 9:00 a.m. – 5:00 p.m.
Wed: 8:00 a.m. – 4:00 p.m.
Thu: 7:00 a.m. – 3:00 p.m.
Fri: 9:00 a.m. – 5:00 p.m.

Scott Northern Wake Campus (Building D – 103)
Mon & Tue: 8:00 a.m. – 4:00 p.m.
Wed: 7:00 a.m. – 3:00 p.m.
Thu: 8:00 a.m. – 4:00 p.m.
Fri: 8:00 a.m. – 4:00 p.m.

Perry Health Sciences Campus (HA145)
Wed: 7:00 a.m. – 3:00 p.m.

RTP Campus (RTP1, 107)
Mon-Fri: 8:00 a.m. – 5:00 p.m.

Western Wake Campus (Room 254) *
Tue – Fri: 10:00 a.m. – 1:00 p.m.

*Please Note: Photo ID services at Western Wake Campus will be closed during student breaks and holidays.

Public Safety Education Campus (Room 1911)
Mon – Thu: 8:00 a.m. – 4:30 p.m.

To request an officer for an after-hours (*5:00 p.m. – 7:00 p.m. Monday – Friday)* ID on Scott Northern Wake Campus, Southern Wake Campus and Perry Health Science Campus, please contact non-emergency dispatch at **919-866-5943**.

Contact:
Kenneth Brown
ID Coordinator

Wake Tech Campus Police
Kjbrown173@waketech.edu
919-866-5493

ACADEMIC ADVISING
Website: advising.waketech.edu

Wake Tech employs professional Academic Advisors and Faculty Advisors to teach students the importance of developing and implementing their educational and career plans to reach their goals.

As a result of Advising, students will:
- Develop an educational plan that aligns with career goals.
- Utilize the resources and services on campus to achieve their educational and career goals.
- Demonstrate decision-making skills and ownership for their educational plans and achievements.
- Select courses each semester to follow their educational plan.

Advisors will:
- Provide professional, courteous, and timely student service.
- Maintain confidentiality.
- Explain college programs, policies, and procedures.
- Educate students about available resources and services and make appropriate referrals.
- Encourage students to utilize Career and Employment Resources to define and develop career interests and individualized goals.
- Empower students to gain decision-making skills and ownership for their educational plans and achievements.
- Guide students in their program-planning activities consistent with their career and educational goals.
- Teach students skills to monitor their academic progress and seek assistance as needed.

College/University Transfer students in A.A. and A.S. programs work with an Academic Advisor from their first semester until graduation.

College/University Transfer students in A.F.A. and A.S. Engineering programs meet with an Academic Advisor in their first semester. After that, students are assigned a Faculty Advisor for their major.

Associate in Applied Science (A.A.S.) students in degree, diploma, and certificate programs meet with an Academic Advisor in their first semester. After that, students are assigned a Faculty Advisor for their major.

In addition, the Academic Advising Center offers these resources and services to support students in setting and attaining academic and career goals:
- **Academic Success Counseling:** Academic Advisors help students address academic difficulties such as low grades, poor study habits, and test anxiety. They also assist students with general problem solving and with the challenges of balancing college, work, and family. Academic Advisors also refer students to other academic support services on campus as appropriate.
- **Workshops:** Workshops are offered on stress management, test anxiety, time management, improving academic success, practical college survival strategies, and many other topics.

STUDENT ENGAGEMENT AND IMPACT
The Student Engagement and Impact Department works collaboratively to provide resources to enhance the student experience, along with programs and prevention services to address and alleviate barriers to completion. The mission is achieved through outreach efforts including Fostering Bright Futures, the Office of Volunteerism and Student Leadership, Pathways Male Mentoring Services and Student Advocacy and Support Student Impact Coaches, and Wellness Counseling Services.

Fostering Bright Futures
Website: fosteringbrightfutures.waketech.edu

The Fostering Bright Futures (FBF) program is a public-private partnership that provides a comprehensive support structure to assist students who are making the transition from the foster care system to independent young adulthood.

Office of Volunteerism and Student Leadership
Website: oval.waketech.edu

The Office of Volunteerism and Student Leadership (OVAL) helps students develop the knowledge and skills to serve their communities; provides them with service opportunities; and encourages them to become engaged and active leaders, locally and globally. Within its framework, OVAL provides leadership training and service experiences in support of Wake Tech's core values of accountability, respect, responsibility, and collaboration.

Pathways Male Mentoring Services
Website: pathways.waketech.edu

Pathways Male Mentoring Services mission is to increase academic engagement and success rates for minority male students (current and prospective) at Wake Tech. The program includes departmental collaborations, partnerships with the local school system, and programming initiatives across the college.

Student Advocacy and Support
Website: sas.waketech.edu

The Office of Student Advocacy and Support (SAS) assists students navigate non-academic barriers, including but not limited to, housing, food insecurity and hunger, childcare, transportation, and emergency financial assistance.

Student Impact Coaches
Website: student impact coaches.waketech.edu

The Student Impact Coaches promote a positive and successful learning experience for students to increase student retention, success, and completion.

Wellness Counseling Services
Website: wellness.waketech.edu

Wellness Counseling Services is a Wake Tech resource providing counseling and referral services to empower students to resolve problems and reach personal and academic goals. Students can discuss and process attitudes, feelings and concerns that may interfere with their education. Wellness Counseling Services provides various forms of ways to communicate with the counselors to fit the needs of students.

WORK-BASED LEARNING
Website: http://wbl.waketech.edu

Wake Tech provides workplace learning opportunities for approved students enrolled in select programs. Work-Based Learning is an educational program that combines classroom instruction with paid, supervised work experiences directly related to student's curricula.

The college does not guarantee employment to any student or employees to any employer. The college reserves the right to add, remove, or alter the work-based learning component in any curriculum, as needed.

CAREER AND EMPLOYMENT RESOURCES
Website: http://careers.waketech.edu

Wake Tech's Career and Employment Resources Division helps students and alumni in assessing their career possibilities, determining a major, setting professional goals, and attaining employment aligned with programs of study.

Students and prospective students are provided resources and services to establish career pathways and attain work experiences to support the continuum of career exploration, planning and employment opportunities. This support is offered through guided coaching sessions, open lab sessions, workshops, and events.

The division manages College Central Network, the official job posting board for students and alumni. Experiential learning opportunities for students are offered through employer and military recruiting on campus, career fairs, speaker programs, and employer site visits.

All services are available by appointment in person or virtually. Resources can be accessed online through Career and Employment Resources' website. Wake Tech does not guarantee employment to any student or employees to any employer. Services are offered at no charge to students and alumni.

LIBRARIES

Wake Technical Community College operates six libraries, as well as providing student resources through a library website at http://library.waketech.edu

Library services are free, and any Wake Tech student or employee may use any of the library services or resources at his or her convenience. All users must have a valid Wake Tech photo ID, in order to establish a library account.

Library Location	Library Location
Southern Wake (Howell) 9101 Fayetteville Rd. Raleigh, NC 27603 919-866-5732	**Scott Northern Wake** 6600 Louisburg Rd. Raleigh, NC 27616 919-866-7135
Perry Health Sciences 2901 Holston Ln. Raleigh, NC 27610 919-866-5764	**Public Safety Education** 321 Chapanoke Rd. Raleigh, NC 27603 919-866-5465
Western Wake Millpond Village Suite 200 3434 Kildaire Farm Rd. Cary, NC 27518 919-866-5721	**RTP** 10908 Chapel Hill Road Morrisville, NC 27560 919-866-5762

Each library location offers the following services and resources:
1. Access to print (books, periodicals) and audiovisual materials
   Electronic research databases (NC LIVE, SIRS, JSTOR, Science Direct, and more)
2. Interlibrary Loan
3. Online Renewals
4. Research Guides & Tutorials and Database Instruction
5. Ask-A-Librarian Services

INDIVIDUALIZED LEARNING CENTER (ILC)

All Wake Tech students and employees have access to the free tutorial services offered by the college's Individualized Learning Centers.

The purpose of the Individualized Learning Centers is to provide supplemental learning opportunities aimed at improving student success. ILC services include math, science, computer, learning, study, and writing skill support. Professionally-prepared tutoring faculty assist through one-on-one tutoring, a collection of audio/video and other media tutorials, and course-related printed materials. Workshops and small group activities tailored specifically for WTCC classes are also available.

ILC services are available at the campus locations (see below). All ILC users must present a valid Wake Tech ID to register and use the timekeeping system. E-tutoring is available through CompuTutor, the Online Biology Center, the Online Math and Science Center, the Online Writing Center, and the Online Study Skills Center.

ILC CAMPUS LOCATIONS

Southern Wake ILC Building – across from Student Services and the Bookstore 9101 Fayetteville Rd. Raleigh, NC 27603 919-866-6880	Scott Northern Wake Building NF, Room 448 6600 Louisburg Rd. Raleigh, NC 27616 919-866-6880	Western Wake Learning Resource Center ILC, 200E 3434 Kildaire Farm Rd. Cary, NC 27518 919-335-1028	RTP 10908 Chapel Hill Rd. Bldg RT1 Room 209 Morrisville, NC 27560 919-335-1251	Public Safety Education Room 1611 321 Chapanoke Rd. Raleigh, NC 27603 919-866-6100	Perry Health Sciences ILC Building 2901 Holston Lane Raleigh, NC 27610 919-747-0233

Hours may vary within each skills center. Please call ahead to check availability.

ILC website, http://ilc.waketech.edu.

LEARNING RESOURCES, SUPPORT, AND SERVICES

DISABILITY SUPPORT SERVICES (DSS)

The mission of Disability Support Services (DSS) is to adapt the College's general services to the specialized, individual needs of otherwise qualified students with disabilities, for the purpose of providing equal access to all programs, facilities, and activities.

Students requesting disability accommodations from the College must self-identify to Disability Support Services. Students are required to submit current documentation of their disability to DSS to determine eligibility prior to the implementation of services. Students requesting accommodations from the College must have a disability as defined by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. Self-identification and providing documentation can be initiated at any time; however, the student must allow reasonable time for accommodations to be implemented.

Consistent with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, Wake Technical Community College is committed to equality of educational opportunity and ensures that no qualified person shall by reason of a disability be denied access to, participation in, or the benefits of any program or activity operated by the College. Each qualified person with a disability shall receive necessary reasonable accommodations to ensure equal access to educational opportunities, programs, and activities in the most integrated setting appropriate.

To obtain additional information or to read documentation guidelines and/or DSS Policies and Procedures, please go to the DSS website http://disabilityservices.waketech.edu or contact the DSS office at 919-866-5670 or by Sorensen Video Phone (919) 324-1508.

ONLINE LEARNING

Wake Technical Community College offers Curriculum Education (for-credit) students two options for online learning: online courses and hybrid courses. These options allow scheduling flexibility not possible in traditional, seated classes. Each course is taught by a qualified instructor who develops the course to achieve learning outcomes comparable to those in a seated class. The instructor provides a syllabus and course guidelines and serves as the facilitator of the course. . Costs, credit hours earned, and support services provided are the same as for seated courses. Students interested in online courses can learn more at http://online.waketech.edu/.

Online Courses

Curriculum Education students in online courses may be invited to an orientation session or other meetings on campus and may be required to take proctored exams, but all coursework is completed online through Wake Tech's Learning Management System, http://dist-ed.waketech.edu/. Students must have access to a personal computer with Internet connection and browser software, and must know how to navigate the Internet and perform basic computer functions, including the use of word processing software, if applicable for their course. Before enrolling in an online course for the first time, students must:

1. Review the information on the Online Learning website, http://www.waketech.edu/student-services/online-learning
2. Complete the online eLearning Intro, which includes modules designed to prepare students for the online learning environment.

Students must complete the Course Entry Quiz during the first 10% of the course. The quiz is available on the first day of class, on the course website in Wake Tech's Learning Management System. Students who fail to complete the quiz within the required time will be immediately marked as "NA" (Never Attending) and dropped from the class.

Hybrid Courses

Hybrid courses combine regular classroom meetings with Internet instruction, reducing the number of hours a class meets on campus during the semester. The instructor determines the class schedule, which is published online. Students must have access to a personal computer with Internet connection and browser software, and must know how to navigate the Internet and perform basic computer functions, including the use of word processing software, if applicable for their course.

Before enrolling in a hybrid course, students must:

- Review the information on the Online Learning website, http://online.waketech.edu/.

Students must complete the Course Entry Quiz or physically attend a seated class during the first 10% of the course.

ELearning Testing

The eLearning Testing Center (eLTC) acts as the liaison between students and their instructors, teaching online Curriculum Education courses (for-credit), to administer exams in a proctored setting. Students must present a valid Wake Tech photo I.D. badge; driver's license; or passport, prior to taking a test.

The eLTC proctors both paper and technology-assisted exams; and collaborates with Disability Support Services to provide testing for students who are eligible for extended time. All eLTC facilities are equipped with student workstations that are outfitted with equipment to support technology-assisted exams using Blackboard, including authorized internet access, as well as Microsoft Office Suite installations. The eLearning Testing Center has four campus locations: Perry Health Sciences, Scott Northern Wake, Southern Wake and Western Wake. For additional information, visit the eLTC Website.

Library Resources
Students enrolled in online courses have access to all Wake Tech libraries. The library website, http://www.waketech.edu/student-services/libraries, is available to all students and provides information on electronic and print databases, interlibrary loans, loan periods, and hours of operation. The website also has links that provide access to other libraries, resources, search engines, and services such as NC LIVE.

MEDIA PRODUCTION AND LEARNING SUPPORT SERVICES

The Media Production and Learning Support Services Department supports administration, faculty, staff, and students. The department includes three distinct areas of support: the eLearning Testing Center, Open Computer Labs, and the Media Production Department.

The eLearning Testing Center (eLTC) acts as the liaison between students and their instructors, teaching online Curriculum Education courses (for-credit), to administer exams in a proctored setting. Students must present a valid Wake Tech photo I.D. badge; driver's license; or passport, prior to taking a test.

The eLTC proctors both paper and technology-assisted exams; and collaborates with Disability Support Services to provide testing for students who are eligible for extended time. All eLTC facilities are equipped with student workstations that are outfitted with equipment to support technology-assisted exams using Blackboard, including authorized internet access, as well as Microsoft Office Suite installations. The eLearning Testing Center has four campus locations: Perry Health Sciences, Scott Northern, Southern and Western Wake. For additional information, visit the eLTC Website.

The Open Computer Labs provide computers and printers for student use; they primarily serve Curriculum Education (for-credit) students. Labs are located on the Southern Wake, Perry Health Sciences, Scott Northern Wake and Western Wake campuses, with computers available. The labs are equipped with black-and-white laser jet printers, Microsoft Operating Systems (OS), Microsoft Office Suite, and an array of computer software to support teach and learning.

The Media Production Department creates educational videos to support student learning and classroom instruction. Additionally, Media Production provides podcast, livestream and several other media services. The department has two Eagle Zone studios. The studios are open to students, staff, and faculty to create educational videos. The Media Production Department also provides training for students, faculty and staff on new innovative technologies that can be used in the classroom.

Remember to check the online College Catalog for the most up-to-date information at http://www.waketech.edu/student-services/catalog

TUITION AND FEES

FEES & PAYMENT

Class Tuition & Fees
The State Board of Community Colleges establishes tuition annually, and the Wake Technical Community College Board of Trustees establishes special fees associated with some classes. Tuition and fees are listed below and are subject to change without notice.

All tuition and fees are due by the published payment due dates. Students may pay:

BY WEB at https://webadvisor.waketech.edu. Self Service may be unavailable for weekly scheduled maintenance beginning Thursdays at 8 p.m. through Fridays at 8 a.m.

BY DROP BOX located in front of the Cashier's Office at the Wake Tech Southern Wake campus, Montague Hall, 9101 Fayetteville Road, Raleigh, NC 27603

BY MAIL to the Cashier's Office, Wake Technical Community College, 9101 Fayetteville Road, Raleigh, NC 27603

IN PERSON at the Cashier's Office on Southern Wake Campus, Perry Health Sciences Campus, Scott Northern Wake Campus, RTP Campus or Western Wake Campus.

Payments may be made using personal check, debit card, credit card (MasterCard or Visa) or cash. If you choose to pay by personal check, it is suggested that each student bring two checks to registration: one for registration and one for the purchase of books and supplies. Textbooks are purchased by students as needed. Costs of textbooks vary, depending upon the curriculum in which the student is enrolled.

All rates are subject to change by action of the North Carolina Legislature (tuition) and the Wake Technical Community College Board of Trustees (fees).

Note: Tuition may be increased.

Tuition Rates
For current tuition rates, please click here.

Fees
Fees are established by the Wake Tech Board of Trustees and are subject to change without notice.

Application Fee
Wake Technical Community College does not charge application fees, **with the exception of a $40.00 application fee for International Students.**

Student Activity Fee
$35.00 per semester (applies to fall, spring, and summer semesters)

Campus Access Fee
Charged per semester during registration at Southern Wake, Perry Health Sciences, Western Wake, Scott Northern Wake, and Public Safety Education campuses:

- Curriculum Education
  $85.00 per semester for fall and spring semesters
  $25.00 per term for summer term

- Workforce Continuing Education
  $5.00 per class or 10% of the cost of the course whichever is greater (not applicable for fee waived students; courses at community schools and other off- site locations; and completely online courses)

Online, Hybrid and Blended Courses
Students in online, hybrid or blended courses may be required to complete tests or assignments with a proctor at a Wake Tech eLearning Testing Center (no student fee involved) or an approved proctoring location. It should be noted that

approved proctoring locations off of Wake Tech campuses may include a student fee to cover the cost of this service by the provider.

Computer Use/Technology Fee
$3.00 per credit hour per term ($48.00 per semester maximum)

Lost Gate Card Fee
$5.00 per card

Lost ID Card Fee
$5.00 per card

Professional Liability Insurance
$6.00 per term for Health Sciences Students
$6.00 per term for Cosmetology and Esthetics Students

Official Transcript Fee
$5.00 for each transcript

Music Fee
$240 per course for MUS 161, MUS 162, MUS 261, MUS 262

Supply and Other Fees
Supply and Other fees ranging from $5.00 to $100.00 may be associated with certain courses. Fees will be noted in the course notes in the schedule of classes.

Placement Test Score Report
$5.00 per report

ACCUPLACER and RISE Re-Test Fee
$10.00 per re-test

Facility Fee – Community Schools
A facility fee of $25 per class will be charged to students attending classes at community schools locations. Fees will be collected by Wake Technical Community College at time of registration. Community schools fees are established by the Wake County Public School System and are subject to change without notice.

Facility Fee – Ice Skating, Bowling and Golf
Facility fees are charged to students registering for the following classes:
PED 177: $85.00
PED 139: $80.00
PED 128: $40.00

Facility Fee – State Learning and Development Center
A lab facility fee of $25.00 TP $65.00 per course is charged to students attending classes at the State Personnel Development Center (101 W. Peace Street, Raleigh, NC).

Audits
Registration and tuition charges for audited courses are the same as for courses taken for credit. Audited classes earn neither credit hour nor quality points. **Requests to audit must be submitted to the Office of the Registrar by the last day to add classes.**

Returned Checks and Unpaid Accounts
Any student who has a returned check will be notified by certified letter. If the returned check is not cleared within the specified time, all academic records will be frozen until the account is cleared. Students who develop a pattern of payment by returned checks will have this payment option revoked. Once identified, these individuals will be required to pay by cash, money order, certified check, or credit card. Our bank is authorized to present NSF checks for payment a second time, which may result in additional fees being assessed.

Unpaid student accounts, including returned checks and unpaid parking tickets, will prevent graduation, granting of credit, and release of transcript.

Senior Citizen Tuition Waiver
Effective July 1, 2013, senior citizens age 65 and older are required to pay for tuition and fees for **all** community college classes taken for credit.

Senior citizens, age 65 and older on the first day of the course, may audit courses with the following guidelines as outlined in 1E SBCCC 1000.2:
- Tuition and registration fees will be waived. Local fees associated with course selections may be charged.

1. Procedure: Obtain Audit form from the Registration & Records office
2. Submit completed form along with a copy of driver's license or state identification card to the Registration & Records office

Registration staff will process the Audit form

1D SBCCC 700.1 (a) Definition. "Audit" means to enroll in a course section without receiving a grade, academic credit, continuing education unit, or certificate of completion.

REFUND POLICY

Curriculum Classes
Refunds are processed under the North Carolina Community College System (state) refund policy.

Tuition refunds are automatically processed based on deadlines and drop dates and sent to BankMobile for processing. For more information about BankMobile, visit https://bankmobiledisbursements.com/refundchoices/.

Refunds are issued only after the 10% date in the semester. This date is published as the drop deadline in class schedules and registration information each semester.

Tuition
Tuition is charged on a per-credit-hour basis up to a maximum of 16 credit hours per term. There is no additional tuition charge for registration in excess of maximum credit hours. Students will be eligible for refunds when course drops result in enrollment for less than maximum credit hours and meet the applicable conditions described below.

For regular-schedule classes that begin the first week (seven calendar days) of the semester:
1. A **100% refund** will be given if the student drops the class prior to the first day of the academic semester as published on the official college calendar.
2. A **75% refund** will be given if the student drops the class on or after the first day of the semester and prior to or on the official **10%** point of the semester, as published in the College calendar. Students who fail to attend classes at all, and who are marked as "never attended" by the instructors, will be dropped from the class rosters and will be eligible for a 75% refund.

For classes that begin at times other than the first week (seven calendar days) of the term:
1. A **100% refund** will be given if the student drops the class prior to the first class meeting.
2. A **75% refund** will be given if the student drops the class prior to or on the **10%** point of the class. Students who fail to attend classes at all, and are marked as "never attended" by the instructors, will be dropped from the class rosters and will be eligible for a 75% refund.
3. To comply with applicable federal regulations regarding refunds, federal regulations supersede the state refund regulations stated in this rule.

For classes for which the college collects receipts that are not required to be deposited into the State Treasury account, the college will adopt local refund policies.

Cancelled Classes
A **100% refund** will be given if the class in which the student is officially registered is cancelled by the college.

Military Tuition
Upon request, the college will grant a full refund of tuition and fees to military reserve and National Guard personnel called to active duty, or active duty personnel with assignments outside North Carolina that make it impossible for them to complete course requirements.

Fees
When a student withdraws entirely and the tuition refund is approved by the college as set forth above, student activity, community schools, and graduation fees will be refunded in total.

Death of a Student
In the event of a student's death, all tuition and fees paid for that term may be refunded to the estate of the deceased.

Books
Books will be accepted for full refund when the student withdraws from the college or drops a class on or before the **10% point** in the semester, provided the books have not been marked in or otherwise defaced. Students must present requests for book refunds (with sales receipts) by the **10% point** in the semester to the bookstore manager, who is authorized to accept or reject the request for refund. Website: http://bookstore.waketech.edu.

Remember to check the online College Catalog for the most up-to-date information at
http://www.waketech.edu/student-services/catalog

CAMPUS POLICIES & PROCEDURES

CAMPUS USE POLICIES
Students have a right to use all resources and facilities of the College during normal operating hours with the proper authorization. Students may not utilize resources and facilities of the College after hours without prior official approval and without faculty supervision. The security personnel must be notified under these unusual circumstances.

CHANGES TO CURRICULUM, FEES, AND OTHER POLICY CHANGES
The Board of Trustees and administration of Wake Technical Community College reserve the right to change at any time, without notice, graduation requirements; fees and other charges; curriculum, course structure, and content; and other such matters as may be within their control, notwithstanding any information set forth in this catalog.

Any statement in the Wake Tech Catalog is subject to change by the college.

New policies and upcoming policy changes will be communicated to students on the official Updates Web page, located at http://Updates.waketech.edu and via the student portal http://my.waketech.edu.

OFF-CAMPUS SITES
Many credit and non-credit courses are scheduled at community schools and other locations county-wide. All rules and regulations of Wake Technical Community College apply at off-campus sites in addition to any rules and regulations specified by those sites.

OFFICIAL COMMUNICATION WITH STUDENTS (E-MAIL)
New policies and policy changes will be communicated to students on the official Updates web page, located at http://updates.waketech.edu./

Every curriculum student is provided with an official Wake Tech email account through the student portal (my.waketech.edu).

- Students must first activate their my.waketech.edu account, wait 24 hours, and then activate the email account.
- This college-issued email account is to be used for all email correspondence with instructors and other college officials.
- Upon two consecutive years of inactivity, the student's Wake Tech email account will be removed.

Official correspondence from the college (communications from instructors, information about registration or financial aid, etc.) will be sent to students' Wake Tech email address **ONLY**. Instructors and college officials may refuse to accept student emails sent from other addresses.

For more information, visit my.waketech.edu and click on "Support". Video tutorials are available in the FAQ/Knowledge Base at http://www2.waketech.edu/lore/studkb/category.php?id=9.

ACCEPTABLE USE POLICY
The purpose of this Acceptable Use Policy is to outline the acceptable use of the College's Information Resources, as well as the expected behavior of all Users on the network. The computing, digital technology, and digital Information Resources at Wake Technical Community College are reserved for the educational, instructional, research, and administrative computing needs of the faculty, students, staff, and other individuals authorized by the College. As a User of these Information Resources, you may have access to valuable Information Resources, to sensitive and critical data, and to internal and external networks. Consequently, it is important for all Users to understand their responsibilities and act in an ethical and legal manner.

This policy applies to all Users of Information Resources owned or managed by the College. Individuals covered by the policy include (but are not limited to) full-time employees, part-time employees, students, contractors, interns, partners, external individuals and organizations.

Wake Tech strives to provide the most secure environment possible for its employees and students, while simultaneously allowing them adequate ability to perform their expected job(s) or academic studies. This policy is required by several federal and state laws and regulations that apply to educational institutions and institutions that process payment information, including, but not limited to: Gramm-Leach-Bliley Act (GLBA), Payment Card Industry (PCI), and Family Educational Rights and Privacy Act (FERPA). This policy will outline what activity is deemed acceptable and unacceptable on any Wake Tech network or computer system.

CAMPUS POLICIES & PROCEDURES

DEFINITIONS

Word/Term	Definition
Incidental Use	The action of using College owned resources for means other than their intended studies or job function within the College. Often for personal use, such as e-mail, social media, or other services.
Information Resources	The network, systems, data, information, equipment, or other College owned hardware and software that can be accessed through the College owned network. This includes any equipment licensed or leased through the College.
Personal Private Gain	Any action or activity where the primary goal is to enhance one's own economic, commercial or political benefit outside of the College
PII	Personally Identifiable Information is any information that can be used either directly or indirectly to identify individuals, their residence, or any other unique information about them.
Sensitive Information	Any information or set of data that could have an adverse impact on an individual, or the College, in the event of exposure.
User(s)	Any individual, or set of individuals, that operates or otherwise makes use of any information resources provided by the College.

It is not possible for the College to articulate all acceptable or unacceptable behaviors or uses of College Information Resources by its Users. Each User is responsible for reading the list below, as well as other College policies, and ensuring their conduct is acceptable. To assist Users, the following contains a non-exhaustive list of guidelines that Users will need to follow to remain compliant with this policy:

- Users shall use only the Information Resources that they are authorized to access (including, but not limited to, resources needed to perform your educational, research, or instructional functions).

- Users shall adhere to the College's password policy and the applicable provisions in this policy to protect their accounts and to secure resources against unauthorized use or access.

- Users are individually responsible for appropriate use of all Information Resources assigned to them and to which they are given access.

- Users shall comply with the policies and guidelines for any specific set of Information Resources to which they have been granted access. When other applicable policies are more restrictive than this policy, the more restrictive policy takes precedence.

- With appropriate authorization, Users may connect laptops and other non-College owned devices to the open wireless network and smart classroom lecterns specifically designed for this purpose. Authorization can be given by the faculty or staff member present, ITS, or other individuals in charge of the room.

- Users shall immediately report any actual, suspected or perceived weakness in any Information Resource to ITS. A weakness may include unexpected network behavior, ability to access Sensitive Information or PII, or security threats.

- Users must report any suspected violation of this policy, including theft or unauthorized disclosure of information.

- All requests for Information Resource access, maintenance, relocation, or provisioning/de-provisioning. must be directed to ITS.

Unacceptable use

- Use of Wake Tech's computing services and facilities for political purposes, Personal Private Gain, or for other activities in violation of the College's student or employee handbook is prohibited. However, Personal Private Gain does not apply if the primary intention of the work being performed is related to the College or has an educational purpose.

- Use of the College's Information Resources to create, access, or transmit inappropriate material, including but not limited to material that is: obscene, illegal, offensive, defamatory or harassing, as well as material that shows aversion, denigration or hostility toward any protected class, including but not limited to race, color, sex, pregnancy, national origin, disability, genetic information, age, religion, marital status, sexual orientation, gender identity, political beliefs, veteran status, or any other characteristic or classification protected by laws.

- Users shall not attempt to access or provide resources or assistance to others to access Information Resources, restricted portions of the network, an operating system, security software or other administrative applications without appropriate authorization by the system owner or administrator.

- Users shall not provide resources or other forms of assistance to others to allow any unauthorized person to access Information Resources. Sharing of account information, including passwords, is strictly prohibited. Additionally, students

(excluding student employees) may not share or otherwise access employee workstations, as these may have access to secured networks or sensitive data.

- Users shall not engage in any activity that could degrade the performance of Information Resources; deprive an authorized User access to Information Resources; obtain extra resources beyond those allocated; or circumvent College computer security measures.

- Users shall not utilize unauthorized file sharing programs or services that incorporate file sharing (including, but not limited to: Dropbox, Box, Google Drive, Amazon S3 storage, or other services) to store Sensitive Information, or PII, without approval by ITS. The College has no control over these services and cannot guarantee the confidentiality, integrity or availability of the data.

- Users shall not waste, monopolize, interfere with or misuse the Information Resources by, for example, requesting an excessive number of copies from a printer, playing games, or participating in chain letters or Ponzi schemes.

- Users shall not access or damage any portion of the College's Information Resources or other College property, such as College records, or use Information Resources for illegal activities.

- Users may not connect personal or non-College-owned equipment to the secure password-protected campus network unless given specific authorization by the Chief Information Officer.

Privacy and Personal Rights
Users do not have an expectation of privacy regarding their use of the College's Information Resources, and by accessing and using the these Information Resources, Users expressly consent to the College's monitoring of, access to, and use of information regarding their use of the College's Information Resources. All information transmitted on or from, received or accessed by, or residing on the Information Resources is monitored by the College through ordinary course of business. Information contained on the Information Resources and in College accounts, including but not limited to e-mail, files and other documents, may be subject to inspection under the Public Records Law of the State of North Carolina.
The College monitors access to these Information Resources and reserves the right, without prior notice to Users, to access the Information Resources and to use any and all information retrieved from the Information Resources.

Incidental Use
Wake Tech acknowledges that there are a vast amount of resources available to employees, often outside the realm of being directly work related. Therefore, Wake Tech allows employees and students the benefit of utilizing the College's infrastructure for incidental personal use, with the following constraints:

1. Incidental Use of electronic mail, internet access, fax machines, copiers, and any other information technology resources is restricted to College approved Users and does not extend to family members. The practice of sharing credentials for access is strictly prohibited.
2. Incidental Use that would result in a direct cost to the College, create the potential for legal action against or liability to the College, or cause embarrassment to the College is strictly prohibited.
3. Incidental Use that interferes with the satisfactory performance of an employee's work duties is strictly prohibited.
4. Incidental Use must not violate any other College policies or procedures or any applicable laws or regulations, must not violate any provision in this policy, and must not be used with the intention of Personal Private Gain.

Incidental Use is considered a privilege and benefit of employees and students. If it is determined that it is being used to the detriment of the College or other individuals, Incidental Use privileges and access to the network and Information Resources may be revoked at any time in the College's sole discretion. Additionally, should the College equipment be used to develop intellectual property, the College will retain rights and ownership of a portion of that intellectual property, consistent with the College's Copyright Infringement and Intellectual Property policy, NCCCS regulations, State, and Federal law.

Legal and Regulatory Considerations
Users of Wake Tech's resources are expected to abide by all applicable laws, regulations, statutes and ordinances and shall:

- Abide by all applicable copyright laws and licensing requirements. The College may have entered into legal agreements, contracts or licensing terms with providers of software and network resources, which require individuals using them to comply with those agreements.

- Not use, copy or distribute copyrighted works (including but not limited to web-page graphics, sound files, film clips, trademarks, software and logos) unless you have a legal right to use, copy, distribute or otherwise exploit the copyrighted work.

Compliance
Individuals found to be in violation of this policy, or engaging in any conduct that violates applicable law shall be subject to disciplinary action including restriction or possible loss of privileges, suspension, termination, or referral to law enforcement. Students violating this policy are subject to disciplinary actions as set forth in the student code of conduct.

CAMPUS POLICIES & PROCEDURES

The Office of the CIO shall verify compliance with this policy through various methods, including but not limited to business tool reports, internal and external audits, and feedback to the policy owner. Additionally, this policy will be reviewed as a part of annual compliance submissions as well as internal and external audits.

Any exception to this Policy must be approved by the Office of the CIO in advance.

All Users have the responsibility to stay up-to-date on any changes to this policy as well as other College policies.

STUDENT DRESS AND HYGIENE
Students are not allowed in any campus facility without shoes and shirts. Students are expected to dress and groom themselves in an appropriate manner while on campus or participating in classes/activities sponsored by the college. Additionally, students must meet the specific dress requirements of their programs of study, including uniforms or personal protective equipment such as goggles, shields, etc., required in laboratory and shop settings.

Display of personal undergarments, lingerie, provocative dress or clothing with profane language or subject matter is not appropriate attire for a college environment. Violations of this policy may result in disciplinary action, including dismissal from the college.

PETS
Pets, including but not limited to dogs and cats, create several conditions the College is not equipped to handle. Pets may carry and spread parasites. Pets of any type may not be brought on campus. This policy is in no way intended to restrict access to the campus for animals specifically trained to aid individuals with disabilities.

FOOD AND BEVERAGES
Food and beverages are not permitted in classrooms, laboratories, shops, learning centers, libraries, or in any instructional area. This policy applies at all Wake Tech campuses, community school locations, and other facilities.

SMOKING/TOBACCO USE
Policy
Students, college employees, volunteers, visitors, contractors, vendors, or any other persons on college property are permitted to smoke or use tobacco products in **designated areas only.** College Property includes any building, facility, or vehicle owned or leased by Wake Technical Community College; or college grounds, including athletic fields and parking lots.

Definitions
For the purposes of this policy, "tobacco products" include cigarettes, e-cigarettes, vaporizers, cigars, blunts, pipes, smokeless tobacco products such as chewing tobacco and snuff, and hookahs; and any other items containing or intended to mimic tobacco or tobacco products. "Tobacco use" includes smoking, chewing, dipping, ingesting, or any other use of tobacco products, or the smoking of any other substance.

Exceptions for Tobacco Products on Campus
Tobacco products may be included in instructional or research activities in college buildings if the activity is conducted or supervised by the faculty member overseeing the instruction or research, and if the activity does not include "tobacco use" as defined above.

Signage
Signs that indicate "smoking/tobacco use in designated areas only" will be posted in a manner and location to provide sufficient notification to students, employees, and visitors.

Violations

- **Students:** Any student who violates the terms of this policy will receive a reprimand upon his or her first offense. If a second offense occurs, the student will be placed on general probation and required to meet with the Student Conduct Officer. A third offense by the student will incur suspension from the college for three calendar days (weekends and holidays excluded). The student will be suspended for a semester if he or she subsequently violates the terms of the Smoking/Tobacco Use policy.

- **Employees:** Any employee who violates the terms of this policy will receive a written warning upon his or her first offense. If a second offense occurs, the employee will be placed on probation. Any employee who subsequently violates the terms of the Smoking/Tobacco Use policy may be subject to additional disciplinary action.

- **Visitors:** Any visitor refusing to comply may be asked to leave campus.

CAMPUS POLICIES & PROCEDURES

CELL PHONES
Students may not engage in any activity that is disruptive to orderly classroom instruction, without limitations to the use of cell phone or pager calls; students are therefore required to disengage all such devices when in a classroom.

HOUSING
The College does not have housing facilities, but students should have no difficulty in locating satisfactory housing.

TRANSPORTATION
Wake Technical Community College provides bus service between downtown Raleigh and Southern Wake Campus via GoRaleigh's Route 40X. The bus stop on Southern Wake Campus is located in Lot D, behind Building C. Schedules for the 40X can be found online at goraleigh.org or in the information center of Building L.

There is a park-and-ride lot located off of Daffodil Drive on Southern Wake Campus that serves GoTriangle's Route FRX bus. Schedules for the FRX can be found online at gotriangle.org.

Wake Tech also offers free GoPasses for students and employees. GoPasses can be picked up in any campus ID office. These bus passes are valid on any GoRaleigh, GoTriangle, GoDurham, or GoCary bus route. In order to qualify for a free GoPass, individuals must be actively enrolled or employed at Wake Tech. With the exception of Western Wake Campus, all Wake Tech campuses are served by public transit.

Transportation information for all campuses can be found at greentrek.waketech.edu.

SKATE BOARDING/ROLLERBLADING/SCOOTERS
Skate boarding, rollerblading, and the use of any type of scooters are not allowed on any Wake Technical Community College campus or site.

PUBLICATIONS POLICY
Publications are defined to include but are not limited to the following: newspapers, pamphlets, newsletters, brochures, flyers, books, posters, or magazines. Publications may not be printed or distributed without official approval of the Dean of Student Development. Approved campus organizations may post and distribute their publications if said publications have been approved by the president of the organization, the organization's advisor, and the Dean of Student Development.

All publications (print, electronic, or other) containing URLs or references to the Wake Tech web site must be sent to the webmaster (webmaster@waketech.edu) prior to finalization to ensure that URLs are listed correctly.

Publications containing profanity, language that is offensive with regard to race, sex, or creed, grammatically incorrect statements, and misspelled words will be subject to disapproval. All publications must represent the dignity, mission, and standards of the college. Organizational publications must also be consistent with the philosophy and mission of the organization.

The college reserves the right to rescind approval for on-campus activity for any organization that violates this policy. Individuals found guilty of not conforming to this policy will face disciplinary action, including suspension from the college.

From time to time, changes made to published, college policies will affect students. The college reserves the right to make such changes and holds students responsible for staying informed about these changes. Announcements of changes will be emailed to student's "my.waketech.edu" email address and can be found online at http://updates.waketech.edu/ or distributed through the electronic newsletter, which is sent to all currently-enrolled students.

This policy does not apply to off-campus groups and individuals. Off-campus groups and individuals are allowed to distribute publications in the designated areas of the Southern Wake Campus and the Scott Northern Wake Campus in accordance with Wake Tech's solicitation policy. Requests for distributions on the Southern Wake Campus require the approval of the Dean of Student Development and requests for the Scott Northern Wake Campus require the approval of the Sr. Dean of Strategic Innovations/Student Conduct Officer. See Campus Policies and Procedures chapter - Solicitation Policy.

All Wake Technical Community College policies (academic; student services; administrative) apply to all students, regardless of campus and center locations or mode of instructional delivery, unless expressly defined by the college.

SOLICITATION
Solicitations occur in numerous forms, formats, and techniques. For the purposes of this handbook, solicitations are deemed to include, among other activities, attempts to address all or portions of the College community to express social, political, religious or other views; to disseminate written materials; or to request, accept, or collect donations or contributions.

CAMPUS POLICIES & PROCEDURES

Any individual, organization, agency, or group that desires to solicit on any property which is owned, leased, or operated under the jurisdiction of the College is required to comply with the procedures listed below.

A. **Expressive Activities**

1. **On-Campus Groups and Individuals**

    On-campus groups and individuals may reserve designated outdoor space for use in support of their activities. Arrangements for the use of outdoor space shall comply with campus reservation procedures and WTCC protocols.

2. **Off-Campus Groups and Individuals**

    a. General provisions
    Speakers will be granted access to designated areas so long as notice has been provided consistent with this policy, granting access will not conflict with any previously-scheduled events, and the designated area is not temporarily inaccessible or unsafe due to construction, act of God or similar cause.
    Access will not be denied because of a speaker's viewpoint or the content of his or her speech.
    Access will be granted on a first-come, first-served, space-available basis.

    Gross, multiple, or continued violation of this solicitation policy will result in the soliciting party's loss or suspension of future solicitation privileges on property which is owned, leased, or operated under the jurisdiction of the College.

    b. Notice Requirement
    Speakers must provide written notice to the Office of the Executive President three business days in advance of an intent to speak. Click here for required form, [Solicitation Request Form](#)

    Upon arriving on campus, speakers must check in with Wake Tech's Campus Police & Security Services office.

    c. Information Requirement
    Speakers must provide the names of the persons who intend to speak on campus, the anticipated size of the group that will visit campus with the speaker, and the name, address and phone number of a responsible contact person who will be present on campus during the event.

    Disclosure of this information is required to permit proper planning and will not be grounds for denying or abridging the right to engage in expressive activities in the designated area.

    d. Designated Areas
    The following areas are designated for expressive activities by off-campus groups and individuals:

     i. Southern Wake Campus: the paved area directly outside and adjacent to the north corner of the Pucher-LeMay building
    ii. Scott Northern Wake Campus: the paved area between buildings NE and NF.

    e. Scheduling Limitations
    At the beginning of the academic year, the President or designee, shall establish a schedule of two days per week for expressive activities by off-campus groups and individuals. These areas will be made available to any off-campus group or individual for up to three hours per day between 10:00 a.m. and 4:00 p.m.

     In order to promote opportunities for a diversity of speakers, a speaker may not reserve the forum more than two weeks in advance.

3. **Noise Restrictions**
    No sound amplification is permitted. Also noise levels that are reasonably likely to or do cause a material disruption to the learning environment or the normal administration or operation of the College are prohibited.

4. **Grounds for Denial of Access or Removal from WTCC Property**
    Speakers will be denied access or removed from WTCC property for the following:

    a. Failing to comply with this policy.
    b. Communicating "fighting words" as defined in case law.
    c. Advocating illegal conduct that is directed to inciting or producing imminent lawless action and is likely to incite or produce such action.

d. Touching, striking, or impeding the progress of pedestrians, except for incidental or accidental contact, or contact initiated by a pedestrian.
e. Photographing, audio recording, or videotaping any faculty, staff or student without first obtaining written permission from the person to be photographed, audio recorded or videotaped; provided, however, that speakers are allowed to photograph, audio record and videotape themselves and others who are located within the designated area described in section A.2.d of this policy and interacting with the speakers.
f. Engaging in disruptive or disorderly conduct that is reasonably likely to cause a material disruption to the learning environment or the normal administration or operation of the College.
g. Damaging, destroying or stealing College or private property on campus.
h. Possessing or using firearms, explosives, or dangerous weapons or substances.
i. Obstructing the free flow of pedestrian or vehicular traffic.

B. Distribution of Written Materials
Pamphlets, publications, advertisements, and any other such materials may not be distributed through any form of the College's internal mail system. Such materials may, however, be distributed by hand at such time(s) and at such location(s) as may be designated in writing by the College President or designee,, so long as the group or individual has complied with the requirements of Section A above. Distribution of written materials will not be denied based solely on the content or the viewpoints expressed in the materials

Any individual, organization, agency, or group that distributes written materials on any property which is owned, leased, or operated under the jurisdiction of the College shall reimburse the College for any of the College's internal or external clean-up costs associated with the distribution of such materials.

C. Posting of Messages or Materials
It is expressly prohibited for any individual, agency, organization, or group not officially affiliated with the College to use any surface such as walls, bulletin boards, trees, or the like located on any property owned, leased, or operated under the jurisdiction of the College to display any written or otherwise visual materials.

D. Commercial Use of Bulletin Boards
The College provides some bulletin board space for its students and employees to advertise or request goods and services. Other than such limited use by the College's students and employees, bulletin boards located on any property that is owned, leased, or operated under the jurisdiction of the College may not be used for commercial purposes.

E. Donations and Contributions
On-campus individuals, organizations, and groups may solicit, accept, or collect donations or contributions on property which is owned, leased, or operated under the jurisdiction of the College for not-for-profit activities only. Prior to engaging in any such activities, individuals, organizations, and groups who desire to solicit, accept, or collect donations or contributions shall request permission in writing from the Office of the Executive Vice President.

F. Goods and Services
Students who desire to solicit on any property that is owned, leased, or operated under the jurisdiction of the College to provide goods or services must make their request in writing to the Dean of Students. The request must contain a full description of the activity as to time, benefit, etc., in order to be considered. The decision as to whether such request will be allowed or denied and any conditions attached thereto shall be within the Dean's discretion. The Dean shall respond to all such requests in writing within five (5) working days from the date the request is received. All other individuals, organizations, agencies, or causes are prohibited from canvassing, selling, offering for sale, soliciting, or promoting the sale or advancement of any goods or services on any property which is owned, leased, or operated under the jurisdiction of the College.

Click here for required form, Solicitation Request Form

MEDIA COVERAGE OF COLLEGE ACTIVITIES
As a public, tax-supported community college, Wake Technical Community College complies with public information law and works with news media to provide coverage of news about the college. Occasionally, media representatives may visit Wake Tech classrooms to interview and photograph students. The college welcomes these opportunities while respecting the rights of students who may not wish to be interviewed or photographed. Students may be excused from classroom activities, without question, while photographs or video images are being recorded.

CAMPUS POLICE & SAFETY
Website: http://www.waketech.edu/about-wake-tech/administrative-offices/campus-police

CAMPUS POLICIES & PROCEDURES

The Board of Trustees of Wake Technical Community College has adopted policy statements in compliance with the dictates of the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (Clery Act).
The College's Campus Police Chief is primarily responsible for developing rules and regulations to implement these policies. Crimes on all campuses are reported to the Campus Police Department, which investigates on-campus murder, criminal sexual assault, criminal sexual abuse, robbery, aggravated assault, aggravated battery, burglary, motor vehicle theft, liquor law violations, drug abuse violations, weapons possession, and other emergencies on campus considered to be a threat to safety. Timely reports of such occurrences are made to employees and students. In the event the perpetrator of a violent crime is subject to discipline by the College, the victim of the crime shall, at the discretion of the College's administration, be permitted to obtain results of the disciplinary proceeding.

The College's Campus Police Department prepares, publishes, and distributes statistical reports that identify the occurrence of campus crimes and the number of campus arrests involving liquor law violations, drug abuse violations, and weapons violations. The policy statements and statistical reports are available upon request to students and employees as well as prospective students and the higher education community at Student Services Building, room 233, Southern Wake Campus, 9101 Fayetteville Road, Raleigh, NC 27603.

Some security patrol and traffic control matters are handled by a private security company under contract with the College. This company is responsible to the College's Campus Police Chief, whose office is on Southern Wake Campus, in Student Services, room 233 and whose telephone number is 919-866-5532. The Campus Police Chief also can be contacted by dialing the College's main switchboard number, 866-5000 (from off-campus or from a coin telephone). Students, employees, and visitors are encouraged to report criminal activity and other emergencies on any campus at the College's emergency number, **919-866-5911**.

Students and employees are prohibited from bringing onto campus or using alcohol or illegal drugs on campus or during any College activity. Limited exceptions to this policy may be granted by the College's President or designee. The College has a Drug and Substance Abuse Council, which offers help to students and employees in seeking counseling and/or assistance programs. From time to time workshops and seminars are conducted on campus relating to the following subjects:

- Crime and Safety
- Self-Defense
- Drugs and Alcohol
- Date Rape

Other information is periodically published in the Campus Connections at http://connections.waketech.edu/ and the student newsletter, The Eagle's Eye. The student newspaper, The Student Voice discusses and debates health, safety, self-defense, etc., issues.

Campus safety means protecting people and property. People working together can make our campuses safe and secure working and learning environments. Report suspicious persons, vehicles, and activities to the Campus Police at **919-866-5911**. Students attending classes in the evenings should walk in well-lighted areas with someone or near other people. Extra precaution should be taken by using sidewalks and crosswalks and by avoiding isolated areas. Personal valuables should be marked and NOT left unattended. Vehicles should be parked in a well-lighted area and locked.

Presentations by Local Law Enforcement Personnel
Wake Tech Campus Police Officers can conduct presentations concerning robbery, motor vehicle theft, and drugs and alcohol.

Annual Report of Criminal Offenses
Wake Tech complies fully with the Clery Act (Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act), which requires the college to gather statistics about crime on campus and publish them in an annual report by October 1 each year. Reach the current Annual Security Report.

THREAT ASSESSMENT & VIOLENCE PREVENTION

Policy Statement
Wake Tech strives to create an atmosphere that encourages learning and productivity. To that end, the college considers the following behaviors unacceptable:

- Injuring another person physically;
- Engaging in behavior that creates a reasonable fear of injury to another person;
- Engaging in behavior that subjects another individual to undue emotional distress;
- Possessing, brandishing, or using a weapon that is not required by the individual's position while on college premises or engaged in college business;

- Threatening to injure an individual or damage property;
- Committing injurious acts motivated by, or related to, domestic violence or sexual harassment;
- Retaliating against any person who, in good faith, reports a violation of this policy; and,
- Any other behavior or activity that creates a threat or danger to a person or the campus.

This policy will be enforceable at any property, building, or other facility that is owned, leased, or used by Wake Technical Community College for any college activity. Violators will be subject to Wake Tech disciplinary policies or North Carolina General Statutes as appropriate. Several, but not all, of the North Carolina General Statutes would include: NCGS 14-33 Assault, NCGS 14-277.3A Stalking, 14-277.1 Communicating Threats, 14-269.2 Possession of Weapons on School Grounds, 14-160 Injury to Personal Property, 14.35 Hazing and 50.B1 Domestic Violence.

Purpose of the Policy
Wake Technical Community College is committed to providing students, employees, contractors, and visitors with a safe and secure environment that is free from threats, intimidation, and violence. This policy contributes to the creation of that environment by helping school officials respond responsibly, prudently, and effectively to threats and other behaviors that raise concern about potential violence.

Definitions

Targeted Violence	Any incidence of violence in which an attacker selects a particular target prior to a violent attack on that target
Concerning Behavior	A wide range of behaviors which, due to their nature or severity, affect the campus or the workplace, generate a concern for personal safety, or result in physical injury.
Threat	An expression of intent to do physical or psychological harm or to act out violently against a person (or persons) or property that would lead to the reasonable belief that such harm will occur. The threat may be spoken, written, symbolic, implied, direct, or indirect.

Note: Certain Wake Tech policies predate the establishment of the process outlined below. They remain official college policies. Employees and students will be expected to comply with the process in the future.

Procedures

Responsibilities

1. **Faculty and Staff** – Faculty and staff members must be familiar with the threat assessment and violence prevention policy and must report violations of the policy to their supervisor or appropriate administrator and the Chief of Police. All employees are encouraged to be alert to the possibility of violence on the part of employees, former employees, students, contractors, and strangers. Employees who in good faith report threats, concerning behaviors, or violations of college policy will not be retaliated against. Deliberately false or misleading reports of violence will be considered unacceptable personal conduct, and the employee or student making such false or misleading reports will be subject to disciplinary action under the Wake Tech disciplinary policy.

2. **Threat Assessment Team** – The responsibility for assessing potentially-threatening behaviors rests with the College Threat Assessment Team. In making assessments, the team may consult outside resources such as counselors, law enforcement officials, threat assessment professionals, mental health specialists, and others who might contribute to a successful resolution. The team will report findings from their assessments, including recommendations for appropriate interventions, to the college president or his designated representative. The Threat Assessment Team is composed of these college employees:

   - Executive Vice President (Team Leader)
   - Vice President of Curriculum Education Services
   - Vice President of Workforce Continuing Education Services
   - Conduct Officers
   - Vice President of Human Resources & College Safety
   - Chief of Police

Crisis Management Team – the Threat Assessment Team will recommend activation of Wake Tech's Crisis Management Team when:

A. A situation poses imminent danger to a person or to the college; or

B. An act of violence occurs resulting in serious or fatal injuries to one or more campus members.

The Crisis Management Team will consider the impact of the incident on the campus community and initiate appropriate debriefing, counseling, and support for victims, co-workers, students, and families.

Principle

Fostering a Culture of Respect
An educational setting in which everyone respects everyone else promotes safety. It provides a place for open discussion in which diversity and differences are respected, communication is encouraged and supported, and conflict is managed and mediated constructively. Problems come to light earlier and can be addressed before they become serious or lead to violence; consequently, the potential for violence diminishes.

Reporting Concerning Behaviors
For the safety of the college community, it is imperative that anyone aware of concerning behavior or perceived threats – from firsthand knowledge, written or verbal communications, or any other source – report it immediately to the **Wake Tech Campus Police at 919-866-5911 (65911 from any campus phone)**. Those reporting may identify themselves or remain anonymous. To the extent allowed by law and policy, any identification provided will remain confidential and will be used only by security officials for follow-up, if necessary. Those choosing to leave an anonymous report should include as much detail as possible to make sure security officials can proceed with an investigation. The Chief of Police will address all reports as quickly as possible and convene the Threat Assessment Team when appropriate. If a report suggests that a law has been violated or that violence is imminent, the Chief will immediately refer it to the Campus Police Department for investigation and crisis response measures, as they deem appropriate.

Identifying Concerning Behaviors
The Threat Assessment Team will focus its efforts on formulating strategies for preventing targeted violence, in two principle areas:
- Developing the capacity to monitor and evaluate information that might indicate a risk of targeted attack, and
- Using the results of threat assessments to develop strategies for preventing attacks.

If the team determines through inquiry that an identified behavior involving a student is non-threatening, the matter will be referred to the Conduct Officers for appropriate action. A Behavior of Concern Assessment Team (BAT) has been implemented to assess student behaviors of concern and low-level threats. Non-threatening incidents involving college employees will be directed to the Executive Director of Human Resources. If the team concludes that a law has been violated or that violence is imminent, it will immediately refer the matter to the Chief of Police.

The Threat Assessment Process
Threat assessment will be fact-based, relying primarily on the appraisal of behaviors, rather than on stated threats or traits, as the basis for determining if there is cause for concern. The fact-based assessment considers every aspect of the person of concern and is based on the totality of what is known about that person, in four major areas: **1)** personality, **2)** family dynamics, **3)** school dynamics (and the person's role in those dynamics), and **4)** social dynamics.

Examples of Concerning Behaviors
- Acts of violence
- Threats (direct, indirect, implied, veiled)
- Harassment
- Intimidation
- Hazing
- Stalking, surveillance, or unwanted pursuit
- Weapons on campus or recent acquisition of firearms
- Special interest in or identification with the military, survivalist groups, or weapons
- Homicidal thoughts or actions
- Preoccupation with violent themes
- Apparent obsession with someone
- Domestic disputes
- Intentional destruction of personal property
- Refusal to accept employment termination
- One-sided contact with others following employment termination
- History of conflict with others
- Documenting the activities of others when not required to do so
- Unusual verbal or written communications to others
- Repeated complaints about working conditions

- Excessive blaming of others
- Excessive or intimidating references to workplace violence incidents or other mass murders

Reporting Student Behaviors of Concern and Low-Level Threats to the Conduct Officers
A report should be made to the Conduct Officers if students display behaviors that indicate a concern, including but not limited to:

- self-injury
- uttering threatening words or displaying threatening actions
- writings that clearly communicate intentions to harm self or others
- actions that endanger the health, safety, or well-being of any member of the college community or its guests

Note: If the behavior constitutes an **emergency** or needs immediate attention, contact **Campus Police at 919-866-5911 (65911 from any campus phone).**

If the behavior is clearly a Student Code Violation, complete the **Student Code Violation Form.**

Faculty, Staff, and Students
When a student behavior of concern takes place in which a student is alleged to have shown concerning behaviors, these steps must be followed by the reporting individual:

1. If the behavior of concern that the student is displaying or has displayed is not an emergency complete the form in its entirety and submit the [Behavior of Concern and Threat Report](#) (BAT) Form electronically.
2. A Conduct Officer will review the report and make a determination on the referral of the report. If the report is a Behavior of Concern and not a Student Code Violation, members of the BAT will schedule a meeting to discuss the case within five (5) business days.
3. Within two (2) business days, a Conduct Officer will notify the person who submitted the report that the information has been received.
4. The student will be contacted and a determination of the submitted report will be made by the BAT; information will be given to pertinent individuals.
5. If the report is found to be only a Student Code Violation, the report will be forwarded to the appropriate Conduct Officer, who will handle the case under the guidelines of the Student Code of Conduct.

In order to assist students in becoming more productive citizens of our community and to provide guidance in addressing behaviors of concern, the following are actions that the BAT may consider (but is not restricted):

- No instant action.
- Contacting the student by official e-mail or by telephone to assess his or her status.
- Meeting with the student to talk about needs, services available, and college expectations.
- Using the Student Services Referral form to refer students to programs and services on campus; e.g., Wellness Services, Student Success Counseling Services, Financial Aid, Disability Support Services, and the ILC.

The recommendations of the BAT are final; however, the student may appeal any sanction given by a Conduct Officer.

Confidentiality
Wake Technical Community College understands the sensitivity of information obtained, provided, and/or alleged in such reports as it pertains to an individual's reputation, privacy, and anonymity. Any report of concerning behaviors or threats of violence will be handled in a confidential manner, with information released only on a need-to-know basis. When appropriate, legal guidance will be requested.

Records Retention
All Behavior of Concern reports (documents, files, etc.) related to a threat assessment will be maintained by the Conduct Officers in the Maxient system. All criminal reports relating to a threat assessment will be maintained by the Campus Police.

VISITORS AND CHILDREN ON CAMPUS
Website: http://www.waketech.edu/about-wake-tech/locations/visitor-information

Visitors are welcome on the Wake Tech campus. For the safety and security of all, immediately upon arriving, visitors are required to register at the receptionist desk at any campus. At the receptionist desk, visitors may obtain information and directions as needed. The College cannot accommodate extended non-official visits; individuals who have not registered or who are found loitering on campus may be required to leave.

CAMPUS POLICIES & PROCEDURES

Visitors, children, and any other persons not enrolled at Wake Tech are not allowed in the library or in classrooms, laboratories, or any other instructional areas (on or off campus) without prior authorization.

Children under the age of 15, who are not enrolled at Wake Tech, must be accompanied by a parent, guardian or other adult at all times and must not be left unattended in any area of the College.

At community schools sites, only persons attending classes or other College activities are permitted on the premises. Wake Tech students or employees violating the above regulations on any Wake Tech campus or community schools site will be subject to disciplinary action, up to and including termination of their enrollment or termination of their employment.

EMERGENCY EXIT PROCEDURES
If the need should arise to evacuate a building because of fire or other impending danger, a general alarm will be sounded. When such an alarm is sounded, individuals should leave the building by way of the nearest exit. Individuals should become familiar with posted evacuation routes.

STUDENT INSURANCE AND ACCIDENTS

Insurance
The college does not assume responsibility for injuries or losses sustained on- or off-campus by any student. For this reason accident insurance is included in the Student Administration fee for all curriculum students. Students in select workforce continuing education courses shall be required to purchase accident insurance as part of their registration. All students covered by the insurance policy are responsible for reading the Student Accident Insurance Plan brochure to understand the extent of coverage and the procedures for filing a claim; a copy of the brochure can be obtained from the Registrar's Office. All provisions described in the Student Accident Insurance Plan brochure will prevail in the event of any discrepancy between this policy and the brochure.

The college requires each person enrolling in a Health Sciences curriculum and students in select workforce continuing education courses to have student malpractice liability insurance coverage in the amount of $2,000,000/ $5,000,000. Students enrolled in Health Sciences curriculum may purchase this insurance from a local insurance agency. Proof of coverage must be presented at the time of registration by providing the policy or certification of insurance. In the absence of proof of coverage, students enrolled in a Health Sciences curriculum are required to purchase professional liability insurance through the College's blanket liability insurance program at the time of registration. Payment for this insurance will be included in the registration fee for workforce continuing education students.

Personal injury insurance is required for students participating in the intercollegiate athletics program.

Students who would like to purchase health insurance for themselves and/or their families may participate in a group policy through the North Carolina Community College Student Health Plan. More information can be found on Wake Tech's website by clicking on the Student Services link and then the Student Health Insurance link.

Accident Notification and Response
All accidents and injuries are to be reported to the Campus Police by calling Wake Tech's 24-hour Call Center at 919-866-5911. The Campus Police will notify the Wake County EMS 9-1-1 call center when an accident appears to be severe enough to require professional medical attention.

The Call Center will assign a case number to each incident. For accidents that occur on a Wake Tech site a Campus Police Officer will be dispatched immediately to the scene to compile information for an incident report and to assist with or administer first aid. Students who are injured while participating in off-campus activities sponsored and supervised by Wake Tech faculty or staff, and those who are otherwise unable to provide information to an Officer at the time of their accident, are to report the details to a Campus Police Officer upon their return to Wake Tech. The Officer responding to the incident (or receiving the student report) will complete an incident report as soon as possible, but no later than by the end of their shift.

Injured students who are unable to drive themselves to an urgent care clinic, hospital, or other medical facility will be consigned to the care and transport of EMS personnel. Under no circumstances shall a Wake Tech employee provide transportation for an injured student. Students may seek treatment from a medical facility of their choosing (within plan limitations) providing that the treatment is not rendered by a doctor or nurse who is a family member.

Accident Reimbursement Claims
Students seeking reimbursement for expenses covered by the student accident insurance plan must obtain an Accident Claim Form from the Registrar's office within 30 days of the incident or as soon as is reasonably possible. To be eligible for reimbursement, the original completed Accident Claim Form must be submitted to the insurance agency. A copy of the claim form and medical bills must be provided to the Business Office. Additional instructions and contact information for the

agency can be found on the back of the Accident Claim Form; the claim procedure is also detailed in the Student Accident Insurance Plan brochure.

DRUG AND ALCOHOL POLICY

No student shall distribute, dispense, possess, use, or be under the influence of any alcoholic beverage, malt beverage, fortified wine, or other intoxicating liquor; or unlawfully manufacture, distribute, dispense, possess, use, or be under the influence of marijuana or any narcotic drug, hallucinogenic drug, amphetamine, barbiturate, anabolic steroid, or any other controlled substance as defined in Schedule I through VI of Section 202 of the Controlled Substance Act (21 U.S.C. Section 812) and as further defined by regulation at 21 C.F.R. 1300.11–1300.15 or Article 5 of Chapter 90 of the North Carolina General Statutes, as amended from time to time, in any college location as defined below.

"College location" means in any college building or on any college premises; in any college-owned vehicle or other college-approved vehicle used to transport students to and from college or college activities; or off college property at any college-sponsored or college-approved activity, event, or function, such as a field trip or athletic event, where students are under the jurisdiction of the college.

Any student who violates the terms of this policy may be subject to suspension or expulsion from the college in accordance with the **Student Code of Conduct, Rights, and Responsibilities** policy or may be required to participate in a drug abuse assistance and rehabilitation program approved by the Enrollment and Student Services Administration. If such student fails to satisfactorily participate in such program, the student will be suspended or expelled from the college in accordance with the Student Code of Conduct, Rights, and Responsibilities policy.

Drug Abuse Prevention Program

Recognizing the serious consequences of the inappropriate use of drugs and the potential disciplinary action that could result from possession or consumption of controlled substances on campus, Wake Tech offers a program of activities and services to prevent drug and alcohol abuse by students. The Dean of Student Development will oversee the program as follows:

1. An annual notification will be sent by email to all students at the start of each fall and spring semester.
2. At least once a year, each campus will conduct a seminar, workshop, presentation or other program of information and awareness that will be open to all students, faculty and staff.
3. Each campus will provide readily available brochures and information sheets which may be used by individuals for their own personal information and awareness. These materials will be available at the Enrollment and Student Services area at each campus.
4. A list of referral services in Wake County that specialize in assisting persons with substance abuse issues is available through Wake County Crisis and Assessment Alliance Behavioral Healthcare. Click the following link or call 1-800-510-9132. (Wake County Referral Information)
   Alliance Behavioral Healthcare will assist students in finding a provider that matches their needs. A link to this agency will be available on the student portal.
5. Services available from our Wellness Services).

Biennial Review

The Associate Vice President for Student Services is responsible for completing the biennial review as noted in 34 CFR Part 86 by December 31 of each even-numbered year, for the two prior academic years.
The review will:

1. Determine the effectiveness of the education program and implement needed changes.
   The AVP will collect program information from the Dean of Student Development.
2. Attendance, timeliness of subject matter, and relevance of content should be considered.
3. Ensure consistent enforcement of disciplinary sanctions for the unlawful possession or distribution of illicit drugs and alcohol as applicable under state or federal laws.
4. Include evidence that email notification was sent to all students at the start of fall and spring semesters.

EMERGENCY CLOSINGS

In emergency situations – inclement weather, power outages, or any other conditions constituting an emergency situation – the college may delay opening or close for the day.

- If the college is closed, all classes at all sites are canceled.
- If evening classes are cancelled, all evening classes at all sites are canceled.
- If there is a delayed opening, any class with 30 or more minutes of instructional time remaining will meet. Curriculum students should check Blackboard sites for information about their courses.
- If the college is open but Wake County Public Schools (WCPSS) are closed, Wake Tech classes scheduled at Wake County Public School sites are cancelled.

Notification
Delays and closings will be announced via the Wake Tech Warn emergency alert system. All Wake Tech student and employee email addresses are automatically registered to receive Wake Tech Warn alerts. To add additional email addresses, or phone numbers for voicemail and text message alerts, go to warn.waketech.edu.

Delays and closings will also be posted on Wake Tech's website (waketech.edu), social media (@waketechcc), and local radio and television stations. In the event that an emergency situation occurs after the opening of the college, announcements about class dismissals and closings will come from the administrative officer in charge. Announcements will also be posted on the college's two primary Learning Management Systems (Blackboard for Curriculum students and Moodle for Workforce Continuing Education students), and recorded on the college switchboard 919-866-5000.

Lost Time
When the college is officially **closed** due to inclement weather or other emergency conditions, the time lost will be counted as excused absences for both students and employees. If, however, the college remains **open** during inclement weather or other emergency conditions, students and employees who do not come in will be accountable for that lost time – students must make up classes or assignments (per arrangement with their instructors), and employees may make up time or take annual leave.

Curriculum students in online courses should be aware that coursework is available via Blackboard (dist-ed.waketech.edu) at all times – even when the college is officially closed. If Blackboard becomes inaccessible or power outages occur, assignment due dates will be clearly posted when service resumes. Due dates may also be extended on a case-by-case basis at the discretion of instructors, and announcements will be posted accordingly.

TRAFFIC RULES AND REGULATIONS
Ordinance Governing Traffic, Parking, and Registration of Motor Vehicles
Pursuant to Chapter 115D-21 of the General Statutes of North Carolina, the Wake Tech Board of Trustees adopts the following rules governing parking, traffic, and the registration of motor vehicles on Wake Tech campuses. These regulations are intended only to supplement the Motor Vehicle Laws of North Carolina, all provisions of which apply to the streets, roads, alleys, sidewalks, walkways, parking spaces, parking areas, and parking lots on all Wake Tech campuses.

A. General Provisions

Definitions
Abandoned vehicle: a motor vehicle that has remained parked for more than 10 days, which is determined to be "derelict" under North Carolina General Statute 20-137.7.

Employees: faculty members, administrative staff, clerical personnel, and all other non-student personnel employed by the college (including temporary, permanent, part-time, and full-time employees).

No parking area: any area **not** specifically set aside, marked, striped, or designated by Facility Services for the permanent or temporary parking of vehicles.

Parking area: any area specifically set aside, marked, striped, or designated by Facility Services for the permanent or temporary parking of vehicles.

Repeat offender: any person committing three (3) or more traffic or parking violations within an academic year.

Student: anyone registered or enrolled in full- or part-time academic study who is not an employee.

Visitor: anyone not identified as an employee or student according to the definitions above.

Authority
Pursuant to North Carolina General Statutes, Chapter 115D-21, the Board of Trustees of Wake Technical Community College through their designee, Facility Services, shall be responsible for the registration, flow, and parking of vehicles on property owned or leased in whole or in part by the State of North Carolina and under control of the Wake Tech Board of Trustees. Notwithstanding the above, the Registrar shall be responsible for the registration of student vehicles. The provisions of the regulations apply to the operators of all vehicles operated on any Wake Tech campus and shall be in effect 24 hours a day, except as herein provided.

CAMPUS POLICIES & PROCEDURES

Wake Tech's **Facility Services Office**, as authorized by this Ordinance and the Board of Trustees, shall exercise discretion and authority in ensuring that the necessary business of the college is conducted properly; and that parking areas and facilities on Wake Tech campuses are used for the benefit and convenience of students, faculty, staff, and visitors.

Liability: Wake Technical Community College assumes no liability or responsibility for damage to or theft of personal property or of any vehicle parked or in operation on the properties leased by or under the control of the Board of Trustees of the college.

Violation of Ordinance
In addition to the criminal penalties set out by the North Carolina General Statutes, any person violating this or any regulation issued hereunder is subject to a civil penalty as set forth in this Ordinance.

Rules of Evidence: When a vehicle is found to be in violation of this Ordinance, it shall be considered prima facie evidence that the vehicle was parked:

1. by the person holding the college parking permit for that vehicle, or
2. by the person on file as owner of said vehicle with the North Carolina Division of Motor Vehicles or corresponding agency of another state.

B. Vehicle Registration and Parking Permits

Permit Eligibility

General Provision: All faculty, staff, and students in good standing with the college are eligible for and may obtain a parking permit. Motor vehicles parked on campus by students, faculty, or staff must be registered with the college and must display a valid, official (Wake Tech-issued) vehicle parking permit.

Handicapped Parking Permits: The state-issued permit is the only one Wake Tech requires.

Parking permits become invalid under the following conditions:

- Ownership of the vehicle is transferred to another person or entity.
- The permit holder's association with the college ends.
- The time period for which the permit is issued expires.
- The permit holder is issued another permit relating to the same vehicle.
- The permit holder's parking privileges are forfeited as a result of disciplinary sanctions.
- The permit holder commits three (3) or more traffic or parking violations in an academic year.

Registration of Motor Vehicles

Faculty/staff vehicles must be registered through the Wake Tech Campus Police Department. There is no cost to employees for vehicle registration and no limit on the number of vehicles that can be registered. Contact Sgt. West at 919-866-5867 for more information.

- **Faculty/staff parking permits** are for the exclusive use of employees and do not entitle friends or relatives of employees to park in staff spaces, even with the permit. Faculty/staff parking permits need not be renewed unless worn or illegible.

Student vehicles must be registered as part of the registration process. To obtain a parking permit, students shall provide their vehicle license plate number and the state in which the vehicle is registered. Vehicles brought onto campus after the college registration period has ended must be registered promptly. Students registered for classes at the Perry Health Sciences Campus shall obtain an entry key card for the parking deck.

- **Student parking permits** will be issued in conjunction with student identification badges.

Faculty, staff, and students who have been issued a vehicle registration permit are responsible for parking violations involving the vehicle for which that permit has been issued.

CAMPUS POLICIES & PROCEDURES

A temporary parking permit shall be obtained when a permit holder's vehicle is unavailable and he/she drives and parks another vehicle on campus.

Parking permits shall be properly displayed on the vehicles for which they have been issued. Four-wheel vehicles shall display permits on the left side of the rear window or to the rear left bumper. If the vehicle is a convertible or a Jeep with no glass rear windshield, permits may be displayed on the rear bumper or in an interior position within the cabin of the vehicle that would be highly visible to a police officer. Two-wheel vehicle permits shall be displayed on the rear of the vehicle if possible, or attached to the front forks or windshield of the vehicle.

Visitors (as defined in Article I) to any campus shall obtain a temporary parking permit from the reception desk and may park in spaces designated for visitors or general parking only.

C. Parking and Traffic Rules and Regulations

General Provision

Faculty, staff, and students are subject to discipline in accordance with the provisions of this Ordinance and Wake Tech policy and procedure.

Rules and Regulations

- No vehicle shall be driven in a careless or reckless manner or in a direction opposite to that indicated by appropriate signs or markings on roadways that are designated as one-way streets.
- Wake Tech campuses are deemed business districts, with a speed limit of 20 miles per hour.
- No vehicle may be parked in such a manner as to occupy more than one space.
- All vehicles shall be parked in the direction of the flow of the traffic pattern. Facing out (backing into) an angled parking space is not allowed. In straight line spaces, vehicles may face out by backing into the space or pulling forward in a double space.
- Vehicles parking in a designated handicapped parking space shall display a valid handicapped placard or distinguishable license plate issued to the operator or passenger (pursuant to North Carolina General Statute 20-37.6). Any person parking in a designated handicapped parking space shall comply with the requirements of North Carolina General Statue 20-37.6, "Parking privileges for handicapped drivers and passengers."
- Parking is prohibited as follows: on a sidewalk or walkway; along the main driveway entering the college; in the driving lanes of parking areas; in loading or unloading areas; in fire lanes; on grass or landscaped areas; in approaches or other portions of parking areas that are not clearly marked for parking.
- No faculty, staff, or student vehicle may be parked in spaces specifically reserved for certain persons or functions.
- Agents authorized by Wake Tech administration have authority to remove to a place of storage or boot any vehicle illegally stopped, parked, or abandoned, at the vehicle owner's expense.

Enforcement
The college reserves the right to revoke any parking privileges and to remove a repeat offender's valid parking permit for flagrant violation of the Traffic Rules and Regulations, including failure to pay fines.

Fines
The Accounting Office is hereby authorized to collect **a $25 fine** for any of the following violations:

- Backing into an angled parking space
- Driving in a hazardous manner
- Driving wrong way in drive lanes
- Failure to display current parking decal
- Failure to register vehicle
- Failure to heed stop or yield sign
- Improper display of parking decal
- Parking in manner creating a hazard
- Parking in more than one parking space
- Parking in non-parking space
- Parking in unauthorized space
- Parking incorrectly in space

CAMPUS POLICIES & PROCEDURES

The Accounting Office is hereby authorized to collect a **$250.00** fine for violation of handicapped parking rules and regulations and a **$50.00** administrative fee for removal of a boot from any vehicle.

Towing
The Chief of Campus Police is hereby authorized to have towed or to have a boot (or other lawful means of enforcement) placed on any vehicle in violation of rules and regulations, as follows:

- unauthorized parking in a handicapped space
- unauthorized parking in reserved space
- parking in area not designated for parking
- repeated violation of the parking rules
- parking in a manner that creates a hazard
- abandoned vehicles

In addition to any fine assessed for a violation of this Ordinance, the owner of a towed vehicle is responsible for payment of any towing and/or storage fees.

Notice of North Carolina State Law Concerning Towed Vehicles
Wake Tech provides a petition/appeal procedure for towing and parking violations. Additionally, North Carolina G.S. 20-219.11 provides the following:

When a vehicle with a valid registration plate or registration is towed as provided in G.S. 20-219.11, the authorizing person shall immediately notify the last known registered owner of the vehicle of the following:

- a description of the vehicle;
- the place where the vehicle is stored;
- the violation with which the owner is charged, if any;
- the procedure the owner must follow to have the vehicle returned to him/her; and
- the procedure the owner shall follow to request a probable cause hearing on the towing.

The owner or any other person entitled to claim possession of the vehicle may request in writing a hearing to determine probable cause for the towing. The request for a hearing shall be filed with the magistrate in the county where the vehicle was towed; the hearing will be set within 72 hours of receipt of the request.

The only issue at this hearing is whether probable cause existed for the towing. If the magistrate finds that probable cause did exist, the tower's lien continues. If the magistrate finds that probable cause did not exist, the tower's lien is extinguished. Any aggrieved party may appeal the magistrate's decision to district court.

For a more complete explanation of the above procedure, refer to North Carolina General Statutes, Chapter 20-219.11.

Suspension of Parking Privileges
The Chief of Campus Police may, in addition to any other penalty, suspend for up to one year the parking privileges of any individual found to be a repeat offender in flagrant violation of this Ordinance.

Failure to Settle Fines, Fees, and Charges
Failure to settle outstanding traffic and parking fines, fees, and charges within fourteen days after issuance of a citation may result in the collection of fees in the following manner:

- Penalties owed by faculty members and other employees of the college may be deducted from payroll checks.
- Penalties owed by students will be forwarded to the Registrar, and a hold will be placed on the student's records until the penalties are paid.

Section 6. Petition/Appeal Procedure
Individuals issued a parking or traffic citation may appeal by returning a Traffic Violation Appeal form to the Traffic Appeals Review Board within the semester the citation is issued. Untimely appeals will not be accepted for review

Traffic Violation Appeal forms are available at the reception desk on all Wake Tech campuses.

Unless otherwise specified in this section, the appeal and all arguments in support of the appeal will be submitted in writing. The Traffic Appeals Review Board Administrator shall review the appeal, considering the written statement of the appellant and relevant documents submitted by the Chief of Campus Police, and respond by mail to the address provided on the appeal form.

Appeal Hearings
Individuals whose driving or parking privileges have been suspended or revoked, or whose vehicles have been towed may submit an appeal in writing directly to the Chief of Campus Police. The appeal must be received within 14 days. Individuals will be notified in writing of the Chief's decision within seven days of the appeal.

The Traffic Appeals Review Board
Board membership consists of one faculty member appointed by the Faculty Association President; one staff member appointed by the Staff Council President; and one student member appointed by the Student Government Association President. The Executive Vice President (or designee) shall serve as chair. The term of office will be one year, with no limit to the number of terms served. Members will serve until successors are appointed. The Chief of Campus Police (or a designee) will attend each hearing to clarify operational questions that arise.

The Board Chair (or designee) will present subsequent appeal forms to board members and call for a vote from each member. The Board Chair will make note of the decision regarding the appeal. The Board Chair is a non-voting member of the board.

The Traffic Appeals Review Board will meet as necessary. The Board Chair is responsible for notifying the board members of the time, date, and location of the hearing. The Board Chair may render decisions on traffic appeals in between regularly-scheduled meetings of the board and in emergency situations

Decisions of the Traffic Appeals Review Board are final. If an appeal is denied, payment of the fine is due immediately.

Judgment Factors
- All facts as stated on the appeal form
- Information provided by the Chief of Campus Police, to include previous violations
- Information noted on the parking violation notice
- The rules and regulations of this Ordinance

TITLE IX (SEXUAL DISCRIMINATION, HARASSMENT, AND MISCONDUCT)

PURPOSE OF THE POLICY
Title IX of the Education Amendments of 1972 states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance."

Wake Technical Community College (also referred to as "Wake Tech" or "College") has a responsibility to ensure compliance by demonstrating that college programs and activities operate in a manner consistent with Title IX regulations and provisions.

APPLICABILITY
This policy applies to all members of the college community (i.e. students, faculty, staff, etc.).

POLICY STATEMENT
Wake Technical Community College adheres to all federal, state, and local civil rights laws prohibiting discrimination in employment and education. The College does not discriminate in its admissions practices (except as permitted by law), in its employment practices, or in its educational programs or activities on the basis of sex.

As a recipient of federal financial assistance for education activities, the College is required by Title IX of the Education Amendments of 1972 to ensure that all of its education programs and activities do not discriminate on the basis of sex. Sex includes sex, sex stereotypes, gender identity, gender expression, sexual orientation, and pregnancy or parenting status. Sexual harassment, sexual assault, dating and domestic violence, and stalking are forms of sex discrimination, which are prohibited under Title IX and by the College policy.

Any member of the campus community, guest, or visitor who acts to deny, deprive, or limit the educational, employment, or social access, opportunities and/or benefits of any member of the College community on the basis of sex is in violation of the Title IX Policy.

CAMPUS POLICIES & PROCEDURES

The College values and upholds the equal dignity of all members of its community and strives to balance the rights of the parties in the grievance process during what is often a difficult time for all those involved.

When the Respondent is a member of the College community, a grievance process may be available regardless of the status of the Complainant, who may or may not be a member of the College community. This community includes, but is not limited to, students, student organizations, faculty, administrators, staff, and third parties such as guests, visitors, and volunteers.

For the purpose of this policy, the College refers to "student" as an individual moved to the status of student by the College's Admissions Department and/or the Workforce Continuing Education Registrar Office's process and maintains an ongoing relationship with the College in one or more of the following categories:
   (1) eligible to register for courses
   (2) registered for a credit or non-credit bearing course
   (3) enrolled in a credit or non-credit bearing course

The procedures below may be applied to incidents, to patterns, and/or to the campus climate, all of which may be addressed and investigated in accordance with this policy.

DEFINITIONS/GLOSSARY (as applicable to the Title IX Policy)

Advisor	A person chosen by a party or appointed by the institution to accompany the party to meetings related to the resolution process, to advise the party on that process, and to conduct cross-examination for the party at the hearing, if any.
Complainant	An individual who is alleged to be the victim of conduct that could constitute harassment or discrimination based on a protected class; or retaliation for engaging in a protected activity.
Complaint (formal)	A document signed by a Complainant or signed by the Title IX Coordinator alleging harassment or discrimination based on a protected class or retaliation for engaging in a protected activity against a Respondent and requesting that Wake Technical Community College investigate the allegation.
Confidential Resource	An employee who is not a Mandated Reporter of notice of harassment, discrimination, and/or retaliation, irrespective of Clery Act Campus Security Authority status.
Day	A business day when the College is in normal operation.
Decision-maker	The person, panel, and/or Chair who hears evidence, determines relevance, and makes the Final Determination of whether this policy has been violated and/or assigns sanctions.
Directly Related Evidence	Evidence connected to the complaint, but is neither inculpatory (tending to prove a violation) nor exculpatory (tending to disprove a violation) and cannot be relied upon by the investigation report or Decision-maker. Compare to Relevant Evidence, below.
Education program or activity	Locations, events, or circumstances where the College exercises substantial control over both the Respondent and the context in which the sexual harassment, discrimination, and/or retaliation occurs and also includes any building owned or controlled by a student organization that is officially recognized the College.
Final Determination	A conclusion by the standard of proof that the alleged conduct did or did not violate policy.
Finding	A conclusion by the standard of proof that the conduct did or did not occur as alleged as in a "finding of fact").
Formal Grievance Process	"Process A," a method of formal resolution designated by the College to address conduct that falls within the policies included below, and which complies with the requirements of the Title IX regulations (34 CFR §106.45).
Grievance Process Pool	Any investigators, hearing Decision-makers, appeal officers, and Advisors who may perform any or all of these roles (though not at the same time or with respect to the same case).
Hearing Decision-maker or Panel	Those who have decision-making and sanctioning authority within the College's Formal Grievance process.

Investigator	The person or persons charged by the College with gathering facts about an alleged violation of this Policy, assessing relevance and credibility, synthesizing the evidence, and compiling this information into an investigation report and file of directly related evidence.
Mandated Reporter	An employee of the College who is obligated by policy to share knowledge, notice, and/or reports of harassment, discrimination, and/or retaliation with the Title IX Coordinator and/or their supervisor.
Notice	An employee, student, or third-party informs the Title IX Coordinator or other Official with Authority of the alleged occurrence of harassing, discriminatory, and/or retaliatory conduct.
Official with Authority (OWA)	An employee of the College explicitly vested with the responsibility to implement corrective measures for harassment, discrimination, and/or retaliation on behalf of the College.
Parties	The Complainant(s) and Respondent(s), collectively.
Process A	The Formal Grievance Process detailed below and defined above.
Process B	The administrative resolution procedures as detailed in Appendix D that apply only when Process A does not, as determination by the Title IX Coordinator.
Relevant Evidence	Evidence that tends to prove or disprove an issue in the complaint.
Remedies	Post-finding actions directed to the Complainant and/or the community as mechanisms to address safety, prevent recurrence, and restore access to Wake Technical Community College's educational program.
Respondent	An individual who has been reported to be the perpetrator of conduct that could constitute harassment or discrimination based on a protected class; or retaliation for engaging in a protected activity.
Resolution	The result of an informal or Formal Grievance Process.
Sanction	A consequence imposed by the College on a Respondent who is found to have violated this policy.
Sexual Harassment	The umbrella category including the offenses of sexual harassment, sexual assault, stalking, and dating violence and domestic violence. See Section 17.b. for greater detail.
Title IX Coordinator	At least one official designated by Wake Technical Community College to ensure compliance with Title IX and the College's Title IX program. References to the Coordinator throughout this policy may also encompass a designee of the Coordinator for specific tasks.
Title IX Team	The Title IX Coordinator, Deputy Coordinators, Investigators, and any member of the Grievance Process Pool.

Training Materials

The following link offers training materials for the College's Title IX Team inclusive of training and certification events, select webinars, and online trainings provided by the Association of Title IX Administrators (ATIXA). The Title IX Team has participated in training relevant to each member's responsibilities and designated roles.
https://atixa.org/2020-regulations-requirement-posting-of-training-materials/

Title IX Coordinator

Laura Bethea serves as the Title IX Coordinator and oversees coordination and implementation of Wake Technical Community College's efforts related to the intake, investigation, resolution, and implementation of supportive measures to stop, remedy, remediate, and prevent discrimination, harassment, and retaliation prohibited under this policy. All parties will be provided with a comprehensive [electronic] brochure detailing options and resources, which the Title IX Coordinator may also go over in person with the parties, as appropriate.

Independence and Conflict-of-Interest
The Title IX Coordinator manages the Title IX Team and acts with independence and authority free from bias and conflicts of interest. The Title IX Coordinator oversees all resolutions under this policy and these procedures. The members of the Title IX Team are vetted and trained to ensure they are not biased for or against any party in a specific case, or for or against Complainants and/or Respondents, generally.

To raise any concern involving bias or conflict of interest, reports of misconduct, or discrimination by the Title IX Coordinator, contact Benita Clark, the College's Vice President of Human Resources and College Safety at biclark@waketech.edu or 919-866-7894 or other designee.

Concerns of bias, a potential conflict of interest, reports of misconduct or discrimination by any other Title IX Team member should be reported to the Title IX Coordinator.

Administrative Contact Information
Complaints or notice of alleged policy violations, or inquiries about or concerns regarding this policy and procedures, may be made internally to the Office of Title IX:

Title IX Coordinator
Laura Bethea
Title IX Coordinator
Southern Wake Campus
9101 Fayetteville Road
Raleigh, NC 27603
919-866-6361
lcbethea@waketech.edu

Title IX Deputy Coordinators/Pool
Karen Phinazee
Title IX Deputy Coordinator
Southern Wake Campus
9101 Fayetteville Road
Raleigh, NC 27603
kbphinazee@waketech.edu
919-866-6169

Benita Clark
Title IX Deputy Coordinator
Southern Wake Campus
9101 Fayetteville Road
Raleigh, NC 27603
biclark@waketech.edu
919-866-7894

Title IX Investigators/Pool
Anthony Garnes
Title IX Investigator
Scott Northern Wake Campus
6600 Louisburg Road
Raleigh, NC 27616
agarnes@waketech.edu
919-866-6873

Kathy Reaves
Title IX Investigator
Southern Wake Campus
9101 Fayetteville Road
Raleigh, NC 27603
kpreaves@waketech.edu
919-866-5881

Kris Ross
Title IX Investigator
Southern Wake Campus
9101 Fayetteville Road
Raleigh, NC 27603
kcross@waketech.edu
919-866-5940

Paul Jenkins
Title IX Investigator
Scott Northern Wake Campus
6600 Louisburg Road
Raleigh, NC 27616
pfjenkins@waketech.edu
919-532-5557

Wake Tech Campus Police & Security
campuspolice@waketech.edu
919-866-5911

The College has determined that the College President, Executive Vice President, and Vice Presidents are Officials with Authority (OWA) to address and correct harassment, discrimination, and/or retaliation. In addition to the Title IX Team members listed above, these OWA listed below may also accept notice or complaints on behalf of the College.

Dr. Scott Ralls
President
sralls@waketech.edu
919-866-5141

Dr. Gayle Greene
Executive Vice President
dggreene@waketech.edu
919-866-5143

Anthony Caison
Vice President, Workforce Continuing Education
amcaison@waketech.edu
919-866-6101

Jeffery Carter
Vice President, Facilities
jjcarter@waketech.edu
919-866-5148

Laurie Clowers
Vice President, Communications and Marketing
lcclowers@waketech.edu
919-866-5929

Sandra Dietrich
Vice President, Curriculum Education Services & Chief Academic Officer
sldietrich@waketech.edu
919-866-5674

Brian Gann
Vice President, Enrollment and Student Services
bwgann@waketech.edu
919-866-5701

Bryan Ryan
Senior Vice President, Effectiveness and Innovation
bkryan@waketech.edu
919-866-5146

Dr. Ryan Schwiebert
Vice President, Information Technology Services
rlschwiebert@waketech.edu
919-866-5108

Matthew Smith
Vice President, Development and Strategic Partnerships
mbsmith9@waketech.edu
919-866-5988

Marla Tart
Vice President, Finance and Business Services
mltart@waketech.edu
919-866-5901

The College has also classified **all employees** as Mandated Reporters of any knowledge they have that a member of the community is experiencing harassment, discrimination, and/or retaliation. The section below on Mandated Reporting details which employees have this responsibility and their duties, accordingly.

Inquiries may be made externally to:
Office for Civil Rights (OCR)
U.S. Department of Education
400 Maryland Avenue, SW
Washington, D.C. 20202-1100
Customer Service Hotline #: 1-800-421-3481
Fax: 202-453-6012
TDD: 877-521-2172
Email: OCR@ed.gov
Web

North Carolina Office for Civil Rights (OCR):
1 S. Wilmington Street
Raleigh, NC 27601
919-508-1808
Fax: 919-508-1814
Web
1511 Mail Service Center (mailing address)
Raleigh, NC 27699-1511

North Carolina Department of Justice
Main Campus
114 West Edenton Street
Raleigh, NC 27603
919-716-6400
Fax: 919-716-6750

Notice/Complaints of Sex Discrimination, Harassment, and/or Retaliation
Notice or complaints of sex discrimination, harassment, and/or retaliation may be made using any of the following options:

1. File a complaint with, or give verbal notice to, the Title IX Coordinator (or deputy/deputies/Officials with Authority as noted above). Such a report may be made at any time (including during non-business hours) by using the telephone number or email address, or by mail to the office address, listed for the Title IX Coordinator or any other Title IX Team Member, or OWA listed above.
2. Report online, using the Maxient reporting form posted at https://bit.ly/TitleIXform. Anonymous reports are accepted but can give rise to a need to investigate to determine if the parties can be identified. If not, no further formal action is taken, though measures intended to protect the community may be enacted. The Recipient tries to provide supportive measures to all Complainants, which may be impossible with an anonymous report that does not identify the Complainant. Because reporting carries no obligation to initiate a formal response, and because the Recipient respects Complainant requests to dismiss complaints unless there is a compelling threat to health and/or safety, the Complainant is largely in control and should not fear a loss of confidentiality by making a report that allows the College to discuss and/or provide supportive measures.
3. Report to any supervisor and/or instructor. The information will be relayed to the appropriate College authorities.

Supportive Measures

The College will offer and implement appropriate and reasonable supportive measures to the parties upon notice of alleged harassment, discrimination, and/or retaliation.

Supportive measures are non-disciplinary, non-punitive individualized services offered as appropriate and as reasonably available. They are offered without fee or charge to the parties to restore or preserve access to the Recipient's education program or activity, including measures designed to protect the safety of all parties and/or the Recipient's educational environment, and/or to deter harassment, discrimination, and/or retaliation.

The Title IX Coordinator promptly makes supportive measures available to the parties upon receiving notice or a complaint. At the time that supportive measures are offered, the College will inform the Complainant, in writing, that they may file a formal complaint with the College either at that time or in the future, if they have not done so already. The Title IX Coordinator works with the Complainant to ensure that their wishes are taken into account with respect to the supportive measures that are planned and implemented.

The College will maintain confidentiality of the supportive measures, provided that confidentiality does not impair the College's ability to provide those supportive measures. The College will act to ensure as minimal an academic/occupational impact on the parties as possible. The College will implement measures in a way that does not unreasonably burden the other party.
These actions may include, but are not limited to:

- Referral to counseling, medical, and/or other healthcare services
- Referral to community-based service providers
- Visa and immigration assistance
- Student financial aid counseling
- Education to the institutional community or community subgroup(s)
- Altering work arrangements for employees or student-employees
- Safety planning
- Providing campus safety escorts
- Providing transportation accommodations
- Implementing contact limitations (no contact orders) between the parties
- Academic support, extensions of deadlines, or other course/program-related adjustments
- Trespass, Persona Non Grata (PNG), or Be-On-the-Lookout (BOLO) orders
- Timely warnings
- Class schedule modifications, withdrawals, or leaves of absence
- Increased security and monitoring of certain areas of the campus
- Any other actions deemed appropriate by the Title IX Coordinator

Violations of no contact orders or other restrictions will be referred to appropriate student or employee conduct processes for enforcement.

Emergency Removal

The College can act to remove a student Respondent entirely or partially from its education program or activities on an emergency basis when an individualized safety and risk analysis has determined that an immediate threat to the physical health or safety of any student or other individual justifies removal. This risk analysis is performed by the Title IX Coordinator in conjunction with the Behavioral Assessment Team (also known as BAT) using its standard objective violence risk assessment procedures.

In all cases in which an emergency removal is imposed, the student or employee will be given notice of the action and the option to request to meet with the Title IX Coordinator prior to such action/removal being imposed, or as soon thereafter as reasonably possible, to show cause why the action/removal should not be implemented or should be modified.

This meeting is not a hearing on the merits of the allegation(s), but rather is an administrative process intended to determine solely whether the emergency removal is appropriate. When this meeting is not requested in a timely manner, objections to the emergency removal will be deemed waived. A Complainant and their Advisor may be permitted to participate in this meeting if the Title IX Coordinator determines it is equitable to do so.

This section also applies to any restrictions that a coach or athletic administrator may place on a student-athlete arising from allegations related to Title IX.

There is no appeal process for emergency removal decisions.

A Respondent may be accompanied by an Advisor of their choice when meeting with the Title IX Coordinator for the show cause meeting. The Respondent will be given access to a written summary of the basis for the emergency removal prior to the meeting to allow for adequate preparation.

The Title IX Coordinator has sole discretion under this policy to implement or stay an emergency removal and to determine the conditions and duration. Violation of an emergency removal under this policy will be grounds for discipline within the student or employee conduct processes, which may include expulsion or termination.

The College will implement the least restrictive emergency actions possible in light of the circumstances and safety concerns. As determined by the Title IX Coordinator, these actions could include, but are not limited to: temporarily re-assigning an employee, restricting a student's or employee's access to or use of facilities or equipment, allowing a student to withdraw or take grades of incomplete without financial penalty, authorizing an administrative leave, and suspending a student's participation in extracurricular activities, student employment, student organizational leadership, or intercollegiate/intramural athletics.

At the discretion of the Title IX Coordinator, alternative coursework options may be pursued to ensure as minimal an academic impact as possible on the parties.

When the Respondent is an employee, existing provisions for interim action are applicable instead of the above emergency removal process.

Promptness
All allegations are acted upon promptly by the College once it has received notice or a formal complaint. Complaints can take 60-90 business days to resolve, typically. There are always exceptions and extenuating circumstances that can cause a resolution to take longer, but the College will avoid all undue delays within its control.

Any time the general timeframes for resolution outlined in the College's procedures will be delayed, the College provide written notice to the parties of the delay, the cause of the delay, and an estimate of the anticipated additional time that will be needed as a result of the delay.

Confidentiality/Privacy
Every effort is made by the College to preserve the confidentiality of reports. The College will not share the identity of any individual who has made a report or complaint of harassment, discrimination, or retaliation; any Complainant; any individual who has been reported to be the perpetrator of sex discrimination; any Respondent, or any witness, except as permitted by the Family Educational Rights and Privacy Act (FERPA), 20 U.S.C. 1232g; FERPA regulations, 34 CFR part 99; or as required by law; or to carry out the purposes of 34 CFR Part 106, including the conducting of any investigation, hearing, or grievance proceeding arising under these policies and procedures.

For the purpose of this policy, privacy and confidentiality have distinct meanings.

Privacy means that information related to a complaint will be shared with a limited number of College employees who "need to know" in order to assist in the assessment, investigation, and resolution of the report. All employees who are involved in the College's response to notice under this policy receive specific training and guidance about sharing and safeguarding private information in accordance with state and federal law. The privacy of student education records will be protected in accordance with the Family Educational Rights and Privacy Act ("FERPA"), as outlined in the College's FERPA policy. The privacy of employee records will be protected in accordance with Human Resources policies.

Confidentiality exists in the context of laws that protect certain relationships, including those who provide services related to medical and clinical care, mental health providers, counselors, and ordained clergy. The law creates a privilege between certain health care providers, mental health care providers, attorneys, clergy, spouses, and others, with their patients, clients, parishioners, and spouses. The College has designated individuals who have the ability to have privileged communications as Confidential Resources as noted in the glossary.

When information is shared by a Complainant with a Confidential Resource, the Confidential Resource cannot reveal the information to any third party except when an applicable law or a court order requires or permits disclosure of such information. For example, information may be disclosed when: (i) the individual gives written consent for its disclosure; (ii) there is a concern that the individual will likely cause serious physical harm to self or others; or (iii) the information concerns conduct involving suspected abuse or neglect of a minor under the age of 18, elders, or individuals with disabilities. Non-identifiable information may be shared by Confidential Resources for statistical tracking purposes as required by the federal Clery Act. Other information may be shared as required by law.

CAMPUS POLICIES & PROCEDURES

The College reserves the right to designate which College officials have a legitimate educational interest in being informed about incidents that fall within this policy, pursuant to the Family Educational Rights and Privacy Act (FERPA).

Only a small group of officials who need to know will typically be told about the complaint, including but not limited to: the College's Police, Curriculum Education Services, Wellness Services, and the Behavioral Assessment Team. Information will be shared as necessary with Title IX Investigators, Hearing Panel members/Decision-makers, witnesses, and the parties. The circle of people with this knowledge will be kept as tight as possible to preserve the parties' rights and privacy.

The College may contact parents/guardians to inform them of situations in which there is a significant and articulable health and/or safety risk, but will usually consult with the student first before doing so.

Confidentiality and mandated reporting are addressed more specifically in the mandating reporting section.

Jurisdiction of Wake Technical Community College

This Policy applies to the educational programs and activities of the College, to conduct that takes place on the campus or on property owned or controlled by the College, at College-sponsored events, and in buildings owned or controlled by the College's recognized student organizations. The Respondent must be a member of the College's community in order for this Policy to apply.

This Policy can also be applicable to the effects of off-campus misconduct that effectively deprive a person of access to the College's educational program. The College may also extend jurisdiction to off-campus and/or to online conduct when the Title IX Coordinator determines that the conduct affects a substantial interest to the College.

Regardless of where the conduct occurred, the College will address notice/complaints to determine whether the conduct occurred in the context of its employment or educational program or activity and/or has continuing effects on campus or in an off-campus sponsored program or activity. A substantial interest to the College includes:

a. Any action that constitutes a criminal offense as defined by law. This includes, but is not limited to, single or repeat violations of any local, state, or federal law;

b. Any situation in which it is determined that the Respondent poses an immediate threat to the physical health or safety of any student, employee, or other individual;

c. Any situation that significantly impinges upon the rights, property, or achievements of oneself or others, significantly breaches the peace, and/or causes social disorder; and/or

d. Any situation that substantially interferes with the educational interests or mission of Wake Technical Community College.

If the Respondent is unknown or is not a member of the College community, the Title IX Coordinator will assist the Complainant in identifying appropriate campus and local resources and support options. If criminal conduct is alleged, the College can assist in contacting local or campus law enforcement if the individual would like to file a police report.

Further, even when the Respondent is not a member of the College community, supportive measures, remedies, and resources may be provided to the Complainant by contacting the Title IX Coordinator.

In addition, the College may take other actions as appropriate to protect the Complainant against third parties, such as barring individuals from the College's property and/or events.

All vendors serving the College through third-party contracts are subject to the policies and procedures of their employers and/or to these policies and procedures to which their employer has agreed to be bound by their contracts.

When the Respondent is enrolled in or employed by another institution, the Title IX Coordinator can assist the Complainant in liaising with the appropriate individual at that institution, as it may be possible to allege violations through that institution's policies.

Similarly, the Title IX Coordinator may be able to assist and support a student or employee Complainant who experiences discrimination in an externship, study abroad program, or other environment external to the College where sexual harassment policies and procedures of the facilitating or host organization may give recourse to the Complainant.

Time Limits on Reporting

There is no time limitation on providing notice/complaints to the Title IX Coordinator. However, if the Respondent is no longer subject to the College's jurisdiction and/or significant time has passed, the ability to investigate, respond, and provide

remedies may be more limited or impossible.

Acting on notice/complaints significantly impacted by the passage of time (including, but not limited to, the rescission or revision of policy) is at the discretion of the Title IX Coordinator, who may document allegations for future reference, offer supportive measures and/or provide remedies, and/or engage in informal or formal action, as appropriate.

When a notice/complaint is affected by a significant time delay, the College will typically apply the policy in place at the time of the alleged misconduct and the procedures in place at the time of notice/complaint. Typically, this Policy is only applied to incidents that occurred after August 14, 2020. For incidents that occurred prior to August 14, 2020, previous versions of this Policy will apply. Those versions are available from the Title IX Coordinator.

Online Harassment and Misconduct
The policies of Wake Technical Community College are written and interpreted broadly to include online and cyber manifestations of any of the behaviors prohibited below, when those behaviors occur in or have an effect on the College's education program and activities or when they involve the use of the College's networks, technology, or equipment.

Although the College may not control websites, social media, and other venues through which harassing communications are made, when such communications are reported to the College, it will engage in a variety of means to address and mitigate the effects.

Members of the College community are encouraged to be good digital citizens and to refrain from online misconduct, such as feeding anonymous gossip sites, sharing inappropriate content via Snaps or other social media, unwelcome sexual or sex-based messaging, distributing or threatening to distribute revenge pornography, breaches of privacy, or otherwise using the ease of transmission and/or anonymity of the Internet or other technology to harm another member of the College community.

Public Recipients: Any online posting or other electronic communication by students, including cyber-bullying, cyber-stalking, cyber-harassment, etc., occurring completely outside of the College's control (e.g., not on the College's networks, websites, or between College email accounts) will only be subject to this Policy when such online conduct can be shown to cause a substantial in-program disruption or infringement on the rights of others.

Otherwise, such communications are considered speech protected by the First Amendment. Supportive measures for Complainants will be provided, but protected speech cannot legally be subjected to discipline.

Off-campus harassing speech by employees, whether online or in person, may be regulated by the College only when such speech is made in an employee's official or work-related capacity.

DISABILITY DISCRIMINATION AND ACCOMMODATION POLICY
Wake Technical Community College is committed to full compliance with the Americans With Disabilities Act of 1990 (ADA), as amended, and Section 504 of the Rehabilitation Act of 1973, which prohibit discrimination against qualified persons with disabilities, as well as other federal, state, and local laws and regulations pertaining to individuals with disabilities.

Under the ADA and its amendments, a person has a disability if they have a physical or mental impairment that substantially limits a major life activity.

The ADA also protects individuals who have a record of a substantially limiting impairment or who are regarded as disabled by the College, regardless of whether they currently have a disability. A substantial impairment is one that significantly limits or restricts a major life activity such as hearing, seeing, speaking, breathing, performing manual tasks, walking, or caring for oneself.

Angelita Ragland has been designated as Wake Technical Community College's ADA Coordinator/504 Officer and responsible for overseeing efforts to comply with these disability laws, including responding to grievances and conducting investigations of any allegation of noncompliance or discrimination based on disability.

Grievances related to disability status and/or accommodations will be addressed using the procedures below. For details relating to disability accommodations in the College's resolution process, see previous section.

a. Students with Disabilities
Wake Technical Community College is committed to providing qualified students with disabilities with reasonable accommodations and support needed to ensure equal access to the academic programs, facilities, and activities of the College.

All accommodations are made on an individualized basis. A student requesting any accommodation should first contact Angelita Ragland, the Director of Disability Support Services, who coordinates services for students with disabilities.

The Director of Disability Support Services reviews documentation provided by the student and, in consultation with the student, determines which accommodations are appropriate for the student's particular needs and academic program(s) in accordance with the College's applicable policies.

b. Employees with Disabilities
Pursuant to the ADA, the College will provide reasonable accommodation(s) to all qualified employees with known disabilities when their disability affects the performance of their essential job functions, except when doing so would be unduly disruptive or would result in undue hardship to the College.

An employee with a disability is responsible for submitting a request for an accommodation to the ADA Coordinator/504 Officer and providing necessary documentation. The ADA Coordinator/504 Officer will work with the employee's supervisor to identify which essential functions of the position are affected by the employee's disability and what reasonable accommodations could enable the employee to perform those duties.

SEXUAL HARASSMENT POLICY
The Department of Education's Office for Civil Rights (OCR), the Equal Employment Opportunity Commission (EEOC), and the state of North Carolina regard Sexual Harassment, a specific form of discriminatory harassment, as an unlawful discriminatory practice.

The College has adopted the following definition of sexual harassment in order to address the unique environment of an academic community, which consists not only of employer and employees, but of students as well.

Acts of sexual harassment may be committed by any person upon any other person, regardless of the sex, sexual orientation, and/or gender identity of those involved.

Sexual harassment, as an umbrella category, includes the offenses of sexual harassment, sexual assault, domestic violence, dating violence, and stalking, and is defined as:

Conduct on the basis of sex/gender or that is sexual in nature that satisfies one or more of the following:

1) Quid Pro Quo:
    a. an employee of the College,
    b. conditions the provision of an aid, benefit, or service of the College,
    c. on an individual's participation in unwelcome sexual conduct; and/or

2) Sexual Harassment:
    a. unwelcome conduct,
    b. determined by a reasonable person,
    c. to be so severe, and
    d. pervasive, and,
    e. objectively offensive,
    f. that it effectively denies a person equal access to the College's education program or activity.
        i. Unwelcomeness is subjective and determined by the Complainant (except when the Complainant is below the age of consent). Severity, pervasiveness, and objective offensiveness are evaluated based on the totality of the circumstances from the perspective of a reasonable person in the same or similar circumstances ("in the shoes of the Complainant"), including the context in which the alleged incident occurred and any similar, previous patterns that may be evidenced.

3) Sexual assault, defined as:

    a) Sex Offenses, Forcible:
        • Any sexual act directed against another person,
        • without the consent of the Complainant,
        • including instances in which the Complainant is incapable of giving consent.
    b) Sex Offenses, Non-forcible:
        • Incest:
            1. Non-forcible sexual intercourse,
            2. between persons who are related to each other,
            3. within the degrees wherein marriage is prohibited by North Carolina law.
        • Statutory Rape:
            1. Non-forcible sexual intercourse,
            2. with a person who is under the statutory age of consent of North Carolina.

4) Dating Violence, defined as:
    a. violence,

b. on the basis of sex,
c. committed by a person,
d. who is in or has been in a social relationship of a romantic or intimate nature with the Complainant.
    i. The existence of such a relationship shall be determined based on the Complainant's statement and with consideration of the length of the relationship, the type of relationship, and the frequency of interaction between the persons involved in the relationship.
    ii. Dating violence includes, but is not limited to, sexual or physical abuse or the threat of such abuse.
    iii. Dating violence does not include acts covered under the definition of domestic violence.

5) Domestic Violence*, defined as:
    a. violence,
    b. on the basis of sex,
    c. committed by a current or former spouse or intimate partner of the Complainant,
    d. by a person with whom the Complainant shares a child in common, or
    e. by a person who is cohabitating with, or has cohabitated with, the Complainant as a spouse or intimate partner, or
    f. by a person similarly situated to a spouse of the Complainant under the domestic or family violence laws of North Carolina or
    g. by any other person against an adult or youth Complainant who is protected from that person's acts under the domestic or family violence laws of North Carolina.

*To categorize an incident as Domestic Violence under this policy, the relationship between the Respondent and the Complainant must be more than just two people living together as roommates. The people cohabitating must be current or former spouses or have an intimate relationship.

6) Stalking, defined as:
    a. engaging in a course of conduct,
    b. on the basis of sex,
    c. directed at a specific person, that
        i. would cause a reasonable person to fear for the person's safety, or
        ii. the safety of others; or
        iii. Suffer substantial emotional distress.
    (i) Course of conduct means two or more acts, including, but not limited to,
acts in which the Respondent directly, indirectly, or through third parties, by any action, method, device, or means, follows, monitors, observes, surveils, threatens, or communicates to or about a person, or interferes with a person's property.
    (ii) Reasonable person means a reasonable person under similar circumstances and with similar identities to the Complainant.
    (iii) Substantial emotional distress means significant mental suffering or anguish that may but does not necessarily require medical or other professional treatment or counseling.

The College reserves the right to impose any level of sanction, ranging from a reprimand up to and including suspension or expulsion/termination, for any offense under this policy. The most serious offenses are likely to result in suspension/expulsion/termination, where warranted.
d. Force, Coercion, Consent, and Incapacitation

As used in the offenses above, the following definitions and understandings apply:

Force: Force is the use of physical violence and/or physical imposition to gain sexual access. Force also includes threats, intimidation (implied threats), and coercion that is intended to overcome resistance or produce consent (e.g., "Have sex with me or I'll hit you," which elicits the response, "Okay, don't hit me, I'll do what you want.").

Sexual activity that is forced is, by definition, non-consensual, but non-consensual sexual activity is not necessarily forced. Silence or the absence of resistance alone is not consent. Consent is not demonstrated by the absence of resistance. While resistance is not required or necessary, it is a clear demonstration of non-consent.

Coercion: Coercion is <u>unreasonable</u> pressure for sexual activity. Coercive conduct differs from seductive conduct based on factors such as the type and/or extent of the pressure used to obtain consent. When someone makes clear that they do not want to engage in certain sexual activity, that they want to stop, or that they do not want to go past a certain point of sexual interaction, continued pressure beyond that point can be coercive.

Consent is:
- knowing, and
- voluntary, and
- clear permission
- by word or action
- to engage in sexual activity.

Individuals may perceive and experience the same interaction in different ways; therefore, it is the responsibility of each party to determine that the other has consented before engaging in the activity.

If consent is not clearly provided prior to engaging in the activity, consent may be ratified by word or action at some point during the interaction or thereafter, but clear communication from the outset is strongly encouraged.

For consent to be valid, there must be a clear expression in words or actions that the other individual consented to that specific sexual conduct. Reasonable reciprocation can be implied. For example, if someone kisses you, you can kiss them back (if you want to) without the need to explicitly obtain *their* consent to being kissed back.

Consent can also be withdrawn once given, as long as the withdrawal is reasonably and clearly communicated. If consent is withdrawn, that sexual activity should cease within a reasonable time.

Consent to some sexual contact (such as kissing or fondling) cannot be presumed to be consent for other sexual activity (such as intercourse). A current or previous intimate relationship is not sufficient to constitute consent.

Proof of consent or non-consent is not a burden placed on either party involved in an incident. Instead, the burden remains on the Wake Technical Community College to determine whether its policy has been violated. The existence of consent is based on the totality of the circumstances evaluated from the perspective of a reasonable person in the same or similar circumstances, including the context in which the alleged incident occurred and any similar and previous patterns that may be evidenced.

Consent in relationships must also be considered in context. When parties consent to bondage, discipline/dominance, submission/sadism, and masochism (BDSM) or other forms of kink, non-consent may be shown by the use of a safe word. Resistance, force, violence, or even saying "no" may be part of the kink and thus consensual, so the College's evaluation of communication in kink situations should be guided by reasonableness, rather than strict adherence to policy that assumes non-kink relationships as a default.

Incapacitation: A person cannot consent if they are unable to understand what is happening or is disoriented, helpless, asleep, or unconscious, for any reason, including by alcohol or other drugs. As stated above, a Respondent violates this policy if they engage in sexual activity with someone who is incapable of giving consent.

It is a defense to a sexual assault policy violation that the Respondent neither knew nor should have known the Complainant to be physically or mentally incapacitated. "Should have known" is an objective, reasonable person standard that assumes that a reasonable person is both sober and exercising sound judgment.

Incapacitation occurs when someone cannot make rational, reasonable decisions because they lack the capacity to give knowing/informed consent (e.g., to understand the "who, what, when, where, why, and how" of their sexual interaction).

Incapacitation is determined through consideration of all relevant indicators of an individual's state and is not synonymous with intoxication, impairment, blackout, and/or being drunk.

This policy also covers a person whose incapacity results from a temporary or permanent physical or mental health condition, involuntary physical restraint, and/or the consumption of incapacitating drugs.

d. Other Civil Rights Offenses
In addition to the forms of sexual harassment described above, which are covered by Title IX, the College additionally prohibits the following offenses as forms of discrimination that may be within or outside of Title IX when the act is based upon the Complainant's actual or perceived membership in a protected class.

- Sexual Exploitation, defined as: an individual taking non-consensual or abusive sexual advantage of another for their own benefit or for the benefit of anyone other than the person being exploited, and that conduct does not otherwise constitute sexual harassment under this Policy. Examples of Sexual Exploitation include, but are not limited to:
  - Sexual voyeurism (such as observing or allowing others to observe a person undressing or using the bathroom or engaging in sexual acts, without the consent of the person being observed)

- o Invasion of sexual privacy
- o Taking pictures, video, or audio recording of another in a sexual act, or in any other sexually-related activity when there is a reasonable expectation of privacy during the activity, without the consent of all involved in the activity, or exceeding the boundaries of consent (such as allowing another person to hide in a closet and observe sexual activity, or disseminating sexual pictures without the photographed person's consent), including the making or posting of revenge pornography
- o Prostituting another person
- o Engaging in sexual activity with another person while knowingly infected with human immunodeficiency virus (HIV) or a sexually transmitted disease (STD) or infection (STI), without informing the other person of the virus, disease, or infection
- o Causing or attempting to cause the incapacitation of another person (through alcohol, drugs, or any other means) for the purpose of compromising that person's ability to give consent to sexual activity, or for the purpose of making that person vulnerable to non-consensual sexual activity
- o Misappropriation of another person's identity on apps, websites, or other venues designed for dating or sexual connections
- o Forcing a person to take an action against that person's will by threatening to show, post, or share information, video, audio, or an image that depicts the person's nudity or sexual activity
- o Knowingly soliciting a minor for sexual activity
- o Engaging in sex trafficking
- o Knowing creation, possession, or dissemination of child pornography

- Threatening or causing physical harm, extreme verbal, emotional, or psychological abuse; other conduct which threatens; or endangers the health or safety of any person;

- Discrimination, defined as actions that deprive, limit, or deny other members of the community of educational or employment access, benefits, or opportunities, including disparate treatment;

- Intimidation, defined as implied threats or acts that cause an unreasonable fear of harm in another;

- Hazing, defined as acts likely to cause physical or psychological harm or social ostracism to any person within the College community, when related to the admission, initiation, pledging, joining, or any other group-affiliation activity;

- Bullying, defined as:
  - o Repeated and/or severe
  - o Aggressive behavior
  - o Likely to intimidate or intentionally hurt, control, or diminish another person, physically and/or mentally
  - o That is not speech or conduct otherwise protected by the First Amendment

Violation of any other College policies may constitute a Civil Rights Offense when a violation is motivated by actual or perceived membership in a protected class, and the result is a discriminatory limitation or denial of employment or educational access, benefits, or opportunities.

Sanctions for the above-listed Civil Rights Offenses range from reprimand through expulsion/termination.

UNETHICAL RELATIONSHIPS/CONSENSUAL RELATIONSHIPS POLICY
There are inherent risks in any romantic or sexual relationship between individuals in unequal positions (such as faculty member and student or supervisor and employee). These relationships may, in reality, be less consensual than perceived by the individual whose position confers power or authority. Similarly, the relationship also may be viewed in different ways by each of the parties, particularly in retrospect. Circumstances may change, and conduct that was once welcomed may, at some point in the relationship, become unwelcomed.
The College does not wish to interfere with private choices regarding personal relationships when these relationships do not interfere with the goals and policies of the College. However, for the personal protection of members of this community, relationships are prohibited in which power differentials and professional responsibility are inherent.

Employees may refer to the College's Employee Handbook for further details regarding personal relationships with others in the College community.

Retaliation

Protected activity under this policy includes reporting an incident that may implicate this policy, participating in the grievance process, supporting a Complainant or Respondent, assisting in providing information relevant to an investigation, and/or acting in good faith to oppose conduct that constitutes a violation of this Policy.

Acts of alleged retaliation should be reported immediately to the Title IX Coordinator and will be promptly investigated. The College will take all appropriate and available steps to protect individuals who fear that they may be subjected to retaliation.

The College and any member of the College community are prohibited from taking or attempting to take materially adverse action by intimidating, threatening, coercing, harassing, or discriminating against any individual for the purpose of interfering with any right or privilege secured by law or policy, or because the individual has made a report or complaint, testified, assisted, or participated or refused to participate in any manner in an investigation, proceeding, or hearing under this Policy and procedure.

Filing a complaint within Process B could be considered retaliatory if those charges could be applicable under Process A, when the Process B charger are made for the purpose of interfering with or circumventing any right or privilege provided afforded within Process A that is not provided by Process B. Therefore, the College vets all complaints carefully to ensure this does not happen, and to ensure that complaints are routed to the appropriate process.

Charges against an individual for code of conduct violations that do not involve sex discrimination or sexual harassment but arise out of the same facts or circumstances as a report or complaint of sex discrimination, or a report or complaint of sexual harassment, for the purpose of interfering with any right or privilege secured by Title IX, constitutes retaliation.

The exercise of rights protected under the First Amendment does not constitute retaliation.

Charging an individual with a code of conduct violation for making a materially false statement in bad faith in the course of a grievance proceeding under this policy and procedure does not constitute retaliation, provided that the determination of responsibility, by itself, is not sufficient to conclude that any party has made a materially false statement in bad faith.

<u>Mandated Reporting</u>

All College employees (faculty, staff, and administrators) are expected to report actual or suspected discrimination, harassment, and/or retaliation to appropriate officials immediately, although there are some limited exceptions.
In order to make informed choices, it is important to be aware of confidentiality and mandatory reporting requirements when consulting campus resources. On campus, some resources may maintain confidentiality and are not required to report actual or suspected discrimination or harassment in a way that identifies the parties. They may offer options and resources without any obligation to inform an outside agency or campus official unless a Complainant has requested the information be shared.
If a Complainant expects formal action in response to their allegations, reporting to any Mandated Reporter can connect them with resources to report crimes and/or policy violations, and these employees will immediately pass reports to the Title IX Coordinator (and/or police, if desired by the Complainant), who will take action when an incident is reported to them.
The following sections describe the reporting options at the College for a Complainant or third-party (including parents/guardians when appropriate):

a. Confidential Resources
If a Complainant would like the details of an incident to be kept confidential, the Complainant may speak with:
- On-campus/virtual (employees) licensed professional counselors (Wellness   Services)
- Off-campus/virtual (non-employees):
  - Licensed professional counselors and other medical providers
  - Local rape crisis counselors
  - Domestic violence resources
  - Local or state assistance agencies
  - Clergy/Chaplains
  - Attorneys

All of the above-listed individuals will maintain confidentiality when acting under the scope of their licensure, professional ethics, and/or professional credentials, or official designation, except in extreme cases of immediacy of threat or danger or abuse of a minor/elder/individual with a disability, or when required to disclose by law or court order.

College licensed professional counselors associated with the College's Wellness Services (students) are available to help free of charge and may be consulted on an emergency basis during normal business hours as outlined below.

Wellness Services (students and student referrals only)
wellness@waketech.edu

Amanda C. Allen M.Ed., NCC, LPCA
919-866-5405
acallen@waketech.edu

Elaine Rodriguez, MSW, LCSWA
919-532-5796
errodriguez@waketech.edu

College employees who have confidential privilege as described above, and who receive reports within the scope of their confidential roles will timely submit anonymous statistical information for Clery Act purposes unless they believe it would be harmful to their service participant or client.

b. Anonymous Notice to Mandated Reporters
At the request of a Complainant, notice may be given by a Mandated Reporter to the Title IX Coordinator anonymously, without identification of the Complainant. The Mandated Reporter cannot remain anonymous themselves.

If a Complainant has requested that a Mandated Reporter maintain the Complainant's anonymity, the Mandated Reporter may do so unless it is reasonable to believe that a compelling threat to health or safety could exist. The Mandated Reporter can consult with the Title IX Coordinator on that assessment without revealing personally identifiable information.

Anonymous notice will be investigated by the College to the extent possible, both to assess the underlying allegation(s) and to determine if supportive measures or remedies can be provided.

However, anonymous notice typically limits the College's ability to investigate, respond, and provide remedies, depending on what information is shared.

When a Complainant has made a request for anonymity, the Complainant's personally identifiable information may be withheld by a Mandated Reporter, but all other details must be shared with the Title IX Coordinator. Mandated reporters may not be able to maintain requests for anonymity for Complainants who are minors, elderly, and/or disabled, depending on state reporting of abuse requirements.

c. Mandated Reporters and Formal Notice/Complaints
All employees the College (including student employees), with the exception of those who are designated as Confidential Resources, are Mandated Reporters and must promptly share with the Title IX Coordinator all known details of a report made to them in the course of their employment.

Employees must also promptly share <u>all</u> details of behaviors under this policy that they observe or have knowledge of, even if not reported to them by a Complainant or third-party.

Complainants may want to carefully consider whether they share personally identifiable details with non-confidential Mandated Reporters, as those details must be shared with the Title IX Coordinator.

Generally, disclosures in climate surveys, classroom writing assignments or discussions, human subjects research, events, marches, or speak-outs do not provide notice that must be reported to the Title IX Coordinator by employees, unless the Complainant clearly indicates that they desire a report to be made or a seek a specific response from the College.

Supportive measures may be offered as the result of such disclosures without formal action by the College.

Failure of a Mandated Reporter, as described above in this section, to report an incident of harassment or discrimination of which they become aware is a violation of the College's policy and can be subject to disciplinary action for failure to comply.

Though this may seem obvious, when a Mandated Reporter is engaged in harassment or other violations of this policy, they still have a duty to report their own misconduct, though the College is technically not on notice when a harasser is also a Mandated Reporter unless the harasser does in fact report themselves.

Finally, it is important to clarify that a Mandated Reporter who is themselves a target of harassment or other misconduct under this policy is not required to report their own experience, though they are, of course, encouraged to do so.

<u>**When a Complainant Does Not Wish to Proceed**</u>
If a Complainant does not wish for their name to be shared, does not wish for an investigation to take place, and/or does not want a formal complaint to be pursued, they may make such a request to the Title IX Coordinator, who will evaluate that request in light of the duty to ensure the safety of the campus and to comply with state or federal law.

The Title IX Coordinator has ultimate discretion over whether the College proceeds when the Complainant does not wish to do so, and the Title IX Coordinator may sign a formal complaint to initiate a grievance process usually upon completion of an appropriate violence risk assessment.

The Title IX Coordinator's decision should be based on results of the violence risk assessment that show a compelling risk to health and/or safety that requires the College to pursue formal action to protect the community.

A compelling risk to health and/or safety may result from evidence of patterns of misconduct, predatory conduct, threats, abuse of minors, use of weapons, and/or violence. The College may be compelled to act on alleged employee misconduct irrespective of a Complainant's wishes.

The Title IX Coordinator must also consider the effect that non-participation by the Complainant may have on the availability of evidence and the College's ability to pursue a Formal Grievance Process fairly and effectively.

When the Title IX Coordinator executes the written complaint, they do not become the Complainant. The Complainant is the individual who is alleged to be the victim of conduct that could constitute a violation of this policy.

When the College proceeds, the Complainant (and/or their Advisor) may have as much or as little involvement in the process as they wish. The Complainant retains all rights of a Complainant under this Policy irrespective of their level of participation. Typically, when the Complainant chooses not to participate, the Advisor may be appointed as proxy for the Complainant throughout the process, acting to ensure and protect the rights of the Complainant, though this does not extend to the provision of evidence or testimony.

Note that the College's ability to remedy and respond to notice may be limited if the Complainant does not want the College to proceed with an investigation and/or grievance process. The goal is to provide the Complainant with as much control over the process as possible, while balancing the College's obligation to protect its community.

In cases in which the Complainant requests confidentiality/no formal action and the circumstances allow the College to honor that request, the College may offer informal resolution options (see below), supportive measures, and remedies to the Complainant and the community, but will not otherwise pursue formal action.

If the Complainant elects to take no action, they can change that decision if they decide to pursue a formal complaint at a later date. Upon making a formal complaint, a Complainant has the right, and can expect, to have allegations taken seriously by the College, and to have the incidents investigated and properly resolved through these procedures. Please consider that delays may cause limitations on access to evidence, or present issues with respect to the status of the parties.

Federal Timely Warning Obligations
Parties reporting sexual assault, domestic violence, dating violence, and/or stalking should be aware that under the Clery Act, the College must issue timely warnings for incidents reported incidents that pose a serious or continuing threat of bodily harm or danger to members of the campus community.

The College will ensure that a Complainant's name and other identifying information is not disclosed, while still providing enough information for community members to make safety decisions in light of the potential danger.

False Allegations and Evidence
Deliberately false and/or malicious accusations under this policy, are a serious offense and will be subject to appropriate disciplinary action. This does not include allegations that are made in good faith but are ultimately shown to be erroneous or do not result in a policy violation determination.

Additionally, witnesses and parties knowingly providing false evidence, tampering with or destroying evidence after being directed to preserve such evidence, or deliberately misleading an official conducting an investigation can be subject to discipline under the appropriate College policies.

Amnesty for Complainants and Witnesses

The College community encourages the reporting of misconduct and crimes by Complainants and witnesses. Sometimes, Complainants or witnesses are hesitant to report to College officials or participate in grievance processes because they fear that they themselves may be in violation of certain policies, such as underage drinking or use of illicit drugs at the time of the incident. Respondents may hesitate to be forthcoming during the process for the same reasons.

It is in the best interests of the College community that Complainants choose to report misconduct to College officials, that witnesses come forward to share what they know, and that all parties be forthcoming during the process.

CAMPUS POLICIES & PROCEDURES

To encourage reporting and participation in the process, the College maintains a policy of offering parties and witnesses amnesty from minor policy violations – such as underage consumption of alcohol or the use of illicit drugs – related to the incident.

Amnesty does not apply to more serious allegations such as physical abuse of another or illicit drug distribution. The decision not to offer amnesty to a Respondent is based on neither sex nor gender, but on the fact that collateral misconduct is typically addressed for all students within a progressive discipline system, and the rationale for amnesty – the incentive to report serious misconduct – is rarely applicable to Respondent with respect to a Complainant.

Students: The College maintains a policy of amnesty for students who offer help to others in need. Although policy violations cannot be overlooked, the College may provide purely educational options with no official disciplinary finding, rather than punitive sanctions, to those who offer their assistance to others in need.

Employees: The College may, at its discretion, offer employee Complainants amnesty from such policy violations (typically more minor policy violations) related to the incident. Amnesty may also be granted to Respondents and witnesses on a case-by-case basis.

Federal Statistical Reporting Obligations
Certain campus officials – those deemed Campus Security Authorities – have a duty to report the following for federal statistical reporting purposes (Clery Act):

1. All "primary crimes," which include homicide, sexual assault, robbery, aggravated assault, burglary, motor vehicle theft, and arson;
2. Hate crimes, which include any bias motivated primary crime as well as any bias motivated larceny or theft, simple assault, intimidation, or destruction/damage/vandalism of property;
3. VAWA-based crimes, which include sexual assault, domestic violence, dating violence, and stalking; and
4. Arrests and referrals for disciplinary action for weapons-related law violations, liquor-related law violations, and drug abuse-related law violations.

All personally identifiable information is kept private, but statistical information must be shared with campus police regarding the type of incident and its general location (on or off-campus or in the surrounding area, but no addresses are given) for publication in the Annual Security Report and daily campus crime log.

Campus Security Authorities include: student services/student conduct staff, campus law enforcement, local police, coaches, athletic directors, student activities staff, human resources staff, advisors to student organizations, and any other official with significant responsibility for student and campus activities.
is the Violence Against Women Act, enacted in 1994 codified in part at 42 U.S.C. sections 13701 through 14040.

Preservation of Evidence
The preservation of evidence in incidents of sexual assault is critical to potential criminal prosecution and to obtaining restraining orders and is particularly time sensitive. The College will inform the Complainant of the importance of preserving evidence by taking the following actions:
1. Seek forensic medical assistance at a local hospital, ideally within 120 hours of the incident (sooner is better).
2. Avoid showering, bathing, washing hands or face, or douching, if possible, but evidence may still be collected even if you do.
3. Try not to urinate.
4. If oral sexual contact took place, refrain from smoking, eating, drinking, or brushing teeth.
5. If clothes are changed, place soiled clothes in a paper bag (plastic destroys evidence) or secure evidence container.
6. Seeking medical treatment can be essential even if it is not for the purposes of collecting forensic evidence. During the initial meeting between the Complainant and the Title IX Coordinator, the importance of taking these actions will be reiterated, if timely.

INTERIM RESOLUTION PROCESS FOR ALLEGED VIOLATIONS OF THE POLICY (KNOWN AS PROCESS "A")

1. Overview
The College will act on any formal or informal notice/complaint of violation of the policy that is received by the Title IX Coordinator or any other Official with Authority by applying these procedures, known as "Process A."

The procedures below apply only to qualifying allegations of sexual harassment (including sexual assault, dating violence, domestic violence, and stalking, as defined above) involving students, staff, administrators, or faculty members.

If other Policy definitions are invoked, such as policies on protected class harassment or discrimination as defined above, the procedures will be applicable to the resolution of such offenses, known as "Process B."

Process B can also apply to sexual harassment (including sexual assault, dating violence, domestic violence, and stalking, as defined above) when jurisdiction does not fall within Process A, as determined by the Title IX Coordinator.

The procedures below may be used to address collateral misconduct arising from the investigation of or occurring in conjunction with reported misconduct (e.g., vandalism, physical abuse of another), when alleged violations of the Policy are being addressed at the same time. All other allegations of misconduct unrelated to incidents covered by the Policy will be addressed through procedures described in the student, faculty, and staff handbooks.

2. Notice/Complaint

Upon receipt of a complaint or notice to the Title IX Coordinator of an alleged violation of the Policy, the Title IX Coordinator initiates a prompt initial assessment to determine the next steps the College needs to take.

The Title IX Coordinator will initiate at least one of three responses:

1) Offering supportive measures because the Complainant does not want to file a formal complaint and/or
2) An informal resolution (upon submission of a formal complaint); and/or
3) A Formal Grievance Process including an investigation and a hearing (upon submission of a formal complaint);

The College uses the Formal Grievance Process to determine whether or not the Policy has been violated. If so, the College will promptly implement effective remedies designed to ensure that it is not deliberately indifferent to harassment or discrimination, their potential recurrence, or their effects.

3. Initial Assessment

Following receipt of notice or a complaint of an alleged violation of this Policy, the Title IX Coordinator engages in an initial assessment, typically one to five business days. The steps in an initial assessment can include:

- The Title IX Coordinator seeks to determine if the person impacted wishes to make a formal complaint, and will assist them to do so, if desired.
    - If they do not wish to do so, the Title IX Coordinator determines whether to initiate a complaint themselves because a violence risk assessment indicates a compelling threat to health and/or safety.
- If a formal complaint is received, the Title IX Coordinator assesses its sufficiency and works with the Complainant to make sure it is correctly completed.
- The Title IX Coordinator reaches out to the Complainant to offer supportive measures.
- The Title IX Coordinator works with the Complainant to ensure they are aware of the right to have an Advisor.
- The Title IX Coordinator works with the Complainant to determine whether the Complainant prefers a supportive and remedial response, an informal resolution option, or a formal investigation and grievance process.
    - If a supportive and remedial response is preferred, the Title IX Coordinator works with the Complainant to identify their wishes, assess their requests, and implements accordingly. No Formal Grievance Process is initiated, though the Complainant can elect to initiate one later, if desired.
    - If an informal resolution option is preferred, the Title IX Coordinator assesses whether the complaint is suitable for informal resolution, which informal mechanism may serve the situation best or is available, and may seek to determine if the Respondent is also willing to engage in informal resolution.
    - If a Formal Grievance Process is preferred by the Complainant, the Title IX Coordinator determines if the misconduct alleged falls within the scope of the 2020 Title IX regulations:
        - If it does, the Title IX Coordinator will initiate the formal investigation and grievance process, directing the investigation to address:
            - an incident, and/or
            - a pattern of alleged misconduct, and/or
            - a culture/climate issue, based on the nature of the complaint.
        - If it does not, the Title IX Coordinator determines that Title IX does not apply (and will "dismiss" that aspect of the complaint, if any), assesses which policies may apply, which resolution process is applicable, and will refer the matter accordingly, including referring the matter for resolution under Process B, if applicable. Please note that dismissing a complaint under the 2020 Title IX regulations is solely a procedural requirement under Title IX which does not limit the College's authority to address a complaint with an appropriate process and remedies.

a. Risk Assessment Tool for Behaviors of Concern

In some cases, the Title IX Coordinator may determine that a risk assessment tool for behaviors of concern should be conducted by the Behavioral Assessment Team (BAT) as of the initial assessment. Threat assessment is the process of evaluating the actionability of violence by an individual against another person or group following the issuance of a direct or conditional threat.

This assessment can aid in critical and/or required determinations, including:

- Emergency removal of a Respondent on the basis of immediate threat to an individual or the community's physical health/safety;
- Whether the Title IX Coordinator should pursue/sign a formal complaint absent a willing/able Complainant;
- Whether the scope of the investigation should include an incident, and/or pattern of misconduct and/or climate of hostility/harassment;
- To help identify potential predatory conduct;
- Whether it is reasonable to try to resolve a complaint through informal resolution, and if so, what approach may be most successful;
- Whether to permit a voluntary withdrawal by the Respondent;
- Whether to impose transcript notation or communicate with a transfer institution about a Respondent;
- Assessment of appropriate sanctions/remedies (to be applied post-hearing); and/or
- Whether a Clery Act Timely Warning/Trespass order is needed.

The risk assessment tool requires specific training and are typically conducted by psychologists, clinical counselors, social workers, case managers, law enforcement officers, student conduct officers, or other BAT members. The risk assessment authorized by the Title IX Coordinator should occur in collaboration with the BAT. Where a risk assessment is required by the Title IX Coordinator, a Respondent refusing to cooperate may result in a charge of failure to comply within the appropriate student or employee conduct process.

For the purpose of this policy, the risk assessment tool is not an evaluation for an involuntary behavioral health hospitalization nor is it a psychological or mental health assessment. A risk assessment assesses the risk of actionable violence, often with a focus on targeted/predatory escalations, and is supported by research from the fields of law enforcement, criminology, human resources, and psychology.

b. Dismissal (Mandatory and Discretionary)

These dismissal requirements are mandated by the 2020 Title IX Regulations, 34 CFR Part 106.45. The College must dismiss a formal complaint or any allegations therein if, at any time during the investigation or hearing, it is determined that:

1) The conduct alleged in the formal complaint would not constitute sexual harassment as defined above, even if proved; and/or

2) The conduct did not occur in an educational program or activity controlled by the Wake Technical Community College (including buildings or property controlled by recognized student organizations), and/or the College does not have control of the Respondent; and/or

3) The conduct did not occur against a person in the United States; and/or

4) At the time of filing a formal complaint, a Complainant is not participating in or attempting to participate in the education program or activity of the College.

The College may dismiss a formal complaint or any allegations therein if, at any time during the investigation or hearing:
1) A Complainant notifies the Title IX Coordinator in writing that the Complainant would like to withdraw the formal complaint or any allegations therein; or

2) The Respondent is no longer enrolled in or employed by the College; or

3) Specific circumstances prevent the College from gathering evidence sufficient to reach a determination as to the formal complaint or allegations therein.

A Complainant who decides to withdraw a complaint may later request to reinstate it or refile it.

Upon any dismissal, the College will promptly send written notice of the dismissal and the rationale for doing so simultaneously to the parties.

This dismissal decision is appealable by any party under the procedures for appeal below. The decision not to dismiss is also appealable by any party claiming that a dismissal is required or appropriate. A Complainant who decides to withdraw a complaint may later request to reinstate it or refile it.

4. Counterclaims
The College is obligated to ensure that the grievance process is not abused for retaliatory purposes. The College permits the filing of counterclaims but uses an initial assessment, described above, to assess whether the allegations in the counterclaim

are made in good faith. Counterclaims by the Respondent may be made in good faith, but are, on occasion, also made for purposes of retaliation. Counterclaims made with retaliatory intent will not be permitted.

Counterclaims by a Respondent may be made in good faith, but are, on occasion, made for purposes of retaliation, instead. Counterclaims made with retaliatory intent will not be permitted.

Counterclaims determined to have been reported in good faith will be processed using the grievance procedures below. Investigation of such claims may take place after resolution of the underlying initial allegation, in which case a delay may occur.

Counterclaims may also be resolved through the same investigation as the underlying allegation, at the discretion of the Title IX Coordinator. When counterclaims are not made in good faith, they will be considered retaliatory and may constitute a violation of this policy.

5. Right to an Advisor
The parties may each have an Advisor of their choice present with them for all meetings, interviews and hearings, within the resolution process, if they so choose. The parties may select whoever they wish to serve as their Advisor as long as the Advisor is eligible and available.

Choosing an Advisor who is also a witness in the process creates potential for bias and conflict-of-interest. A party who chooses an Advisor who is also a witness can anticipate that issues of potential bias will be explored by the hearing Decision-maker(s).

The College may permit parties to have more than one Advisor upon special request to the Title IX Coordinator. The decision to grant this request is at the sole discretion of the Title IX Coordinator and will be granted equitably to all parties.

a. Who Can Serve as an Advisor
The Advisor may be a friend, mentor, family member, attorney, or any other individual a party chooses to advise, support, and/or consult with them throughout the resolution process. The parties may choose Advisors from inside or outside of the College community.

The Title IX Coordinator will also offer to assign a trained Advisor to any party if the party so chooses. If the parties choose an Advisor from the pool available from the College, the Advisor will have trained by the College and be familiar with the College's resolution process.

If the parties choose an Advisor from outside the pool of those identified by the College, the Advisor may not have been trained by the College and may not be familiar with College policies and procedures.

Parties also have the right to choose not to have an Advisor in the initial stages of the resolution process, prior to a hearing.

b. Advisor's Role in Meetings and Interviews
The parties may be accompanied by their Advisor in all meetings and interviews at which the party is entitled to be present, including intake and interviews. Advisors should help the parties prepare for each meeting and are expected to advise ethically, with integrity, and in good faith. The College cannot guarantee equal Advisory rights, meaning that if one party selects an Advisor who is an attorney, but the other party does not or cannot afford an attorney, the College is not obligated to provide an attorney. Where applicable under state law or College policy, Advisors or attorneys are permitted to fully represent their advisees or clients in resolution proceedings, including all meetings interviews, and hearings. Although the College prefers to hear from parties directly, in these cases, parties are entitled to have evidence provided by the chosen representatives.

c. Advisors in Hearings/College-Appointed Advisor
Under U.S. Department of Education regulations for Title IX, a form of indirect questioning is required during the hearing, but must be conducted by the parties' Advisors. The parties are not permitted to directly question each other or any witnesses. If a party does not have an Advisor for a hearing, the College will appoint a trained Advisor for the limited purpose of conducting any questioning of the other party(ies) and witness.

d. Pre-Interview Meetings
Advisors and their advisees may request to meet with the investigators conducting interviews/meetings in advance of these interviews or meetings. This pre-meeting allows Advisors to clarify and understand their role and College's policies and procedures.

e. Advisor Violations of the College's Policy
All Advisors are subject to the same College policies and procedures, whether they are attorneys or not, and whether they are selected by a party or assigned by the Recipient. Advisors are expected to advise their advisees without disrupting proceedings. Advisors should not address the College's officials or investigators in a meeting or interview unless invited to do so (e.g., asking procedural questions). The Advisor may not make a presentation or represent their advisee during any meeting or proceeding and may not speak on behalf of the advisee to the Investigator(s) or other Decision-maker(s) except

during a hearing proceeding, during questioning.

The parties are expected to ask and respond to questions on their own behalf throughout the investigation phase of the resolution process. Although the Advisor generally may not speak on behalf of their advisee, the Advisor may consult with their advisee, either privately as needed, or by conferring or passing notes during any resolution process meeting or interview. For longer or more involved discussions, the parties and their Advisors should ask for breaks to allow for private consultation.

Any Advisor who oversteps their role as defined by this Policy will be warned only once. If the Advisor continues to disrupt or otherwise fails to respect the limits of the Advisor role, the meeting/interview/hearing will be ended, or other appropriate measures implemented. Subsequently, the Title IX Coordinator will determine how to address the Advisor's non-compliance and future role.

f. Sharing Information with the Advisor
The College expects that the parties may wish to have the College share documentation and evidence related to the allegations with their Advisors. Parties may share this information directly with their Advisor or other individuals if they wish. Doing so may help the parties participate more meaningfully in the resolution process.

The College also provides a consent form that authorizes the College to share such information directly with their Advisor. The parties must either complete and submit this form to the Title IX Coordinator or provide similar documentation demonstrating consent to a release of information to the Advisor before College is able to share records with an Advisor.

If a party requests that all communication be made through their attorney or Advisor, the College will not comply with that request. The College will engage in communicate directly with a party's Advisor.

g. Privacy of Records Shared with Advisor
Advisors are expected to maintain the privacy of the records shared with them. These records may not be shared with third parties, disclosed publicly, or used for purposes not explicitly authorized by the College. Advisors will be asked to sign Non-Disclosure Agreements (NDAs). The College may restrict the role of any Advisor who does not respect the sensitive nature of the process or who fails to abide by the College's privacy expectations.

h. Expectations of an Advisor
The College generally expects an Advisor to adjust their schedule to allow them to attend the College's meetings when planned, but the College may change scheduled meetings to accommodate an Advisor's inability to attend, if doing so does not cause an unreasonable delay.

The College may also make reasonable provisions to allow an Advisor who cannot be present in person to attend a meeting by telephone, video conferencing, or other similar technologies as may be convenient and available.

i. Expectations of the Parties with Respect to Advisors
A party may elect to change Advisors during the process and is not obligated to use the same Advisor throughout. The parties are expected to inform the Investigator(s) of the identity of their Advisor at least three (3) business days before the date of their first meeting with Investigators (or as soon as possible if a more expeditious meeting is necessary or desired). The parties are expected to provide timely notice to the Title IX Coordinator if they change Advisors at any time. It is assumed that if a party changes Advisors, consent to share information with the previous Advisor is terminated, and a release for the new Advisor should be secured. Parties are expected to inform the Title IX Coordinator of the identity of their hearing Advisor at least three (3) business days before the hearing.

j. Assistance in Securing an Advisor
Parties may choose their own Advisors. The College does not endorse any attorney or legal team.

Following are resources for Complainants and Respondents.

Legal Aid of North Carolina
224 S. Dawson Street
Raleigh, NC 27611
1-866-219-LANC (5262)

For representation, Respondents may wish to contact organizations such as:
- FACE
- SAVE

Complainants may wish to contact organizations such as:
- The Victim Rights Law Center
- The National Center for Victims of Crime, which maintains the Crime Victim's Bar Association

- The Time's Up Legal Defense [Fund](#)

6. Resolution Processes

Resolution proceedings are private. All persons present at any time during the resolution process are expected to maintain the privacy of the proceedings in accordance with the College's Policy. Although there is an expectation of privacy around what Investigators share with parties during interviews, the parties have discretion to share their own knowledge and evidence with others if they so choose, with the expectation of information the parties agree not to disclose related to Informal Resolution, discussed below. The College encourages parties to discuss with their Advisors any sharing of information before doing so.

The Formal Grievance Process is the Recipient's primary resolution approach, unless Informal Resolution is elected by all parties and the Recipient. Three options for Informal Resolution are detailed in this section, and the Formal Grievance Process is detailed starting in the next section.

a. Informal Resolution

Informal Resolution can include three different approaches:

- **Supportive Resolution.** When the Title IX Coordinator can resolve the matter informally by providing supportive measures (only) to remedy the situation.
- **Alternative Resolution.** When the parties agree to resolve the matter through an alternate resolution mechanism s described below, including mediation, usually before a formal investigation takes place, see discussion below in b., below.
- **Accepted Responsibility.** When the Respondent accepts responsibility for violating policy, and desires to accept a sanction and end the resolution process (similar to above, but usually occurs post-investigation); see below in c., below.

To initiate Informal Resolution, a Complainant must to submit a formal complaint, as defined above. A Respondent who wishes to initiate Informal Resolution, they should contact the Title IX Coordinator. The parties may agree as a condition of engaging in Informal Resolution that statements made or evidence shared during the Informal Resolution process will not be considered in the Formal Grievance Process unless all parties consent.

It is not necessary to pursue Informal Resolution first in order to pursue a Formal Grievance Process, and any party participating in Informal Resolution can stop the process at any time and begin or resume the Formal Grievance Process.

Prior to implementing Informal Resolution, the College will provide the parties with written notice of the reported misconduct and any sanctions or measures that may result from participating in such a process, including information regarding any records that will be maintained or shared by the College.

The College will obtain voluntary, written confirmation that all parties wish to resolve the matter through Informal Resolution before proceeding and will not pressure the parties to participate in Informal Resolution.

b. Alternative Resolution Approaches

Alternative Resolution is an informal approach (including mediation, restorative practices, facilitated dialog, etc.) by which the parties reach a mutually agreed upon resolution of an allegation. All parties must consent to the use of Alternative Resolution approach.

The Title IX Coordinator may look to the following factors to assess whether Alternative Resolution is appropriate, or which form of Alternative Resolution may be most successful for the parties:

- The parties' amenability to Alternative Resolution;
- Likelihood of potential resolution, taking into account any power dynamics between the parties;
- The parties' motivation to participate;
- Civility of the parties;
- Results of a risk assessment/ongoing risk analysis;
- Disciplinary history;
- Whether an emergency removal is needed;
- Skill of the Alternate Resolution facilitator with this type of allegation;
- Complaint complexity;
- Emotional investment/capability of the parties;
- Rationality of the parties;
- Goals of the parties;
- Adequate resources to invest in Alternative Resolution (time, staff, etc.)

The ultimate determination of whether Alternative Resolution is available or successful is to be made by the Title IX Coordinator. The Title IX Coordinator is authorized to negotiate a resolution that is acceptable to all parties, and/or to accept a resolution that is proposed by the parties, usually through their Advisors. The Title IX Coordinator maintains records of any resolution that is reached, and failure to abide by the resolution agreement may result in appropriate responsive/disciplinary actions. Results of complaints resolved by Informal Resolution or Alternative Resolution are not appealable.

c. Respondent Accepts Responsibility for Alleged Violations

The Respondent may accept responsibility for all or part of the alleged policy violations at any point during the resolution process. If the Respondent indicates an intent to accept responsibility for all of the alleged misconduct, the formal process will be paused, and the Title IX Coordinator will determine whether Informal Resolution can be used according to the criteria in that section above.

If Informal Resolution is applicable, the Title IX Coordinator will determine whether all parties and the College are able to agree on responsibility, sanctions, and/or remedies. If so, the Title IX Coordinator implements the accepted finding that the Respondent is in violation of the College's Policy and implements agreed-upon sanctions and/or remedies, in coordination with other appropriate administrator(s), as necessary.

This result is not subject to appeal once all parties indicate their written assent to all agreed upon terms of resolution. When the parties cannot agree on all terms of resolution, the Formal Grievance Process will resume at the same point where it was paused.

When a resolution is accomplished, the appropriate sanction or responsive actions are promptly implemented in order to effectively stop the harassment or discrimination, prevent its recurrence, and remedy the effects of the discriminatory conduct, both on the Complainant and the community.

d. Negotiated Resolution

The Title IX Coordinator, with the consent of the parties, may negotiate and implement an agreement to resolve the allegations that satisfies all parties and the College. Negotiated Resolutions are not appealable.

7. Grievance Process Pool

The Formal Grievance Process relies on a pool of administrators ("the Pool") to carry out the process. This pool is comprised of the College's Title IX Investigators and Deputy Coordinators. Other pool members may be included as deemed appropriate by the Title IX Coordinator. Members of the Pool are announced in an annual distribution of this Policy to all students, parents/guardians of students, employees, prospective students, and prospective employees.

a. Pool Member Roles

Members of the Pool are trained annually, and can serve in in the following roles, at the direction of the Title IX Coordinator:

- To provide appropriate intake of and initial guidance pertaining to complaints
- To act as an Advisor to the parties
- To serve in a facilitation role in Informal Resolution or Alternate Resolution, if appropriately trained in appropriate resolution modalities
- To perform or assist with initial assessment
- To investigate complaints
- To serve as a hearing facilitator (process administrator, no decision-making role)
- To serve as a Decision-maker regarding the complaint
- To serve as an Appeal Decision-maker

b. Pool Member Appointment and Membership

The Title IX Coordinator appoints the Pool, which acts with independence and impartiality. This Pool may undergo an application and/or interview/selection process. Although members of the Pool are typically trained in a variety of skill sets and can rotate amongst the different roles listed above in different cases, the College can also designate permanent roles for individuals in the Pool, using others as substitutes or to provide greater depth of experience when necessary. This process of role assignment may be the result of particular skills, aptitudes, or talents identified in members of the Pool that make them best suited to particular roles.

Pool members are usually appointed to semester-to-semester basis. Individuals who are interested in serving in the Pool are encouraged to contact the Title IX Coordinator.

c. Pool Member Training

The Pool members receive annual training. This training includes, but is not limited to:
- The scope of the College's Title IX Policy and Procedures
- How to conduct investigations and hearings that protect the safety of Complainants and Respondents, and promote accountability

- Implicit bias
- Disparate treatment and impact
- Reporting, confidentiality, and privacy requirements
- Applicable laws, regulations, and federal regulatory guidance
- How to implement appropriate and situation-specific remedies
- How to investigate in a thorough, reliable, timely and impartial manner by individuals who receive annual training in conducting investigations of sexual harassment, trauma-informed practices, and impartiality
- How to uphold fairness, equity, and due process
- How to weigh evidence
- How to conduct questioning
- How to assess credibility
- Impartiality and objectivity
- How to render findings and generate clear, concise, evidence-based rationales
- The definitions of all offenses
- How to apply definitions used by the College with respect to consent (or the absence or negation of consent) consistently, impartially, and in accordance with policy
- How to conduct an investigation and grievance process including hearings, appeals, and informal resolution processes
- How to serve impartially by avoiding prejudgment of the facts at issue, conflicts of interest, and bias
- Any technology to be used at a live hearing
- Issues of relevance of questions and evidence
- Issues of relevance to create an investigation report that fairly summarizes relevant evidence
- How to determine appropriate sanctions in reference to all forms of harassment, discrimination, and/or retaliation allegations
- Recordkeeping

Specific training is also provided for all Pool members. All Pool members are required to attend these trainings annually.
d. Pool Membership
The Pool includes [this is just an example]:
• 4 or more chairs: one representative from HR and one from Student Affairs, etc., who respectively Chair hearings for allegations involving student and employee Respondents
• 3 or more members of the Academic Affairs administration and/or faculty
• 3 or more members of the administration/staff
• 1 representative from Campus Safety
• 2 representatives from Human Resources
• 1 representative from Athletics

Pool members are usually appointed to annual terms. Individuals who are interested in serving in the Pool are encouraged to contact the Title IX Coordinator.

8. Formal Grievance Process: Notice of Investigation and Allegations
The Title IX Coordinator will provide written notice of the investigation and allegations (the "NOIA") to the Respondent upon commencement of the Formal Grievance Process. This facilitates the Respondent's ability to prepare for the interview and to identify and choose an Advisor to accompany them. The NOIA is also copied to the Complainant, who will be given advance notice of when the NOIA will be delivered to the Respondent.

The NOIA will include:
- A meaningful summary of all of allegations,
- The identity of the involved parties (if known),
- The precise misconduct being alleged,
- The date and location of the alleged incident(s) (if known),
- The specific policies implicated,
- A description of the applicable procedures,
- A statement of the potential sanctions/responsive actions that could result,
- A statement that the College presumes the Respondent is not responsible for the reported misconduct unless and until the evidence supports a different determination,
- A statement that determinations of responsibility are made at the conclusion of the process and that the parties will be given an opportunity to inspect and review all directly related and/or relevant evidence obtained during the review and comment period,
- A statement about the College's Policy on retaliation,
- Information about the confidentiality of the process,
- Information on the need for each party to have an Advisor of their choosing and suggestions for ways to identify an Advisor,

- A statement informing the parties that the College's Policy prohibits knowingly making false statements, including knowingly submitting false information during the resolution process,
- Detail on how the party may request disability accommodations during the interview process,
- The College's VAWA information
- The name(s) of the Investigator(s), along with a process to identify, in advance of the interview process to the Title IX Coordinator, any conflict of interest that the Investigator(s) may have, and
- An instruction to preserve any evidence that is directly related to the allegations.

Amendments and updates to the NOIA may be made as the investigation progresses and more information becomes available regarding the addition or dismissal of various charges.

Notice will be made in writing and may be delivered by one or more of the following methods: in person, mailed to the local or permanent address(es) of the parties as indicated in official College records, or emailed to the parties' college-issued email or designated accounts. Once mailed, emailed, and/or received in-person, notice will be presumptively delivered.

9. Resolution Timeline
The College will make a good faith effort to complete the resolution process within a sixty-to-ninety (60-90) business day time period, including appeal if any, which can be extended as necessary for appropriate cause by the Title IX Coordinator, who will provide notice and rationale for any extensions or delays to the parties as appropriate, as well as an estimate of how much additional time will be needed to complete the process.

10. Appointment of Investigators
Once the decision to commence a formal investigation is made, the Title IX Coordinator appoints Pool members to conduct the investigation (typically using a team of two Investigators), usually within three (3) business days of determining that an investigation should proceed.

11. Ensuring Impartiality
Any individual materially involved in the administration of the resolution process including the Title IX Coordinator, Investigator(s), and Decision-maker(s) may neither have nor demonstrate a conflict of interest or bias for a party generally, or for a specific Complainant or Respondent.

The Title IX Coordinator will vet the assigned Investigator(s) for impartiality by ensuring there are no actual or apparent conflicts of interest or disqualifying biases. At any time during the resolution process, the parties may raise a concern regarding bias or conflict of interest, and the Title IX Coordinator will determine whether the concern is reasonable and supportable. If so, another Pool member will be assigned and the impact of the bias or conflict, if any, will be remedied. If the source of the conflict of interest or bias is the Title IX Coordinator, concerns should be raised with Benita Clark, the Vice President, Human Resources and College Safety.

The Formal Grievance Process involves an objective evaluation of all relevant evidence obtained, including evidence that supports that the Respondent engaged in a policy violation and evidence that supports that the Respondent did not engage in a policy violation. Credibility determinations may not be based solely on an individual's status or participation as a Complainant, Respondent, or witness.

The College operates with the presumption that the Respondent is not responsible for the reported misconduct unless and until the Respondent is determined to be responsible for a policy violation by the applicable standard of proof.

12. Investigation Timeline
Investigations are completed expeditiously, normally within thirty (30) business days, though some investigations may take weeks or even months, depending on the nature, extent, and complexity of the allegations, availability of witnesses, police involvement, etc.

The College will make a good faith effort to complete investigations as promptly as circumstances permit and will communicate regularly with the parties to update them on the progress and timing of the investigation.

13. Delays in the Investigation Process and Interactions with Law Enforcement
The College may undertake a short delay in its investigation (several days to a few weeks) if circumstances require. Such circumstances include, but are not limited to: a request from law enforcement to temporarily delay the investigation, the need for language assistance, the absence of parties and/or witnesses, and/or accommodations for disabilities or health conditions.

The College will communicate in writing the anticipated duration of the delay and reason to the parties and provide the parties with status updates if necessary. The College will promptly resume its investigation and resolution process as soon as feasible. During such a delay, the College will implement supportive measures as deemed appropriate.

The College's action(s) or processes are not typically altered or precluded on the grounds that civil or criminal charges

involving the underlying incident(s) have been filed or that criminal charges have been dismissed or reduced.

14. Steps in the Investigation Process

All investigations are thorough, reliable, impartial, prompt, and fair. Investigations involve interviews with all relevant parties and witnesses; obtaining available, relevant evidence; and identifying sources of expert information, as necessary.

All parties have a full and fair opportunity, through the investigation process, to suggest witnesses and questions, to provide evidence and expert witnesses, and to fully review and respond to all evidence on the record. Recordings of interviews are/are not provided to the parties, and/but the parties will have the ability to review the transcript/summary of the interview once the investigation report is compiled.

The Investigator(s) typically take(s) the following steps, if not already completed (not necessarily in this order):
- Determine the identity and contact information of the Complainant
- In coordination with campus partners (e.g., the Title IX Coordinator), initiate or assist with any necessary supportive measures
- Identify all policies implicated by the alleged misconduct and notify the Complainant and Respondent of all of the specific policies implicated
- Assist the Title IX Coordinator, if needed, with conducting a prompt initial assessment to determine if the allegations indicate a potential policy violation
- Commence a thorough, reliable, and impartial investigation by identifying issues and developing a strategic investigation plan, including a witness list, evidence list, intended investigation timeframe, and order of interviews for all witnesses and the parties
- Meet with the Complainant to finalize their interview/statement, if necessary
- Work with the Title IX Coordinator, as necessary, to prepare the initial Notice of Investigation and Allegation (NOIA). The NOIA may be amended with any additional or dismissed allegations
  - Notice should inform the parties of their right to have the assistance of an Advisor, who could be a member of the Pool or an Advisor of their choosing present for all meetings attended by the party
- Provide each interviewed party and witness an opportunity to review and verify the Investigator's summary notes (or transcript) of the relevant evidence/testimony from their respective interviews and meetings
- Make good faith efforts to notify the parties of any meeting or interview involving the other party, in advance when possible
- When participation of a party is expected, provide that party with written notice of the date, time, and location of the meeting, as well as the expected participants and purpose
- Interview all available, relevant witnesses and conduct follow-up interviews as necessary
- Allow each party the opportunity to suggest witnesses and questions they wish the Investigator(s) to ask of the other party and witnesses, and document in the report which questions were asked, with a rationale for any changes or omissions.
- Complete the investigation promptly and without unreasonable deviation from the intended timeline
- Provide regular status updates to the parties throughout the investigation.
- Prior to the conclusion of the investigation, provide the parties and their respective Advisors (if so desired by the parties) with a list of witnesses whose information will be used to render a finding
- Write a comprehensive investigation report fully summarizing the investigation, all witness interviews, and addressing all relevant evidence. Appendices including relevant physical or documentary evidence will be included
- The Investigator(s) gather, assess, and synthesize evidence, but make no conclusions, engage in no policy analysis, and render no recommendations as part of their report.
- Prior to the conclusion of the investigation, provide the parties and their respective Advisors (if so desired by the parties) a secured electronic or hard copy of the draft investigation report as well as an opportunity to inspect and review all of the evidence obtained as part of the investigation that is directly related to the reported misconduct, including evidence upon which the College does not intend to rely in reaching a determination, for a ten (10) business day review and comment period so that each party may meaningfully respond to the evidence. The parties may elect to waive the full ten days. Each copy of the materials shared will be watermarked on each page with the role of the person receiving it (e.g., Complainant, Respondent, Complainant's Advisor, Respondent's Advisor).
- The Investigator(s) may elect to respond in writing in the investigation report to the parties' submitted responses and/or to share the responses between the parties for additional responses
- The Investigator(s) will incorporate relevant elements of the parties' written responses into the final investigation report, include any additional relevant evidence, make any necessary revisions, and finalize the report. The Investigator(s) should document all rationales for any changes made after the review and comment period
- The Investigator(s) shares the report with the Title IX Coordinator and/or legal counsel for their review and feedback.
- The Investigator will incorporate any relevant feedback, and the final report is then shared with all parties and their Advisors through secure electronic transmission or hard copy at least ten (10) business days prior to a

hearing. The parties are also provided with a file of any directly related evidence that was not included in the report

15. Role and Participation of Witnesses in the Investigation

Witnesses (as distinguished from the parties) who are employees of the College are strongly encouraged to cooperate with and participate in the College's investigation and resolution process. Student witnesses and witnesses from outside the College community are encouraged to cooperate with College investigations and to share what they know about a compliant.

Although in-person interviews for parties and all potential witnesses are ideal, circumstances (e.g., study abroad, summer break) may require individuals to be interviewed remotely. Microsoft Teams, Skype, Zoom, FaceTime, WebEx, or similar technologies may be used for interviews, if the Investigator(s) determine that timeliness, efficiency, or other reasons dictate a need for remote interviewing. The College will take appropriate steps to reasonably ensure the security/privacy of remote interviews.

Witnesses may also provide written statements in lieu of interviews or choose to respond to written questions, if deemed appropriate by the Investigator(s), though not preferred. If a witness submits a written statement, but does not intend to be and is not present for questioning at a hearing, their written statement may not be used as evidence.

16. Recording of Interviews

No unauthorized audio or video recording of any kind is permitted during investigation meetings. If Investigator(s) elect to audio and/or video record interviews, all involved parties should be made aware of audio and/or video recording.

17. Evidentiary Considerations in the Investigation

The investigation does not consider: 1) incidents not directly related to the possible violation, unless they evidence a pattern; or 2) the character of the parties; or 3) questions and evidence about the Complainant's prior sexual behavior, unless such questions and evidence about the Complainant's prior sexual behavior are offered to prove that someone other than the Respondent committed the conduct alleged by the Complainant, or if the questions and evidence concern specific incidents of the Complainant's prior sexual behavior with respect to the Respondent and are offered to prove consent.

18. Referral for Hearing

Provided that the complaint is not resolved through Informal Resolution, once the final investigation report is shared with the parties, the Title IX Coordinator will refer the matter for a hearing.

The hearing cannot be held less than ten (10) business days from the conclusion of the investigation – when the final investigation report is transmitted to the parties and the Decision-maker – unless all parties <u>and</u> the Decision-maker agree to an expedited timeline.

The Title IX Coordinator will select an appropriate Decision-maker from the Pool depending on whether the Respondent is an employee or a student, and provide a copy of the investigation report. Allegations involving student-employees in the context of their employment will be directed to the appropriate Decision-maker depending the context and nature of the alleged misconduct.

19. Hearing Decision-maker Composition

The College will designate a three-member panel from the Pool, at the discretion of the Title IX Coordinator. The single Decision-maker will also Chair the hearing. With a panel, one of the three members will be appointed as Chair by the Title IX Coordinator.

The Decision-maker(s) will not have had any previous involvement with the investigation. The Title IX Coordinator may elect to have an alternate from the Pool sit in throughout the hearing process in the event that a substitute is needed for any reason.

Those who have served as Investigators will be witnesses in the hearing and therefore may not serve as Decision-makers. Those who are serving as Advisors for any party may not serve as Decision-makers in that matter.

The Title IX Coordinator may not serve as a Decision-maker or Chair in the matter but may serve as an administrative facilitator of the hearing if their previous role(s) in the matter do not create a conflict of interest. Otherwise, a designee may fulfill this facilitator role. The hearing will convene at a time and venue determined by the Chair or designee.

20. Evidentiary Considerations in the Hearing

Any evidence that the Decision-maker(s) determine(s) is relevant and credible may be considered. The hearing does not consider: 1) incidents not directly related to the possible violation, unless they evidence a pattern; 2) questions and evidence about the Complainant's sexual predisposition; or 3) questions and evidence about the Complainant's prior sexual behavior, unless such questions and evidence about the Complainant's prior sexual behavior are offered to prove that someone other than the Respondent committed the conduct alleged by the Complainant, or if the questions and evidence concern specific incidents of the Complainant's prior sexual behavior with respect to the Respondent and are offered to prove consent.

Previous disciplinary action of any kind involving the Respondent may be considered in determining an appropriate sanction upon a determination of responsibility, assuming the College uses a progressive discipline system. This information is only considered at the sanction stage of the process and is not shared until then.

The parties may each submit a written impact statement prior to the hearing for the consideration of the Decision-maker(s) at the sanction stage of the process when a determination of responsibility is reached.

After post-hearing deliberation, the Decision-maker(s) render(s) a determination based on the preponderance of the evidence; whether it is more likely than not that the Respondent violated the Policy as alleged.

21. Notice of Hearing

No less than ten (10) business days prior to the hearing, the Title IX Coordinator or the Chair will send notice of the hearing to the parties. Once mailed, emailed, and/or received in-person, notice will be presumptively delivered.

The notice will contain:

- A description of the alleged violation(s), a list of all policies allegedly violated, a description of the applicable hearing procedures, and a statement of the potential sanctions/responsive actions that could result.
- The time, date, and location of the hearing.
  Description of any technology that will used to facilitate the hearing.
- Information about the option for the live hearing to occur with the parties located in separate rooms using technology that enables the Decision-maker(s) and parties to see and hear a party or witness answering questions. Such a request must be raised with the Title IX Coordinator at least five (5) business days prior to the hearing.
- A list of all those who will attend the hearing, along with an invitation to object to any Decision-maker(s) on the basis of demonstrated bias or conflict of interest. This must be raised with the Title IX Coordinator at least three (3) business days prior to the hearing.
- Information on how the hearing will be recorded and on access to the recording for the parties after the hearing.
- A statement that if any party or witness does not appear at the scheduled hearing, the hearing may be held in their absence, and the party's or witness's testimony and any statements given prior to the hearing will not be considered by the Decision-maker(s). For compelling reasons, the Chair may reschedule the hearing.
- Notification that the parties may have the assistance of an Advisor of their choosing at the hearing and will be required to have one present for any questions they may desire to ask. The party must notify the Title IX Coordinator if they do not have an Advisor, and the College will appoint one. Each party must have an Advisor present. There are no exceptions.
- A copy of all the materials provided to the Decision-maker(s) about the matter, unless they have been provided already.
- An invitation to each party to submit to the Chair an impact statement pre-hearing that the Decision-maker(s) will review during any sanction determination.
- An invitation to contact the Title IX Coordinator to arrange any disability accommodations, language assistance, and/or interpretation services that may be needed at the hearing, at least seven (7) business days prior to the hearing.
- Notification that parties cannot bring mobile phones/devices into the hearing.

Hearings for possible violations that occur near or after the end of an academic term (assuming the Respondent is still subject to this Policy) and are unable to be resolved prior to the end of term will typically be held immediately after the end of the term or during the summer, as needed, to meet the resolution timeline followed by the College and remain within the 60-90 business day goal for resolution.

In these cases, if the Respondent is a graduating student, a hold may be placed on graduation and/or official transcripts until the matter is fully resolved (including any appeal). A student facing charges under this Policy is not in good standing to graduate.

22. Alternative Hearing Participation Options

If a party or parties prefer not to attend or cannot attend the hearing in person, the party should request alternative arrangements from the Title IX Coordinator or the Chair at least five (5) business days prior to the hearing.

The Title IX Coordinator or the Chair can arrange to use technology to allow remote testimony without compromising the fairness of the hearing. Remote options may also be needed for witnesses who cannot appear in person. Any witness who cannot attend in person should let the Title IX Coordinator or the Chair know at least five (5) business days prior to the hearing so that appropriate arrangements can be made.

23. Pre-Hearing Preparation

After any necessary consultation with the parties, the Chair will provide the names of persons who will be participating in the hearing, all pertinent documentary evidence, and the final investigation report to the parties at least seven (7) business days prior to the hearing.

Any witness scheduled to participate in the hearing must have been first interviewed by the Investigator(s) or have proffered a written statement or answered written questions, unless all parties and the Chair assent to the witness's participation in the hearing. The same holds for any evidence that is first offered at the hearing. If the parties and Chair do not assent to the admission of evidence newly offered at the hearing, the Chair may delay the hearing and/or instruct that the investigation needs to be re-opened to consider that evidence.

The parties will be given a list of the names of the Decision-maker(s) at least five (5) business days in advance of the hearing. All objections to any Decision-maker must be raised in writing, detailing the rationale for the objection, and must be submitted to the Title IX Coordinator as soon as possible and no later than two days prior to the hearing. Decision-makers will only be removed if the Title IX Coordinator concludes that their bias or conflict of interest precludes an impartial hearing of the allegation(s).

The Title IX Coordinator will give the Decision-maker(s) a list of the names of all parties, witnesses, and Advisors at least three (3) business days in advance of the hearing. Any Decision-maker who cannot make an objective determination must recuse themselves from the proceedings when notified of the identity of the parties, witnesses, and Advisors in advance of the hearing. If a Decision-maker is unsure of whether a bias or conflict of interest exists, they must raise the concern to the Title IX Coordinator as soon as possible.

During the ten (10) business day period prior to the hearing, the parties have the opportunity for continued review and comment on the final investigation report and available evidence. That review and comment can be shared with the Chair at a pre-hearing meeting or at the hearing and will be exchanged between each party by the Chair.

24. Pre-Hearing Meetings

The Chair may convene a pre-hearing meeting(s) with the parties and/or their Advisors and invite them to submit the questions or topics they (the parties and/or their Advisors) wish to ask or discuss at the hearing, so that the Chair can rule on their relevance ahead of time to avoid any improper evidentiary introduction in the hearing to provide recommendations for more appropriate phrasing.

However, this advance review opportunity does not preclude the Advisors from asking a question for the first time at the hearing or from asking for a reconsideration on a pre-hearing ruling by the Chair based on any new information or testimony offered at the hearing. The Chair must document and share with each party their rationale for any exclusion or inclusion at a pre-hearing meeting.

The Chair, only with full agreement of the parties, may decide in advance of the hearing that certain witnesses do not need to be present if their testimony can be adequately summarized by the Investigator(s) in the investigation report or during the hearing.

At each pre-hearing meeting with a party and their Advisor, the Chair will consider arguments that evidence identified in the final investigation report as relevant is, in fact, not relevant. Similarly, evidence identified as directly related but not relevant by the Investigator(s) may be argued to be relevant. The Chair may rule on these arguments pre-hearing and will exchange those rulings between the parties prior to the hearing to assist in preparation for the hearing. The Chair may consult with legal counsel and/or the Title IX Coordinator or ask either or both to attend pre-hearing meetings.

The pre-hearing meeting(s) will not be recorded. The pre-hearing meetings may be conducted as separate meetings with each party/advisor, with all parties/advisors present at the same time, remotely, or as a paper-only exchange. The Chair will work with the parties to establish the format.

25. Hearing Procedures

At the hearing, the Decision-maker(s) has the authority to hear and make determinations on all allegations of discrimination, harassment, and/or retaliation and may also hear and make determinations on any additional alleged policy violations that have occurred in concert with the discrimination, harassment, and/or retaliation, even though those collateral allegations may not specifically fall within the policy on Equal Opportunity, Harassment, and Nondiscrimination.

Participants at the hearing will include the Chair, any additional panelists, the hearing facilitator, the Investigator(s) who conducted the investigation, and the parties (or three (3) organizational representatives when an organization is the Respondent). Advisors to the parties, any called witnesses, the Title IX Coordinator and anyone providing authorized accommodations, interpretation, and/or assistive services.

The Chair will answer all questions of procedure. Anyone appearing at the hearing to provide information will respond to

questions on their own behalf.

The Chair will allow witnesses who have relevant information to appear at a portion of the hearing in order to respond to specific questions from the Decision-maker(s) and the parties and the witnesses will then be excused.

26. Joint Hearings
In hearings involving more than one Respondent or in which two (2) or more Complainants have accused the same individual of substantially similar conduct, the default procedure will be to hear the allegations jointly.

However, the Title IX Coordinator may permit the investigation and/or hearings pertinent to each Respondent to be conducted separately if there is a compelling reason to do so. In joint hearings, separate determinations of responsibility will be made for each Respondent with respect to each alleged policy violation.

27. The Order of the Hearing – Introductions and Explanation of Procedure
The Chair explains the procedures and introduces the participants. This may include a final opportunity for challenge or recusal of the Decision-maker(s) on the basis of bias or conflict of interest. The Chair will rule on any such challenge unless the Chair is the individual who is the subject of the challenge, in which case the Title IX Coordinator will review and decide the challenge.

The Chair and/or hearing facilitator then conducts the hearing according to the hearing script. At the hearing, recording, witness logistics, party logistics, curation of documents, separation of the parties, and other administrative elements of the hearing process are managed by a non-voting hearing facilitator/case manager appointed by the Title IX Coordinator. The hearing facilitator may attend to: logistics of rooms for various parties/witnesses as they wait; flow of parties/witnesses in and out of the hearing space; ensuring recording and/or virtual conferencing technology is working as intended; copying and distributing materials to participants, as appropriate, etc.

28. Investigator Presents the Final Investigation Report
The Investigator(s) will then present a summary of the final investigation report, including items that are contested and those that are not, and will be subject to questioning by the Decision-maker(s) and the parties (through their Advisors). The Investigator(s) will be present during the entire hearing process, but not during deliberations.

Neither the parties nor the Decision-maker(s) should ask the Investigator(s) their opinions on credibility, recommended findings, or determinations, and the Investigators, Advisors, and parties will refrain from discussion of or questions for Investigators about these assessments. If such information is introduced, the Chair will direct that it be disregarded.

29. Testimony and Questioning
Once the Investigator(s) present(s) the report and are questioned, the parties and witnesses may provide relevant information in turn, beginning with the Complainant, and then in the order determined by the Chair. The hearing will facilitate questioning parties and witnesses will submit to questioning by the Decision-maker(s) and then by the parties through their Advisors.

All questions are subject to a relevance determination by the Chair. The Advisor, who will remain seated during questioning, will pose the proposed question orally, electronically, or in writing (orally is the default, but other means of submission may be permitted by the Chair upon request if agreed to by all parties and the Chair), the proceeding will pause to allow the Chair to consider the question, (and state it if it has not already been stated aloud) and the Chair will determine whether the question will be permitted, disallowed, or rephrased.

The Chair may invite explanations or persuasive statements explore arguments regarding relevance with the Advisors, if the Chair so chooses. The Chair will then state their decision on the question for the record and advise the party/witness to whom the question was directed, accordingly. The Chair will explain any decision to exclude a question as not relevant, or to reframe it for relevance.

The Chair will limit or disallow questions on the basis that they are irrelevant, unduly repetitious (and thus irrelevant), or abusive. The Chair has final say on all questions and determinations of relevance. The Chair may consult with legal counsel on any questions of admissibility. The Chair may ask Advisors to frame why a question is or is not relevant from their perspective but will not entertain argument from the Advisors on relevance once the Chair has ruled on a question.

If the parties raise an issue of bias or conflict of interest of an Investigator or Decision-maker at the hearing, the Chair may elect to address those issues, consult with legal counsel, and/or refer them to the Title IX Coordinator, and/or preserve them for appeal. If bias is not in issue at the hearing, the Chair should not permit irrelevant questions that probe for bias.

CAMPUS POLICIES & PROCEDURES

30. Refusal to Submit to Questioning; Inferences
Cross-examination is an all or nothing proposition, meaning that if any relevant question is refused, no statements of that party or witness are admissible. Only if a party or witness is willing to submit to cross-examination, and answers all questions, will their statements prior to or at the hearing be fully admissible. If a party or witness chooses not to submit to cross-examination at the hearing, either because they do not attend the meeting, or they attend but refuse to participate in questioning, then the Decision-maker(s) may not rely on any prior statement made by that party or witness at the hearing (including those contained in the investigation report) in the ultimate determination of responsibility. The Decision-maker(s) must disregard all such statements. Evidence provided that is something other than a statement by the party or witness may be considered.

Whether a party or witness does or does not answer questions from the Decision-maker, their statements will be admissible as long as they are willing to submit to cross-examination questions, even if they are not asked such questions. The Decision-maker(s) may not draw any inference solely from a party's or witness's absence from the hearing or refusal to answer cross-examination or other questions.

If collateral charges of policy violations other than sexual harassment are considered at the same hearing, the Decision-maker(s) may consider all evidence it deems relevant, may rely on any relevant statement as long as the opportunity for questioning is afforded to all parties through their Advisors, and may draw reasonable inferences from any decision by any party or witness not to participate or respond to questions. If a party's Advisor of choice refuses to comply with the Recipient's established rules of decorum for the hearing, the Recipient may require the party to use a different Advisor. If a recipient-provided Advisor refuses to comply with the rules of decorum, the Recipient may provide that party with a different Advisor to conduct questioning on behalf of that party.

An Advisor may not be called as a witness at a hearing to testify to what their advisee has told them during their role as an Advisor unless the party being advised consents to that information being shared. It is otherwise considered off-limits, and an Advisor who is an institutional employee is temporary alleviated from mandated reporter responsibilities related to their interaction with their advisee during the resolution process.

31. Recording Hearings
Hearings (but not deliberations) are recorded by the College for purposes of review in the event of an appeal. The parties may not record the proceedings and no other unauthorized recordings are permitted.

The Decision-maker(s), the parties, their Advisors, and appropriate administrators of the College will be permitted to listen to the recording or review a transcript of the recording, in a controlled environment determined by the Title IX Coordinator, upon request. No person will be given or be allowed to make a copy of the recording without permission of the Title IX Coordinator.

32. Deliberation, Decision-making, and Standard of Proof
The Decision-maker(s) will deliberate in closed session to determine whether the Respondent is responsible or not responsible for the policy violation(s) in question. If a panel is used, a simple majority vote is required to determine the finding. The preponderance of the evidence standard of proof is used. The hearing facilitator may be invited to attend the deliberation by the Chair, but is there only to facilitate procedurally, not to address the substance of the allegations.

When there is a finding of responsibility on one or more of the allegations, the Decision-maker(s) may then consider the previously submitted party impact statements in determining appropriate sanction(s).
The Chair will ensure that each of the parties has an opportunity to review any impact statement submitted by the other party(ies). The Decision-maker(s) may – at their discretion – consider the statements, but they are not binding.
The Decision-maker(s) will review the statements and any pertinent conduct history provided by the Office of Student Conduct will recommend the appropriate sanction(s) in consultation with other appropriate administrators, as required.

The Chair will then prepare a written deliberation statement and deliver it to the Title IX Coordinator, detailing the determination, rationale, the evidence used in support of its determination, the evidence not relied upon in its determination, credibility assessments, and any sanctions or recommendations.

This report is typically three (3) to five (5) pages in length and must be submitted to the Title IX Coordinator within three (3) business days of the end of deliberations, unless the Title IX Coordinator grants an extension. If an extension is granted, the Title IX Coordinator will notify the parties.

33. Notice of Outcome
Using the deliberation statement, the Title IX Coordinator will work with the Chair to prepare a Notice of Outcome. The Notice of Outcome will then be reviewed by legal counsel, as appropriate. The Title IX Coordinator will then share the outcome letter, including the final determination, rationale, and any applicable sanction(s) with the parties and their Advisors within seven (7) business days of receiving the Decision-maker(s)' deliberation statement.

The Notice of Outcome will then be shared with the parties simultaneously. Notification will be made in writing and may be delivered by one or more of the following methods: in person, mailed to the local or permanent address of the parties as indicated in official College records, or emailed to the parties' college-issued email or otherwise approved account. Once mailed, emailed, and/or received in-person, notice will be presumptively delivered.

The Notice of Outcome will articulate the specific policy(ies) reported to have been violated, including the relevant policy section, and will contain a description of the procedural steps taken by the College from the receipt of the misconduct report to the determination, including any and all notifications to the parties, interviews with parties and witnesses, site visits, methods used to obtain evidence, and hearings held.

The Notice of Outcome will specify the finding on each alleged policy violation; the findings of fact that support the determination; conclusions regarding the application of the relevant policy to the facts at issue; a statement of, and rationale for, the result of each allegation to the extent the College is permitted to share such information under state or federal law; any sanctions issued which the College is permitted to share according to state or federal law; and whether remedies will be provided to the Complainant designed to ensure access to the College's educational or employment program or activity.

The Notice of Outcome will also include information on when the results are considered by the College to be final, any changes that occur prior to finalization, and the relevant procedures and bases for any available appeal options.

34. Statement of the Rights of the Parties
View Appendix C for the full statement.

35. Sanctions
Factors considered when determining a sanction/responsive action may include, but are not limited to:
- The nature, severity of, and circumstances surrounding the violation(s)
- The Respondent's disciplinary history
- Previous allegations or allegations involving similar conduct
- The need for sanctions/responsive actions to bring an end to the discrimination, harassment, and/or retaliation
- The need for sanctions/responsive actions to prevent the future recurrence of discrimination, harassment, and/or retaliation
- The need to remedy the effects of the discrimination, harassment, and/or retaliation on the Complainant and the community
- The impact on the parties
- Any other information deemed relevant by the Decision-maker(s)

The sanctions will be implemented as soon as is feasible, either upon the outcome of any appeal or the expiration of the window to appeal without an appeal being requested.

The sanctions described in this Policy are not exclusive of, and may be in addition to, other actions taken or sanctions imposed by external authorities.

a. Student Sanctions: Examples
The following are sanctions that may be imposed upon students or organizations singly or in combination:

- *Warning:* A formal statement that the conduct was unacceptable and a warning that further violation of any Wake Technical Community College policy, procedure, or directive will result in more severe sanctions/responsive actions.
- *Required Counseling:* A mandate to meet with and engage in either college-sponsored or external counseling to better comprehend the misconduct and its effects.
- *Probation:* A written reprimand for violation of institutional policy, providing for more severe disciplinary sanctions in the event that the student or organization is found in violation of any institutional policy, procedure, or directive within a specified period of time. Terms of the probation will be articulated and may include denial of specified social privileges, exclusion from co-curricular activities, exclusion from designated areas of campus, no-contact orders, and/or other measures deemed appropriate.
- *Suspension:* Termination of student status for a definite period of time not to exceed two years and/or until specific criteria are met. Students who return from suspension are automatically placed on probation through the remainder of their tenure as a student at Wake Technical Community College.
- *Expulsion:* Permanent termination of student status and revocation of rights to be on campus for any reason or to attend College-sponsored events. This sanction will be noted permanently as a Conduct Expulsion on the student's official transcript, subject to any applicable expungement policies.
- *Withholding Diploma*: The College may withhold a student's diploma for a specified period of time and/or deny a student participation in commencement activities if the student has an allegation pending or as a sanction if the student is found responsible for an alleged violation.

- *Revocation of Degree:* The College reserves the right to revoke a degree previously awarded from the College for fraud, misrepresentation, and/or other violation of the College's policies, procedures, or directives in obtaining the degree, or for other serious violations committed by a student prior to graduation.
- *Organizational Sanctions*: Deactivation, loss of recognition, loss of some or all privileges (including College's registration) for a specified period of time.
- *Other Actions:* In addition to or in place of the above sanctions, the College may assign any other sanctions as deemed appropriate.

b. Employee Sanctions/Responsive/Corrective Actions
Responsive actions for an employee who has engaged in sex/gender-based harassment, discrimination, and/or retaliation include:
- *Warning – Verbal or Written*
- *Performance Improvement Plan/Management Process*
- *Enhanced supervision, observation, or review*
- *Required Counseling*
- *Required Training or Education*
- *Probation*
- *Denial of Pay Increase/Pay Grade*
- *Loss of Oversight or Supervisory Responsibility*
- *Demotion*
- *Transfer*
- *Reassignment*
- *Delay of faculty rank progression*
- *Assignment to supervisor*
- *Restriction of stipends, research, and/or professional development resources*
- *Suspension with pay*
- *Suspension without pay*
- *Termination*
- *Other Actions:* In addition to or in place of the above sanctions/responsive actions, the College may assign any other responsive action as deemed appropriate.

36. Withdrawal or Resignation While Charges Pending
a. Students: Should a Respondent decide not to participate in the resolution process, the process proceeds absent their participation to a reasonable resolution. Should a student Respondent permanently withdraw from the College, the resolution process ends with a dismissal, as the College no longer has disciplinary jurisdiction over the withdrawn student.

However, the College will continue to address and remedy any systemic issues, variables that may have contributed to the alleged violation(s), and any ongoing effects of the alleged harassment, discrimination, and/or retaliation. The student who withdraws or leaves while the process is pending may not return to the College in any capacity. Admissions and Human Resources will be notified, accordingly. Such exclusion applies to all campuses of the College.

If the student Respondent only withdraws or takes a leave for a specified period of time (e.g., one semester or term), the resolution process may continue remotely and that student is not permitted to return to College unless and until all sanctions, if any, have been satisfied.

During the resolution process, the College may put a hold on a responding student's transcript or place a notation on a responding student's transcript or dean's disciplinary certification that a disciplinary matter is pending.

b. Employees: Should an employee Respondent resign with unresolved allegations pending, the resolution process ends with dismissal, as the College no longer has disciplinary jurisdiction over the resigned employee.

However, the College will continue to address and remedy any systemic issues, variables that contributed to the alleged violation(s), and any ongoing effects of the alleged harassment, discrimination and/or retaliation.

The employee who resigns with unresolved allegations pending is not eligible for admissions or rehire with the College, and the records retained by the Title IX Coordinator will reflect that status.

All College responses to future inquiries regarding employment references for that individual will include that the former employee resigned during a pending disciplinary matter.

37. Appeals
Any party may file a request for appeal ("Request for Appeal"), but it must be submitted in writing to the Title IX Coordinator within five (5) business days of the delivery of the Notice of Outcome.

A three-member appeal panel chosen from the Pool will be designated by the Title IX. No appeal panelists will have been involved in the process previously, including in any dismissal appeal that may have been heard earlier in the process. A voting Chair of the Appeal panel will be designated.

The Request for Appeal will be forwarded to the Appeal Chair or designee for consideration to determine if the request meets the grounds for appeal (a Review for Standing).

This review is not a review of the merits of the appeal, but solely a determination as to whether the request meets the grounds and is timely filed.

a. Grounds for Appeal

Appeals are limited to the following grounds:

(A) Procedural irregularity that affected the outcome of the matter;

(B) New evidence that was not reasonably available at the time the determination regarding responsibility or dismissal was made, that could affect the outcome of the matter; and

(C) The Title IX Coordinator, Investigator(s), or Decision-maker(s) had a conflict of interest or bias for or against Complainants or Respondents generally or the specific Complainant or Respondent that affected the outcome of the matter.

If any of the grounds in the Request for Appeal do not meet the grounds in this Policy, that request will be denied by the Appeal Chair, and the parties and their Advisors will be notified in writing of the denial and the rationale.

If any of the grounds in the Request for Appeal meet the grounds in this Policy, then the Appeal Chair will notify the other party(ies) and their Advisors, the Title IX Coordinator, and, when appropriate, the Investigators and/or the original Decision-maker(s).

The other party(ies) and their Advisors, the Title IX Coordinator, and, when appropriate, the Investigators and/or the original Decision-maker(s) will be mailed, emailed, and/or provided a hard copy of the request for an appeal with the approved grounds and then be given five (5) business days to submit a response to the portion of the appeal that was approved and involves them. All responses, if any, will be forwarded by the Chair to all parties for review and comment.

The non-appealing party (if any) may also choose to raise a new ground for appeal at this time. If so, that will be reviewed to determine if it meets the grounds on this Policy by the Appeal Chair and either denied or approved. If approved, it will be forwarded to the party who initially requested an appeal, the Investigator(s) and/or original Decision-maker(s), as necessary, who will submit their responses, if any, in five (5) business days, which will be circulated for review and comment by all parties. If not approved, the parties will be notified accordingly, in writing.

Neither party may submit any new requests for appeal after this time period. The Appeal Chair will collect any additional information needed and all documentation regarding the approved grounds for appeal and the subsequent responses will be shared with the Appeal Panel/Chair, and the Panel will render a decision in no more than five (5) business days, barring exigent circumstances. All decisions are by majority vote and apply the preponderance of the evidence OR the clear and convincing evidence standard.

A Notice of Appeal Outcome will be sent to all parties simultaneously including the decision on each approved ground and rationale for each decision. The Notice of Appeal Outcome will specify the finding on each ground for appeal, any specific instructions for remand or reconsideration, any sanctions that may result which the College is permitted to share according to state or federal law, and the rationale supporting the essential findings to the extent the College is permitted to share under state or federal law.

Notification will be made in writing and may be delivered by one or more of the following methods: in person, mailed to the local or permanent address of the parties as indicated in official institutional records, or emailed to the parties' college-issued email or otherwise approved account. Once mailed, emailed and/or received in-person, notice will be presumptively delivered.

b. Sanctions Status During the Appeal

Any sanctions imposed as a result of the hearing are stayed during the appeal process. Supportive measures may be reinstated, subject to the same supportive measure procedures above.

If any of the sanctions are to be implemented immediately post-hearing, but pre-appeal, then emergency removal procedures (detailed above) for show cause meeting on the justification for doing so must be permitted within 48 hours of implementation.

The College may still place holds on official transcripts, diplomas, graduations, and course registration pending the outcome of an appeal when the original sanctions included separation.

c. Appeal Considerations
- Appeals are not intended to provide for a full re-hearing (de novo) of the allegation(s). In most cases, appeals are confined to a review of the written documentation or record of the original hearing and pertinent documentation regarding the specific grounds for appeal.
- Decisions on appeal are to be deferential to the original decision, making changes to the finding only when there is clear error and to the sanction(s)/responsive action(s) only if there is a compelling justification to do so.
- An appeal is not an opportunity for Appeal Decision-makers to substitute their judgment for that of the original Decision-maker(s) merely because they disagree with the finding and/or sanction(s).
- The Appeal Chair/Decision-maker may consult with the Title IX Coordinator and/or legal counsel on questions of procedure or rationale, for clarification, if needed. Documentation of all such consultation will be maintained.
- Appeals granted based on new evidence should normally be remanded (or partially remanded) to the original Investigator(s) and/or Decision-maker(s) for reconsideration. Other appeals may be remanded at the discretion of the Title IX Coordinator or, in limited circumstances, decided on appeal.
- Once an appeal is decided, the outcome is final: further appeals are not permitted, even if a decision or sanction is changed on remand (except in the case of a new hearing). When appeals result in no change to the finding or sanction, that decision is final. When an appeal results in a new finding or sanction, that finding or sanction can be appealed one final time on the grounds listed above and in accordance with these procedures.
- In rare cases where an error cannot be cured by the original Decision-maker(s) (as in cases of bias), the appeal Chair/Panel may order a new investigation with new investigators and/or a new hearing with a new Decision-maker(s).
- The results of a remand to a Decision-maker(s) cannot be appealed. The results of a new hearing can be appealed. The results of a new hearing can be appealed, once, on any of the three available appeal grounds.
- In cases in which the appeal results in reinstatement to the College or resumption of privileges, all reasonable attempts will be made to restore the Respondent to their prior status, recognizing that some opportunities lost may be irreparable in the short term.

38. Long-Term Remedies/Other Actions
Following the conclusion of the resolution process, and in addition to any sanctions implemented, the Title IX Coordinator may implement additional long-term remedies or actions with respect to the parties and/or the campus community that are intended to stop the harassment, discrimination, and/or retaliation, remedy the effects, and prevent reoccurrence.

These remedies/actions may include, but are not limited to:

- Referral to counseling and health services
- Referral to the Employee Assistance Program
- Education to the individual and/or the community
- Permanent alteration of housing assignments
- Permanent alteration of work arrangements for employees
- Provision of campus safety escorts
- Climate surveys
- Policy modification and/or training
- Provision of transportation accommodations
- Implementation of long-term contact limitations between the parties
- Implementation of adjustments to academic deadlines, course schedules, etc.

At the discretion of the Title IX Coordinator, certain long-term support or measures may also be provided to the parties even if no policy violation is found.

When no policy violation is found, the Title IX Coordinator will address any remedies owed by the College to the Respondent to ensure no effective denial of educational access.

The College will maintain the confidentiality of any long-term remedies/actions/measures, provided confidentiality does not impair the College's ability to provide these services.

39. Failure to Comply with Sanctions and/or Interim and Long-term Remedies and/or Responsive Actions
All Respondents are expected to comply with the assigned sanctions, responsive actions, and/or corrective actions within the timeframe specified by the final Decision-maker(s) (including the Appeal Chair/Panel).

Failure to abide by the sanction(s)/action(s) imposed by the date specified, whether by refusal, neglect, or any other reason, may result in additional sanction(s)/action(s), including suspension, expulsion, and/or termination from the College and may be noted on a student's official transcript.

A suspension will only be lifted when compliance is achieved to the satisfaction of the Title IX Coordinator.

40. Recordkeeping
The College will maintain for a period of at least seven years records of:

1. Each sexual harassment investigation including any determination regarding responsibility and any audio or audiovisual recording or transcript required under federal regulation;
2. Any disciplinary sanctions imposed on the Respondent;
3. Any remedies provided to the Complainant designed to restore or preserve equal access to the College's education program or activity;
4. Any appeal and the result therefrom;
5. Any Informal Resolution and the result therefrom;
6. All materials used to train Title IX Coordinators, Investigators, Decision-makers, and any person who facilitates an Informal Resolution process. The College will make these training materials publicly available on the College's website; and
7. Any actions, including any supportive measures, taken in response to a report or formal complaint of sexual harassment, including:
    a. The basis for all conclusions that the response was not deliberately indifferent;
    b. Any measures designed to restore or preserve equal access to the College's education program or activity; and
    c. If no supportive measures were provided to the Complainant, document the reasons why such a response was not clearly unreasonable in light of the known circumstances.

The College will also maintain any and all records in accordance with state and federal laws.

41. Disabilities Accommodations in the Resolution Process
The College is committed to providing reasonable accommodations and support to qualified students, employees, or others with disabilities to ensure equal access to the College's resolution process.

Anyone needing such accommodations or support should contact the Director of Disability Support Services who will review the request and, in consultation with the person requesting the accommodation and the Title IX Coordinator, determine which accommodations are appropriate and necessary for full participation in the process.

42. Revision of this Policy and Procedures
This Policy and procedures supersede any previous policy(ies) addressing sex discrimination, sexual harassment, sexual misconduct, and/or retaliation for incidents occurring on or after August 14, 2020, under Title IX and will be reviewed and updated annually by the Title IX Coordinator. The College reserves the right to make changes to this document as necessary, and once those changes are posted online, they are in effect.

During the resolution process, the Title IX Coordinator may make minor modifications to procedures that do not materially jeopardize the fairness owed to any party, such as to accommodate summer schedules. The Title IX Coordinator may also vary procedures materially with notice (on the institutional website, with the appropriate effective date identified) upon determining that changes to law or regulation require policy or procedural alterations not reflected in this Policy and procedures.

If government laws or regulations change – or court decisions alter – the requirements in a way that impacts this document, this document will be construed to comply with the most recent government laws or regulations or court holdings.
This document does not create legally enforceable protections beyond the protection of the protections of the background state and federal laws which frame such policies and codes, generally.

This Policy and procedures are effective August 14, 2020.

Additional Campus Resources

Student Advocacy and Support
Wake Tech assist students with easier access to a wide range of resources and benefits.
919-866-5066

Ombuds Office
An impartial resource for students, faculty, staff, and administrators to assist in finding options for addressing concerns, resolving conflicts, and handling a variety of institutional issues as they arise, in a confidential and informal manner.
919-866-5479

CAMPUS POLICIES & PROCEDURES

Additional Community Resources

Alliance Behavioral Health
Provider network for mental health, developmental disability, and substance abuse services.

Provider Directory

Assessment and Crisis Centers

InterAct
A non-profit United Way Agency that provides services to survivors of domestic violence and rape/sexual assault. Services include short-term counseling, court assistance, support groups, information and referrals.
919-828-7501

Ncbon-Approved Sexual Assault Nurse Examiner (Sane) Programs
These N.C. based programs offer support from sexual assault nurse examiners (SANE) trained in the collection of forensic evidence and can check for injuries and exposure to sexually transmitted diseases.

Solace Center
A resource located at InterAct of Wake County at 1012 Oberlin Road, is a designated area for the forensic examination and treatment of survivors of rape/sexual assault.
919-828-3067

Raleigh Police Department
919-996-3335

PREGNANT AND PARENTING POLICY

GLOSSARY (as applicable to the Title IX Policy)

Caretaking	Caring for and providing for the needs of a child.
Medical Necessity	Determination made by a health care provider (of the student's choosing) that a certain course of action is in the patient's best health interests.
Parenting	The raising of a child by the child's parents in the reasonably immediate postpartum period.
Pregnancy and Pregnancy-Related Conditions	Include (but are not limited to) pregnancy, childbirth, false pregnancy, termination of pregnancy, conditions arising in connection with pregnancy, and recovery from any of these conditions.
Pregnancy Discrimination	Treating an individual affected by pregnancy or a pregnancy-related condition less favorably than similar individuals not so affected and includes a failure to provide legally mandated leave or accommodations.
Pregnant Student/Birth-Parent	The student who is or was pregnant. This Policy and its pregnancy-related protections apply to all pregnant persons, regardless of gender identity or expression.
Pregnant Student/Birth-Parent	(For the purposes of this Policy) refers to changes in the academic environment or typical operations that enables pregnant students or students with pregnancy-related conditions to continue to pursue their studies and enjoy the equal benefits of the College.
Reasonable Accommodations	(For the purposes of this Policy) refers to changes in the academic environment or typical operations that enables pregnant students or students with pregnancy-related

	conditions to continue to pursue their studies and enjoy the equal benefits of the College.

COMPLIANCE
Reporting
Any member of the Wake Technical Community College community may report a violation of this Policy to any supervisor, manager, or to the Title IX Coordinator. All mandated reporters are responsible for promptly forwarding such reports to the Title IX office.

Administrative Contact Information
The Title IX Coordinator is responsible for overseeing complaints of discrimination involving pregnant and parenting students. Additionally, the Title IX Team is tasked with supporting these duties. Contact information is available in section 6 for the Title IX Coordinator and Title IX Team.

Complaints may be filed online, using the available form.

POLICY STATEMENT
 Wake Technical Community College is committed to creating and maintaining a community where all individuals enjoy freedom from discrimination, including discrimination on the basis of sex, as mandated by Title IX of the Education Amendments of 1972 (Title IX). Sex discrimination, which can include discrimination based on pregnancy, marital status, or parental status, is prohibited and illegal in admissions, educational programs and activities, hiring, leave policies, employment policies, and health insurance coverage.

The College hereby establishes a policy and associated procedures for ensuring the protection and equal treatment of pregnant individuals, persons with pregnancy-related conditions, and new parents. Under the Department of Education's (DOE) Title IX regulations, an institution that receives federal funding "shall not discriminate against any student, or exclude any student from its education program or activity, including any class or extracurricular activity, on the basis of such student's pregnancy, childbirth, false pregnancy, termination of pregnancy, or recovery therefrom."

According to the DOE, appropriate treatment of a pregnant student includes granting the student leave "for so long a period of time as is deemed medically necessary by the student's physician," and then effectively reinstating the student to the same status as was held when the leave began. This generally means that pregnant students should be treated by the College the same way as someone who has a temporary disability, and will be given an opportunity to make up missed work wherever possible. Extended deadlines, make-up assignments (e.g., papers, quizzes, tests, and presentations), tutoring, independent study, online course completion options, and incomplete grades that can be completed at a later date, should all be employed, in addition to any other ergonomic and assistive supports typically provided by Disability Support Services.

To the extent possible, the College will take reasonable steps to ensure that pregnant students who take a leave of absence or medical leave return to the same position of academic progress that they were in when they took leave, including access to the same course catalog that was in place when the leave began. The Title IX Coordinator has the authority to determine that such accommodations are necessary and appropriate, and to inform faculty members of the need to adjust academic parameters accordingly.

As with disability accommodations, information about pregnant students' requests for accommodations will be shared with faculty and staff only to the extent necessary to provide the reasonable accommodation. Faculty and staff will regard all information associated with such requests as private and will not disclose this information unless necessary. Administrative responsibility for these accommodations lies with the Title IX Coordinator, who will maintain all appropriate documentation related to accommodations.

In situations such as clinical rotations, performances, labs, and group work, the institution will work with the student to devise an alternative path to completion, if possible. In progressive curricular and/or cohort-model programs, medically necessary leaves are sufficient cause to permit the student to shift course order, substitute similar courses, or join a subsequent cohort when returning from leave.

Students are encouraged to work with their faculty members and the College's support systems to devise a plan for how to best address the conditions as pregnancy progresses, anticipate the need for leaves, minimize the academic impact of their absence, and get back on track as efficiently and comfortably as possible. The Title IX Coordinator will assist with plan development and implementation as needed.

SCOPE OF POLICY

This Policy applies to all aspects of the College's programs, including, but not limited to, admissions, educational programs and activities, extracurricular activities, hiring, leave policies, employment policies, and health insurance coverage.

Reasonable Accommodations of Students Affected by Pregnancy, Childbirth, or Related Conditions
   a. The College and its faculty, staff, and other employees will not require students to limit their studies as the result of pregnancy or pregnancy-related conditions.
   b. The benefits and services provided to students affected by pregnancy will be no less than those provided to students with temporary medical conditions.
   c. Students with pregnancy-related disabilities, like any student with a short-term or temporary disability, are entitled to reasonable accommodations so that they will not be disadvantaged in their courses of study or research, and may seek assistance from the Title IX office.
   d. No artificial deadlines or time limitations will be imposed on requests for accommodations, but the College is limited in its ability to impact or implement accommodations retroactively.
   e. Reasonable accommodations may include, but are not limited to:
      1. Providing accommodations requested by a pregnant student to protect the health and safety of the student and/or the pregnancy (such as allowing the student to maintain a safe distance from hazardous substances);
      2. Making modifications to the physical environment (such as accessible seating);
      3. Providing mobility support;
      4. Extending deadlines and/or allowing the student to make up tests or assignments missed for pregnancy-related absences;
      5. Offering remote learning options;
      6. Excusing medically necessary absences (this must be granted, irrespective of classroom attendance requirements set by a faculty member, department, or division);
      7. Implementing incomplete grades for classes that will be resumed at a future date; or
      8. Allowing breastfeeding students reasonable time and space to pump breast milk in a location that is private, clean, and reasonably accessible. Bathroom stalls do not satisfy this requirement.

Nothing in this Policy requires modification to the essential elements of any academic program. Pregnant students cannot be channeled into an alternative program or school against their wishes.

Modified Academic Responsibilities Policy for Parenting Students
   a. Students with child caretaking/parenting responsibilities who wish to remain engaged in their coursework while adjusting their academic responsibilities because of the birth or adoption of a child or placement of a foster child may request an academic modification period during the same semester the child entered the home. Extensions may be granted when additional time is required by medical necessity or extraordinary caretaking/parenting responsibilities.

   b. During the modification period, the student's academic requirements will be adjusted and deadlines postponed as appropriate, in collaboration among the Title IX office, the student's academic advisor, and the appropriate academic department(s).

   c. Students seeking a period of modified academic responsibilities may consult with their Academic Advisor or with the Title IX office to determine appropriate academic accommodations requests. The Title IX office will communicate all requests under this Policy to students' academic advisors and coordinate accommodation-related efforts with the advisors unless the students specifically requests that their advisors be excluded. Students are encouraged to work with their advisors and faculty members to reschedule course assignments, lab hours, examinations, or other requirements, and/or to reduce their overall course load, as appropriate, once authorization is received from the Title IX office. If, for any reason, caretaking/parenting students are not able to work with their advisors/faculty members to obtain appropriate modifications, students should alert the Title IX office as soon as possible, and the office will help facilitate needed accommodations and modifications.

   d. In timed degree, certification or credentialing programs, students who seek modifications upon the birth or placement of their child will be allowed an extension to prepare for and take preliminary and qualifying examinations, and an extension toward normative time to degree while in candidacy, to the extent those deadlines are controlled by the College. Extensions may be granted when additional time is required by medical necessity or extraordinary caretaking/parenting responsibilities.

   e. Students can request modified academic responsibilities under this Policy regardless of whether they elect to take a leave of absence.

   f. While receiving academic modifications, students will remain registered and retain benefits accordingly.

Student-Employee Leave
All student-employees will be entitled to the protections of the Family and Medical Leave Act. Pregnancy and related conditions will be treated as any other temporary disability for job purposes, including leave and benefits.

Retaliation and Harassment
Harassment of any member of the College community based on sex, gender identity, gender expression, pregnancy, or parental status is prohibited.

Faculty, staff, and other College employees are prohibited from interfering with students' right to a period of leave, seek reasonable accommodation, or otherwise exercise their rights under this Policy.

Faculty, staff, and other College employees are prohibited from retaliating against students for exercising the rights articulated by this Policy, including imposing or threatening to impose negative educational outcomes because students request leave or accommodation, file a complaint, or otherwise exercise their rights under this Policy.

Dissemination of the Policy and Training
A copy of this Policy will be made available to faculty, staff, and employees in annually required training and posted on the College's website. The College will alert all new students about this Policy and the location of this Policy as part of orientation. The Title IX office will make educational materials available to all members of the College community to promote compliance with this Policy and familiarity with its procedures.

Pregnancy and Parenting Students' Resources
Department of Education Resources

- The Pregnancy Discrimination Act (PDA) is an amendment to Title VII of the Civil Rights Act of 1964. Discrimination on the basis of pregnancy, childbirth or related medical conditions constitutes unlawful sex discrimination under Title VII. More information may be viewed on the U.S. Equal Employment Opportunity Commission's website.

- Title IX of the Education Amendments of 1972 ("Title IX"), 20 U.S.C. §1681 et seq., is a Federal civil rights law that prohibits discrimination on the basis of sex—including pregnancy and parental status—in educational programs and activities. View more details on rights provided by the U.S. Department of Education.

Lactation Support Policy
The College promotes supports for working parents with the transition back to work and school following childbirth. This includes support of nursing mothers wishing to express breast milk periodically during the work/school day. In accordance with provisions of the federal Fair Labor Standards Act (FLSA), upon request, suitable space must be provided for lactation support. Information about the NC State Government policy can be found via the Office of State Human Resources website.

Campus Locations
The College provides lactation rooms college-wide. The list of campus lactation rooms includes the locations of the rooms, information on how to reserve the rooms, and contact information for accessing the rooms.

Gender-Neutral/Single Stall Restrooms
As part of its commitment to creating welcoming and inclusive spaces, Wake Tech provides gender-neutral restrooms college-wide. These facilities are open to people of all genders at all campus locations.

Campus Maps
- Beltline Education Campus
- Northern Wake Campus
- RTP Campus
- Southern Wake Campus
- Perry Health Sciences Campus
- Public Safety Education Campus
- Western Wake Campus

CAMPUS POLICIES & PROCEDURES

<u>**APPENDIX A: POLICY EXAMPLES**</u>

<u>Examples of Sexual Harassment</u>

- A professor offers for a student to have sex or go on a date with them in exchange for a good grade. This constitutes sexual harassment regardless of whether the student accedes to the request and irrespective of whether a good grade is promised or a bad grade is threatened.

- A student repeatedly sends graphic, sexually oriented jokes and pictures around campus via social media to hundreds of other students. Many don't find it funny and ask them to stop, but they do not. Because of these jokes, one student avoids the sender on campus and in the residence hall in which they both live, eventually asking to move to a different building and dropping a class they had together.

- A professor engages students in class in discussions about the students' past sexual experiences, yet the conversations are not in any way germane to the subject matter of the class. The professor inquires about explicit details and demands that students answer them, though the students are clearly uncomfortable and hesitant.

- An ex-partner widely spreads false stories about their sex life with their former partner to the clear discomfort and frustration of the former partner, turning the former partner into a social pariah on campus.

- A student has recently transitioned from male to non-binary, but primarily expresses as a female. Since their transition, the student has noticed that their professor, pays them a lot more attention. The student is sexually attracted to the professor and believes the attraction is mutual. The student decides to act on the attraction. One day, the student visits the professor during office hours, and after a long conversation about being non-binary, the student kisses the professor. The professor is taken aback, stops the kiss, and tells the student not to do that. The professor explains to the student that they are not interested in the student sexually or romantically. The student takes it hard, crying to the professor about how hard it is to find someone who is interested in them now based on their sexual identity. The professor feels sorry for the student and softens the blow by telling them that no matter whether they like the student or not, faculty-student relationships are prohibited by the College. The student takes this as encouragement. One night, the student goes to a gay bar some distance from campus and sees the professor there. The student tries to buy the professor a drink and, again, tries to kiss the professor. The professor leaves the bar abruptly. The next day, the student makes several online posts that out the professor as gay and raise questions about whether they are sexually involved with students. The professor contacts the Title IX Office and alleges sexual harassment by the student.

<u>Examples of Stalking</u>

- Students A and B were "friends with benefits". Student A wanted a more serious relationship, which caused student B to break it off. Student A could not let go, and pursued student B relentlessly. Student B obtained a campus no-contact order. Subsequently, Student B discovered their social media accounts were being accessed, and things were being posted and messaged as if they were from them, but they were not. Whoever accessed their account posted a picture of a penis, making it look as if Student B had sent out a picture of themselves, though it was not their penis. This caused them considerable embarrassment and social anxiety. They changed their passwords, only to have it happen again. Seeking help from the Title IX Coordinator, Student B met with the IT department, which discovered an app on their phone and a keystroke recorder on their laptop, both of which were being used to transmit their data to a third party.

- A graduate student working as an on-campus tutor received flowers and gifts delivered to their office. After learning the gifts were from a student they recently tutored, the graduate student thanked the student and stated that it was not necessary and would appreciate it if the gift deliveries stopped. The student then started leaving notes of love and gratitude on the tutor's car, both on-campus and at home. Asked again to stop, the student stated by email, "You can ask me to stop, but I'm not giving up. We are meant to be together, and I'll do anything to make you have the feelings for me that I have for you." When the tutor did not respond, the student emailed again, "You cannot escape me. I will track you to the ends of the earth. If I can't have you, no one will."

<u>Examples of Sexual Assault</u>

- Students A and B meet at a party. They spend the evening dancing and getting to know each other. Student A convinces Student B to come up to their room. From 11:00 p.m. until 3:00 a.m., Student A uses every line they can think of to convince Student B to have sex, but Student B adamantly refuses. Despite her clear communications that Student B is not interested in doing anything sexual, Student A keeps questioning about religious convictions and accusations of being "a prude." Student A brings up several rumors that were heard about how Student B performed oral sex on a number of other guys. Finally, it seems to Student A that Student B's resolve is weakening, and convinces Student B to "jerk him off" (hand to genital contact). Student B would have never done it but for Student A's incessant coercion.

- Student A is a junior. Student B is a sophomore. Student A comes to Student B's residence hall room with some mutual friends to watch a movie. Student A and B, who have never met before, are attracted to each other. After the movie, everyone leaves, and Students A and B are alone. They hit it off, soon become more intimate, and start to make out. Student A verbally expresses their desire to have sex with Student B. Student B, who was abused by a babysitter at the age of five and avoids sexual relations as a result, is shocked at how quickly things are progressing. As Student A takes Student B by the wrist over to the bed, lays down, undresses Student B, and begins to have intercourse with Student B, Student B has a severe flashback to childhood trauma. Student B wants to tell Student A to stop but cannot. Student B is stiff and unresponsive during the intercourse. Although sex has progressed for sexual minutes, Student B requests Student A to stop. Student A refuses to do so.

- Students A and B are at a party. Student A is not sure how much Student B has been drinking, but is pretty sure it's a lot. After the party, Student A walks Student B to their apartment and ultimately engage in sexual activity. Student A asks Student B asks if they are really up to this, and Student B says yes. They remove each other's clothes, and they end up in bed. Suddenly, Student B runs for the bathroom. Upon returning, Student's B face is pale, resulting from potential vomiting. Student B gets back into bed, and they begin to have sexual intercourse. Student A is having a good time, though can't help but notice that Student A seems pretty groggy and passive and thinks Student B may have even passed out briefly during the sex, but came to again. When Student A runs into Student B the next day, and thanks for the great night. Student B remembers nothing and decides to make a report to the Dean.

Examples of Retaliation
- Student-athlete A alleges sexual harassment by a coach; the coach subsequently cuts the student-athlete's playing time without a legitimate justification.
- A faculty member alleges gender inequity in pay within her department; the Department Chair then revokes approval for the faculty member to attend a national conference, citing the faculty member's tendency to "ruffle feathers."
- A student from Organization A participates in a sexual harassment investigation as a witness whose testimony is damaging to the Respondent, who is also a member of Organization A; the student is subsequently removed as a member of Organization A because of their participation in the investigation.

CAMPUS POLICIES & PROCEDURES

<u>**APPENDIX B: AN ATIXA FRAMEWORK FOR INFORMAL RESOLUTION (IR)**</u>

The College utilizes the professional guidance of the Association of Title IX Administrators (ATIXA) for its Informal Resolution (IR) process.

ATIXA has framed a process for IR that includes:

1. A response based on supportive measures; and/or
2. A response based on a Respondent accepting responsibility; and/or
3. A response based on alternative resolution, which could include various approaches and/or facilitation of dialogue.

Alternative resolution approaches such as mediation, restorative practices, and transformative justice are likely to be used more and more often by colleges and universities. ATIXA does not endorse these approaches as better or worse than other formal or informal approaches.

ATIXA believes that if they are to be used in, and are effective for, sex offenses, they need to be designed and executed carefully and thoughtfully and be facilitated by well-trained personnel who take the necessary time to prepare and lay a foundation for success. Although no approach is a panacea, the framework below can help to lay that foundation, regardless of which approach(es) are used.

Here are the principles to be considered in supporting various approaches to informal resolution:

- IR can be applied in any sex/gender-based interpersonal conflict but may not be appropriate or advisable in cases involving violent incidents (sexual violence, stalking, domestic and dating violence, severe sexual harassment, sexual exploitation, etc.)

- Situations involving dangerous patterns or significant ongoing threat to the community should not be resolved by IR.

- The determination of whether to permit an IR-based resolution is entirely at the discretion of the Title IX Coordinator (TIXC) and in line with the requirements for IR laid out in the Title IX regulations.

- Any party can end IR early-, mid-, or late-process for any reason or no reason.

- IR can be attempted before and in lieu of formal resolution as a diversionary resolution (although a formal complaint must be filed if you are within Section 106.30, per OCR).

- Alternative approaches can inform formal resolution, as in a formal resolution model infused with restorative practices.

- IR could be deployed after formal resolution, as an adjunct healing/catharsis opportunity (that could potentially mitigate sanctions or be a form of sanction).

- Alternative Resolution approaches to IR must be facilitated by the College or a third-party. There may be value in creating clearly agreed-upon ground rules, which the parties must sign in advance and agree to abide by, otherwise the informal resolution process may be deemed to have failed.

- Technology-facilitated IR can be made available, should the parties not be able or willing to meet in person.

- If IR fails, a formal resolution can take place thereafter. No evidence elicited within the "safe space" of the IR facilitation is later admissible in the formal resolution unless all parties consent.

- With cases involving violence, the preferred alternative approach typically involves a minimal number of essential parties and is not a restorative circle approach with many constituents in order to ensure confidentiality.

- Some approaches require a reasonable gesture toward accountability (this could be more than an acknowledgement of harm) and some acceptance, or at least recognition, by the Respondent that catharsis is of value and likely the primary goal of the Complainant. A full admission by the Respondent is not a prerequisite. This willingness needs to be vetted carefully in advance by the Title IX before determining that an incident is amenable/appropriate for resolution by IR.

- IR can result in an accord or agreement between the parties (Complainant, Respondent, and the College) which is summarized in writing by and enforced by the College. This can be a primary goal of the process.

- IR can result in the voluntary imposition of safety measures, remedies, and/or agreed-upon resolutions by the parties, that are enforceable by the College. These can be part of the accord/agreement.

- As a secondary goal, IR can result in the voluntary acceptance of "sanctions," meaning that a Respondent could agree to withdraw, self-suspend (by taking a leave of absence), or undertake other restrictions/transfers/online course options that would help to ensure the safety/educational access of the Complainant, in lieu of formal sanctions that would create a formal record for the Respondent. These are enforceable by the College as part of the accord/agreement, as may be terms of mutual release, non-disparagement, and/or non-disclosure.

- Although a non-disclosure agreement (NDA) could result from IR, it would have to be mutually agreed-upon by the parties in an environment of non-coercion verified by the Title IX Coordinator.

- Institutions must develop clear rules for managing/facilitating the conference/meeting/dialogue of alternative resolution approaches, to ensure they are civil, age-appropriate, culturally-competent, reflective of power imbalances, and maximize the potential for the resolution process to result in catharsis, restoration, remedy, etc., for the harmed party(ies).

CAMPUS POLICIES & PROCEDURES

<u>APPENDIX C: STATEMENT OF RIGHTS OF THE PARTIES</u>

- The right to an equitable investigation and resolution of all credible allegations of prohibited harassment or discrimination made in good faith to College officials.

- The right to timely written notice of all alleged violations, including the identity of the parties involved (if known), the precise misconduct being alleged, the date and location of the alleged misconduct (if known), the implicated policies and procedures, and possible sanctions.

- The right to timely written notice of any material adjustments to the allegations (e.g., additional incidents or allegations, additional Complainants, unsubstantiated allegations) and any attendant adjustments needed to clarify potentially implicated policy violations.

- The right to be informed in advance of any public release of information by the College regarding the allegation(s) or underlying incident(s), whenever possible.

- The right not to have any personally identifiable information released by the College to the public without consent provided, except to the extent permitted by law.

- The right to be treated with respect by College officials.

- The right to have College Policy and these procedures followed without material deviation.

- The right not to be pressured to mediate or otherwise informally resolve any reported misconduct involving violence, including sexual violence.

- The right not to be discouraged by College officials from reporting sexual harassment, discrimination, and/or retaliation to both on-campus and off-campus authorities.

- The right to be informed by College officials of options to notify proper law enforcement authorities, including on-campus and local police, and the option(s) to be assisted by the College authorities in notifying such authorities, if the party so chooses. This also includes the right not to be pressured to report.

- The right to have allegations of violations of this Policy responded to promptly and with sensitivity by the College's law enforcement and/or other College officials.

- The right to be informed of available interim actions and supportive measures, such as counseling, advocacy, health care, student financial aid, visa, immigration assistance, and/or other services, both on campus and in the community.

- The right to a college-implemented no-contact order or a n-trespass order against a non-affiliated third party when a person has engaged in or threatens to engage in stalking, threatening, harassing, or other improper conduct that presents a danger to the welfare of the party or others.

- The right to be informed of available assistance in changing academic, living, and/or working situations after an alleged incident of discrimination, harassment, and/or retaliation, if such changes are reasonably available. No formal report, or investigation, either campus or criminal, needs to occur before this option is available. Such actions may include, but are not limited to:
    - Relocating an on-campus student's housing to a different on-campus location
    - Assistance from the College's staff in completing the relocation
    - Changing an employee's work environment (e.g., reporting structure, office/workspace relocation)
    - Transportation accommodations
    - Visa/immigration assistance
    - Arranging to dissolve a housing contract and provide a pro-rated refund
    - Exam, paper, and/or assignment rescheduling or adjustment
    - Receiving an incomplete in, or a withdrawal from, a class (may be retroactive)
    - Transferring class sections
    - Temporary withdrawal/leave of absence (may be retroactive)
    - Campus safety escorts
    - Alternative course completion options

- The right to have the College maintain such actions for as long as necessary and for supportive measures to remain confidential, provided confidentiality does not impair the College's ability to provide the supportive measures.

- The right to receive sufficiently advanced, written notice of any meeting or interview involving the other party, when possible.

- The right to have the Investigator(s), Advisors, and/or Decision-maker(s) to identify and question relevant available witnesses, including expert witnesses.

- The right to provide the Investigator(s)/Decision-maker(s) with a list of questions that, if deemed relevant by the Investigator(s)/Decision-maker(s), may be asked of any party or witness.

- The right not to have inadmissible prior sexual predisposition/history or irrelevant character admitted as evidence.

- The right to know the relevant and directly related evidence obtained and to respond to that evidence.

- The right to fair opportunity to provide the Investigator(s) with their account of the alleged misconduct and have that account be on the record.

- The right to receive a copy of the final investigation report, including all factual, policy, and/or credibility analyses performed, and to have at least (10) business days to review and comment on the report prior to the hearing.

- The right to respond to the investigation report, including comments providing any additional relevant evidence after the opportunity to review the investigation report, and to have that response on the record.

- The right to be informed of the names of all witnesses whose information will be used to make a finding, in advance of that finding, when relevant.

- The right to regular updates on the status of the investigation and/or resolution.

- The right to have reports of alleged policy violations addressed by Investigators, Title IX Coordinators, and Decision-maker(s) who have received relevant annual training.

- The right to a Hearing Panel that is not single sex in its composition, if a panel is used.

- The right to preservation of confidentiality/privacy, to the extent possible and permitted by law.

- The right to meetings, interviews, and/or hearings that are closed to the public.

- The right to petition that any College representative in the process be recused on the basis of disqualifying bias and/or conflict of interest.

- The right to have an Advisor of their choice to accompany and assist the party in all meetings and/or interviews associated with the resolution process.

- The right to the use of the appropriate standard of evidence, preponderance of the evidence, to make a finding after an objective evaluation of all relevant evidence.

- The right to be present, including presence via remote technology, during all testimony given and evidence presented during any formal grievance hearing.

- The right to have an impact statement considered by the Decision-maker(s) following a determination of responsibility for any allegation, but prior to sanctioning.

- The right to be promptly informed in a written Notice of Outcome letter of the finding(s) and sanction(s) of the resolution process and a detailed rationale of the decision (including an explanation of how credibility was assessed), delivered simultaneously (without undue delay) to the parties.

- The right to be informed in writing of when a decision by the College is considered final and any changes to the final determination or sanction(s) that occur post Notification of Outcome.

- The right to be informed of the opportunity to appeal the finding(s) and sanction(s) of the resolution process, and the procedures for doing so in accordance with the standards for appeal established by the College.

- The right to a fundamentally fair resolution as defined in these procedures.

APPENDIX D: PROCESS B

- Process B is applicable when the Title IX Coordinator determines Process A is inapplicable, or offenses subject to Process A have been dismissed.

- If Process A is applicable, Process A must be applied in lieu of Process B.

- Recipients can substitute any alternative process instead of Process B, if desired.

- VAWA Section 304 requirements apply to Process B or any alternative process for reports that fall under VAWA.

- Title IX requirements outside of Section 106.30 (based on the original 1975 regulations, the 2001 Revised Guidance, etc.) may also be applicable to Process B.

ATIXA 2020 ONE POLICY, TWO PROCEDURES MODEL
USE AND ADAPTATION OF THIS MODEL WITH CITATION TO ATIXA IS
PERMITTED THROUGH A LIMITED LICENSE
TO Wake Technical Community College
ALL OTHER RIGHTS RESERVED.
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COPYRIGHT INFRINGEMENT AND INTELLECTUAL PROPERTY
Purpose of the policy
This policy states Wake Technical Community College's position on copyright infringement, illegal file sharing, and intellectual property. The college adheres to the Higher Education Opportunity Act of 2008 regarding the copying or distribution of copyrighted materials.

Applicability
This policy applies to all faculty, staff, and students.

Policy statement
Wake Technical Community College requires its faculty, staff, and students to comply with the United States Copyright Act (Title 17 of the United States Code) (the "Copyright Act"). Faculty, students, and staff may download, possess, and store only lawfully-acquired, copyrighted materials; and may use, adapt, and distribute those materials only in ways consistent with the Copyright Act, associated case law, the Fair Use principle, and the intellectual property rights of others. The unauthorized use (downloading, possessing, storing, copying, adapting, sharing, or distribution) of copyrighted materials is a violation of federal law and Wake Technical Community College policy and is strictly prohibited.

View Full Policy*
Copyright Infringement and Intellectual Property
*This PDF document is the official version of the policy.

LEARNING MANAGEMENT SYSTEM (LMS) RETENTION SCHEDULE
Purpose of the Policy
This policy governs digital student records generated in the course of delivering online courses. These records are confidential, protected under FERPA regulations, and must be provided to students or legal authorities when requested. North Carolina General Statutes (NCGS) § 115D, § 121, and § 132 have no special provisions for the handling or retention of digital academic records or protection from litigation regarding such records. NCGS and current Wake Tech policy require the retention of grade books for a period of three years. Retaining student-generated data poses legal risks for the college if a student or parent sues or if records are compromised through accidental release or malicious intrusion. The maintenance, security, storage, and backup of records in perpetuity and the mechanisms for producing the records in an accessible form constitute a financial burden for the college as well.

Policy Statement
Wake Tech will utilize best practices related to maintaining a comprehensive Learning Management System (LMS) records and data archive and retention schedule. The retention schedule will adhere to all applicable regulations and comply with all audit criteria. The retention schedule provides information pertinent to all types of courses offered by the college and provides instruction for storage and destruction of affected data.

Remember to check the online College Catalog for the most up-to-date information at
http://www.waketech.edu/student-services/catalog

WORKFORCE CONTINUING EDUCATION
Website: http://workforce.waketech.edu

WORKFORCE CONTINUING EDUCATION MISSION
Our mission at the college is to provide equitable access to education that transforms lives through economic mobility and personal fulfillment. We achieve this mission through the multitude of program offerings we provide.

WORKFORCE CONTINUING EDUCATION UNITS (CEU's)
Wake Technical Community College awards Continuing Education Units (CEUs) for specific non-credit courses and special activities. A permanent transcript will be established for each non-credit student and updated each time the student completes a non-credit course. One CEU will be awarded for every 10 hours of non-credit instruction; for example, a 66-hour non-credit course earns 6.6 CEUs. CEUs are awarded to students upon satisfactorily completing a non-credit course.

The Southern Association of Colleges and Schools became the first regional accrediting agency to require that all member institutions use the CEU to document non-credit special activities.

Workforce Continuing Education Transcripts
Students who have taken non-credit classes may request copies of their **official transcripts** by visiting
http://www.waketech.edu/student-services/registration-student-records/transcripts.

Unofficial transcripts may be obtained by logging into WebAdvisor, entering a Wake Tech username and password, and clicking on Transcript in the Academic Profile area. Students who do not have a Wake Tech username and password must submit an electronic Student Record Inquiry form.

GRADING POLICY

All classes except Adult High School classes use the S-U system.

Grade	Explanation
S	Satisfactory (attended at least 80% of scheduled class hours)
*U	Unsatisfactory
*NG	No grade
*W	Withdrew

***Individual courses may vary in attendance policy and requirements to attain "Satisfactory" status. Contact appropriate Workforce Continuing Education staff to establish specific requirements.

*CEU's are not awarded with these grades.

Adult High School
Adult High School classes use the A-F system*****.

Grade	Explanation
A (93-100)	Excellent
B (85-92)	Above average
C (78-84)	Average
D (70-77)	Below average
F (0-69)	Unsatisfactory
W	Withdrew
NG	No Grade

*Effective Fall 2015 the grading scale for Adult High School classes will be the 10-point grading scale that has been approved by the North Carolina State Board of Education for public high schools.

ADMISSION & REGISTRATION

Workforce Continuing Education Registrar
This department ensures accuracy and quality in all Workforce Continuing Education programs to comply with the NC General Statues, Title 23 of the NC Administrative Code, Workforce Continuing Education Guidelines, Numbered Memoranda and the Colleges' Accountability and Credibility Plan in all of Workforce Continuing Education registration and reporting processes.

Admissions
Any adult, 18 years of age or older, or emancipated minor not enrolled in public school, may be admitted to an adult education class. A person 16-18 years of age may enroll in certain courses upon the approval of the appropriate public

school principal or superintendent. For more detailed information regarding the admissions and registration process of minors, please click here.

A course schedule is available in an interactive online format at http://ceregistration.waketech.edu. Information about all workforce continuing education classes may be obtained by calling the college at 919-866-5800.

CLASS LOCATIONS

All Wake Tech campuses provide numerous workforce continuing education courses and services. Other classes are conducted in surrounding communities or within a particular business or industry in Wake County. Almost any course can and will be organized in other areas of the county when a sufficient number of citizens indicate an interest in having a class brought to a particular location, provided that there's an instructor and suitable facility.

Site locations and abbreviations can be found at http://www.waketech.edu/about-wake-tech/locations/directions.

COURSE DESCRIPTIONS

Although course descriptions for workforce continuing education courses are not provided in this publication, examples of the types of courses that are offered are listed. Course descriptions are furnished upon request. Descriptions for classes currently open for registration are listed in the interactive online schedule. Courses may be offered to meet expressed needs of the community when evidence of these needs is presented to the college.

FEES

Registration fees are required for Community Service and Occupational Extension Workforce Continuing Education courses (as of July 1, 2013), as follows:

1-24 hours	$70
25-50 hours	$125
51+ hours	$180

Other fees (facility, campus access, technology, or lab fees) may also be required for certain courses.

1D SBCCC 1000.2, senior citizens, age 65 years old or older, may audit courses with the following considerations:

1. No charge for tuition or registration fees
    a. Senior Citizens may be charged local fees associated with course sections
2. Enrollment into a course is dependent on space availability
3. Self-support courses are not eligible

Fees are set by the NC Legislature and are subject to change without notice.

No registration fees are required for Adult Basic Education programs, High School Equivalency Preparation, Adult High School, or English as a Second Language programs.

Registration fees may be waived for certain classes for fire service, rescue, and law enforcement personnel. Eligibility for fee waiver is contingent on authorized agency affiliation and authorized groups, dictated by North Carolina General Statutes and the State Board of Community College Code.

Self-supporting classes have a pro-rated cost per individual or group and **are not eligible** for fee waiver.

High School Equivalency Testing Fees

GED® and HiSET® are the high school equivalency tests currently offered at Wake Tech's Beltline Education Center. The GED® (www.myged.com), a four-part, computer-based test, costs $80 total or $20 per section. The HiSET® (www.hiset.ets.org), a five-part, paper-based test, costs $75 total or $15 per section. Testing fees must be paid through the test vendor websites at the time of registration using a debit or credit card or voucher. All sections of either exam must be passed to earn the credential.

WITHDRAWALS & REFUNDS

Requests for withdrawals and refunds **must** be made in writing by the student (**no exceptions**) to the Workforce Continuing Education Registrar's Office. Refund request forms (Wake Tech Form # 802) are also available at each class site. A request for refund may also be submitted to ceregistrar@waketech.edu.

- A **100% refund** will be given if the student officially withdraws from the class (by written request) before the first class meeting.
- A **75% refund** will be given if the student officially withdraws from the class (by written request) on or before the 10-percent date of scheduled hours. Community school, facility, and lab fees are non-refundable.

For classes for which the college collects receipts that are not required to be deposited into the State Treasury account, the college will adopt local refund policies.

Cancelled classes

A full refund will be given for classes canceled by the college. Students do not have to request these refunds.

TRANSFER POLICY FOR WORKFORCE CONTINUING EDUCATION

Students may transfer from one course to another during a given semester as long as neither course has passed the 10% point of total scheduled course hours. Students must request transfer **in writing** by completing a Course Transfer Request form (Wake Tech Form #980) or sending an email to the Workforce CE Registrar at ceregistrar@waketech.edu. Requests received after the 10% point will not be considered, and refunds will not be given.

COLLEGE & CAREER READINESS ADMISSION & PLACEMENT POLICY

Wake Tech admits all adults and makes every effort to place students in programs where they can experience success and meet their goals. College & Career Readiness offers educational opportunities in Adult Basic Education (ABE), Pathfinder Career Exploration Program (designed for adults with intellectual disabilities), High School Equivalency Preparation (HSEP), Adult High School (AHS), and English as a Second Language (ESL). Placement into these programs is determined by standardized assessment tools. If students do not demonstrate progress within one year of attendance, they will be dropped from the program and referred to other college programs or a more appropriate agency.

Admission of Minors and Non-High School Graduates

This policy applies to Wake Technical Community College and is in addition to State Board of Community College policies as published in North Carolina Administrative Code, 23 NCAC 2C.0301, Admission to Colleges and 23 NCAC 2C.0305, Education Services for Minors. This policy specifically addresses non-high school graduates' admission into the College & Career Readiness Programs:

- Non-high school graduates who are 16 or 17 years of age will not be allowed to enroll in the College & Career Readiness Program before a minimum of six months from the official date of withdrawal from a public or private high school or from a home school program.
- The student must exhaust any suspension period given the student by a public or private high school or a home school program in addition to the six-month waiting period described above before being eligible for enrollment in the College & Career Readiness Program.

The Administration of Wake Technical Community College has the express authority of the Board of Trustees to implement necessary procedures for enforcement and regulation of this policy.

COLLEGE & CAREER READINESS PROGRAMS

College and Career Readiness Programs include Adult Basic Education (ABE), Pathfinder Career Exploration Program (designed for adults with intellectual disabilities), High School Equivalency Preparation (HSEP), Adult High School (AHS), and English as a Second Language (ESL). These programs are offered throughout Wake County for the primary purposes of helping adults:

- Improve math, reading, writing and technology skills for the purposes of pursuing post-secondary education, employment, or advancement in the workplace
- Earn a high school equivalency diploma
- Learn English as a second language
- Explore career options

Ability to Benefit Policy

All participants must demonstrate the ability to benefit from the program by successfully completing one of the following pre-tests approved by the United States Department of Education: TABE, CASAS, or BEST. Students unable to complete the pre-test may be admitted to the program at a future date once they are able to complete the pre-test.

Once enrolled, educational progress in the College and Career Readiness program is expected and defined by the Workforce Innovation and Opportunity Act of 2014, which indicates students will demonstrate improvement in literacy skill levels in reading, writing, and speaking the English language, numeracy, problem-solving, English language acquisition, and other literacy skills. Improvements must be sufficient enough to move students to higher placement/educational functioning

levels.

Students who do not demonstrate movement to higher placement levels on College and Career Readiness tests (TABE, CASAS or BEST) after one year from the date of enrollment, may be dropped from the Wake Tech program and referred to other agencies. For students with a diagnosed intellectual disability, a level improvement must be demonstrated within two program years or they may be dropped from the Wake Tech program and referred to other agencies.

Adult Basic Education

Adult Basic Education (ABE) is designed to assist individuals who want to improve their skills to enter or advance in the workplace and/or prepare for enrollment in one of the College's high school equivalency completion programs.

There are no fees or charges of any kind. All materials have been especially prepared for adults. Students enrolled in ABE classes are taught from the following content standards using contextualized teaching practices:

- Reading
- Writing
- Math
- Technology
- Career Exploration

High School Equivalency Preparation (HSEP)

The High School Equivalency Preparation program offers instruction for adults who are preparing for high school equivalency exams. Instruction covers high school level reading, writing, mathematics, science, and social studies skills. Students may prepare for the exam at various locations throughout Wake County, or by enrolling in Wake Tech's online HSEP programs. Tuition is free, and course materials are provided for students.

Those achieving a passing score on all sections of the HSEP exams and for transition into post-secondary education and employment receive a high school equivalency diploma from the North Carolina State Board of Community Colleges. The high school equivalency diploma is generally recognized for college admission and employment.

Adult High School Diploma

The Adult High School Diploma is offered through a cooperative agreement between Wake Tech and the Wake County Board of Education, with Wake Tech serving as administering agency. Adult High School provides academic courses in a lab setting or online. Students are placed in English, mathematics, social studies, science, and elective courses based on their high school transcripts. Students are awarded an adult high school diploma upon completion of required North Carolina high school courses.

The Adult High School diploma is offered at the Beltline Education Center. While enrolled in this program, students may be dually enrolled in select curriculum pathway courses as they work on their high school completion diploma.

Pathfinder Career Exploration Program

The Pathfinder Career Exploration Program is designed for adults with disabilities and those who struggle academically. Students should have a high level of independence, and be focused on transitioning to the workplace. We currently offer six Employability Skills-Focused Cohorts and two Career Pathways.

Please call 919.334.1545 for more information.
pathfinder.waketech.edu

English as a Second Language

English as a Second Language (ESL) classes are designed for people whose native language is not English. The ESL program focuses on increasing speaking, listening, reading, and writing skills – and prepares students to live, work, and continue their post-secondary education in the United States. Instructors assist students with workplace skills, community interaction, cultural enrichment, and professional and academic advancement. A variety of online and seated class options are available, as well as Saturday, Citizenship and Integrated Career classes.

High School Equivalency Program

The High School Equivalency Program (HEP) is a five-year grant from the U.S. Department of Education, Office of Migrant Education, to Wake Technical Community College. The purpose of the HEP grant is to provide migratory and seasonal farmworkers and their immediate families the instruction and support necessary to earn a high school equivalency (HSE) diploma and subsequently, to gain upgraded employment, be placed in an institution of higher education (ISE) or other post secondary education or training, or enter the military.

HEP operates in partnership with other community organizations throughout the state of North Carolina.

BIONETWORK CAPSTONE CENTER

The BioNetwork Capstone Center provides affordable, high-quality, hands-on training in biotechnology, biomanufacturing, and biopharmaceutical/pharmaceutical operations in a simulated industrial (cGMP) environment. The BioNetwork Capstone Center is situated in the **Golden LEAF Biomanufacturing Training and Education Center (BTEC)** on the Centennial Campus of North Carolina State University. It provides a training environment that mirrors a biomanufacturing plant facility, with state-of-the-art classrooms, industrial-grade equipment laboratories, and a certified cleanroom suite.

The BioNetwork Capstone Center serves:
- Incumbent workers
- New hires
- Workers in job transition
- Community college and college students enrolled in the life sciences, especially in biotechnology-related degree and certificate programs (The center provides an invaluable, extended, hands-on learning experience.)
- College/university and community college faculty

Four certificates are offered by the BioNetwork Capstone Center. Courses can be taken individually and focus on critical skill sets in areas important to biomanufacturing: good manufacturing practices (GMP), aseptic manufacturing, operations in biotechnology processes, industrial microbiology, good laboratory practices (GLP), HPLC, and validation.

- BioNetwork Capstone Certificate in Biomanufacturing
- BioNetwork Capstone Certificate in Analytical Lab Skills
- BioNetwork Capstone Certificate for Instrumentation/Calibration Technicians in Support of Biomanufacturing
- BioNetwork Capstone Certificate in Computer Validation

Professional development training is delivered in a variety of formats and is completely customizable for any industry's needs. Our solutions make a positive difference in your company or organization.

EDUCATION SERVICES & TECHNOLOGY

Human Resources Development (HRD)

Human Resources Development (HRD) provides assessment services, employability training, and career development counseling to unemployed and underemployed individuals, age 18 and older, to prepare them for success in the workplace. Training focuses on helping students obtain and perform successfully in entry-level jobs; it is based on national skills standards, assessments, and certifications that enhance participants' ability to compete effectively in the high-tech, high-performance, global economy. Courses are designed to enhance skills and improve employment prospects. Class times and total contact hours vary.

Employability Skills Training is the centerpiece of HRD training, the core training component around which the other four revolve. Employability Skills Training includes job preparation, job-seeking skills, job-keeping skills, lifelong learning, and life skills. Learn more at http://hrd.waketech.edu.

Noncredit Computer Education

The goals of the Noncredit Computer Education Department are to enrich personal and workplace computer skills and to enhance opportunities for employment and job advancement.

The department consists of Workforce Continuing Education classes taught at various campus sites and online. Learn more about our certification programs and explore the trends at http://computertechnology.waketech.edu.

LANGUAGES AND LIFELONG LEARNING

The Languages and Lifelong Learning Department provides language instruction for all levels, from beginner to advanced. Classes focus on helping students build language skills for personal enrichment and enhanced employment opportunities; as such, it allows them to learn about the world.

Command Spanish is non-grammar-based training designed to help employees use limited amounts of everyday Spanish to meet the needs of their employers and the community. The training gives employers a practical way to offer professional development to their employees.

PROFESSIONAL DEVELOPMENT AND CORPORATE TRAINING

Wake Tech offers a variety of courses to meet the supervisory and managerial needs of business and industry. Our courses help professionals increase proficiency and gain new skills to enhance competency and marketability. Participants can select from our many program areas and build the knowledge and skills to become effective members of their organizations. Professional Development courses are available in the following areas:

- Leadership, Management, and Supervision
- Writing and Communication
- Organizational Improvement and Analysis
- Professional Certifications

Technology Services & Special Programs

Wake Tech's Distance Learning programs enhance the learning experience and increase student success overall. The programs succeed by 1) partnering with leading educational organizations such as Education-to-Go (ed2go), CareerStep and other platforms to deliver instruction online, and 2) providing relevant courses and quality instruction. Wake Tech has a reputation for quality and for the strength of its faculty; online courses make these resources available to a greater number of students.

Wake Tech's Plus 50 initiative offers classes and events to help adults zero in on a new career, plan for retirement, or simply enjoy this stage of life. Although these classes are designed for those 50 and older, everyone is welcome. Participants can learn new skills, enhance their resumes, maintain health and wellness, or start new hobbies! Learn more at http://plusfifty.waketech.edu

Substitute Effective Teacher Training

This program helps prospective substitute teachers develop instructional preparation; learn time management and presentation skills, discipline strategies, and hands-on activities for the classroom; and become familiar with NC school laws and all levels of administrative expectations.

Note: Effective November 2012, an applicant must have completed a minimum of 48 semester hours from an accredited college or university to be considered for substitute teaching. Substitute Effective Teacher Training will no longer be sufficient for meeting minimum requirements.

ENTREPRENEURSHIP INITIATIVES

This partnership between Wake Tech and Wells Fargo aims to enhance the entrepreneurial climate in Wake County by introducing and supporting projects and initiatives that increase the success rate of new and established entrepreneurial ventures.

Learn more at http://entrepreneurship.waketech.edu.

OCCUPATIONAL SERVICES

The Occupational Services Division is comprised of departments that provide high quality training to meet the workforce needs of the service industries in Wake County.

Workforce Allied Health: Training for entry-level employment in a healthcare setting; including courses to prepare students for higher-level nursing degree pathways. Training courses include, but are not limited to: Nurse Aide I (NAI), Nurse Aide II (NAII) and Nurse Aid Refresher. All courses are approved by the NC Division of Health Service Regulation. The Medical Occupations service area prepares students to perform clerical and administrative duties in medical settings. Courses include, but are not limited to: Medical Terminology, Healthcare Billing & Coding, Medical Office Assistance, Electronic Health Records and EKG Monitor Technician. Students can be prepared for certification testing in their respective areas.

Hospitality Training Department

The Hospitality Training Department trains individuals in food service, lodging, and travel information. Primary objectives are to provide hospitality industry employers with well-trained personnel and to help individuals develop skills that will qualify them for greater employment opportunities. Hospitality training is arranged and scheduled in accordance with the needs of the industry. Courses include, but are not limited to: Barista & Café, Hospitality Certification Program, ServSafe, Start a Food Truck Business, Bartending, Housekeeping, Certified Pool Operator, Activity Coordinator for Long Term Care Facility and Commercial Food Equipment Repair.

Corrections Education

Corrections Education is delivered to immured individuals who have been assigned to Wake County facilities by the NC Department of Public Safety and the Wake County Sheriff's Department. The primary purpose of the program is to increase the safety of the general public by reducing recidivism via educational and vocational training.

BioWork

BioWork is a 128-hour certificate course. Students who complete the course are equipped with entry-level skills required for becoming a **process technician** for a biotechnology, pharmaceutical or chemical-manufacturing company.

BioWork is intended for high school graduates, for those in manufacturing industries who have lost their jobs, and for those

interested in starting new careers.

Career Pathways Program & Student Resources
The Career Pathways Program & Student Resources Department is a Workforce Continuing Education strategy design to develop students' academic, technical, and employability skills while offering services and resources to assist them in overcoming barriers that may impede their successful completion of the course and subsequent transition (back) into the workforce. Career coaches work closely with program coordinators and resource agencies to ensure program compliance and student success.

PROFESSIONAL SERVICES & VOCATIONAL TRAINING
The Professional Services & Vocational Training division provides continuous workforce training for adults aspiring to advance or start new careers and trades. The division's top priority is enriching the lives of adults by providing the education and practical experience necessary to excel in specific careers. Classroom instruction is combined with practical experience to prepare students for NC State Board exams and actual scenarios encountered on the job. Students have opportunities to gain certifications and training that will put them on the fast track to employment.

Vocational training classes provide development in programs such as Electrical Wiring, HVAC, Apartment Maintenance, Automotive detailing, Healthcare Facilities Manager and many others. Basic computer skills and software training classes are also taught in Spanish.

Programs and courses include:
- Automotive Repair
- Automotive Safety
- Building Trades
- Machine Trades and Welding
- On-Board Diagnostic Emission Certification
- Plumbing

Training for these WCE programs can be completed **in three (3) months or less:**
- Building Envelope Specialist
- Building Envelope Specialist Exam
- Residential Building Analysis
- Residential Building Analysis Exam
- Agribusiness and Sustainable Farming for the Family
- NC Barber Instructor Exam Prep
- Shampoo Technician Certification

Training for these WCE programs can be completed **in six (6) months or less**:

- Natural Hair Specialist
- Community Gardening/Intermediate Community Gardening/Advanced Gardening Concepts

Training for these WCE programs can be completed **in 12 months or less**:
- Workforce Continuing Education Cosmetology Program

PUBLIC SAFETY TRAINING
The following program areas provide training for public safety personnel and others who wish to increase competencies in specialized occupational areas.

Emergency Medical Services (EMS)
These courses are designed to meet the needs of local emergency services agencies, healthcare providers, and the public, with an emphasis on emergency patient care in pre-clinical settings. EMS training also includes health education courses for those interested in healthcare and related institutions or retraining.

Fire Service Training
Fire Service Training is delivered directly to local fire departments, allowing personnel to learn with the actual equipment they will use in controlling fires. Classes include those listed below along with related classes in industrial brigade training, home fire safety, and search and rescue:
- CPR & First Aid
- Ropes
- USAR
- Fire Hoses / Extinguishers
- Ladders

- Fire Officer I & II
- Instructor I & II
- Rescue Techniques
- EMR courses

Law Enforcement In-Service Training

In-service training for law enforcement personnel is provided at the request of law enforcement agencies. Training emphasizes legal and technological law enforcement advancements. Programs include Criminal Investigation and the Police Law Institute, as well as those listed below:

- Radar / SMI
- Simunitions / Force on Force
- General Instructor
- Personal Protective Services
- Criminal Investigation
- Police Law Institute
- Legal Update (Arrest, Search & Seizure)
- Narcotics Detection / Investigations
- Accident Reconstruction

Basic Law Enforcement Training (BLET)

This program is designed to give students essential skills required for entry-level employment as law enforcement officers with state, county, or municipal governments or with private enterprise. The program covers topics and uses instructional methods mandated by the North Carolina Criminal Justice Education and Training Standards Commission. Topics include but are not limited to criminal, juvenile, civil, motor vehicle, and alcohol beverage laws; investigative, patrol, custody and court procedures; emergency responses; and community relations. The course is filled with practical exercises, and an extensive ethics section is woven throughout the training experience.

The Wake Tech BLET Academy offers the state commission-mandated 620 hour program along with an additional 124 hours of training, for a total of 744 hours. The additional hours include officer survival, public speaking, and other law enforcement-related training.

To qualify for the program, students must meet the Minimum Standards for the Certification of Law Enforcement Officers Administrative Code 12 NCAC 9B .0101/9B .0111 and Admission of trainees 12 NCAC 09B .0203 ADMISSION OF TRAINEES.

Cadets completing the Academy are eligible to take the state comprehensive written exam and skills testing. Upon successful completion of the BLET State Comprehensive Written Examination, the Cadet has one year to be duly appointed and sworn as a law enforcement officer in North Carolina.

Corrections and Detention Training

In-service corrections and detention training is provided for Department of Correction personnel at the request of the department. Training emphasizes officer safety and inmate security and includes courses such as the following:
- Supervisory / Leadership and Mentoring
- Gang Awareness & Identification
- Teamwork
- Report Writing
- Promotional Examination Preparation
- Investigative & Interviewing Techniques
- Spanish For Corrections / Detention Personnel

SMALL BUSINESS CENTER (SBC)

Wake Tech's Small Business Center helps people **start** and **grow** their business.
Open to any resident within Wake County, we offer:

- Seminars/Workshops/Webinars that cover the basics of starting and growing a business.

- One-on-one confidential business counseling with a plan customized for a business owner from startup to success.

- A Resource Library to assist business owners.

- Access to business planning and financial projections software and industry data reports.

- Connections to lenders and sources of capital.

Free of charge. Sign up and learn more at sbc.waketech.edu
Part of the Small Business Center Network of North Carolina. Learn more at https://www.ncsbc.net/.

WE ARE HERE TO HELP!

Phone
919- 866-5800
Website
http://workforce.waketech.edu/

Remember to check the online College Catalog for the most up-to-date information at
http://www.waketech.edu/student-services/catalog

Degrees, Diplomas, and Certificates

Wake Technical Community College awards degrees, diplomas, and certificates in a variety of fields shown below. The highest credential given in each area is listed first, in bold type.

- Click on the "**Program Name**" to go to the program's web page
- Click on the "**Program of Study**" to see specific course requirements for that program

Programs may be offered during the day, evening, online, or a combination. Students should refer to Self Serve for the availability of classes. Click to see a list of Wake Tech's programs that can be completed fully online.

Program Name	Division to Contact	Program Code
Accounting - *AAS Degree* Accounting *- Diploma* Accounting: Core *– Certificate* Accounting Software Applications *- Certificate* Advanced Accounting Core *– Certificate* Bookkeeping *– Certificate* Fraud Examination *– Certificate* Income Tax Preparer *– Certificate* Management Accountant *- Certificate* Payroll Accounting *- Certificate*	**Business & Public Services Technologies**	A25800 D25800 C25800A C25800D C25800G C25800S C25800J C25800B C25800M C252800C
Advertising and Graphic Design *- AAS Degree* Advanced Graphic Design *- Certificate* Design Basics *- Certificate* Design Portfolio *- Certificate* Graphics Design *- Certificate* Web and Graphic Design *- Certificate*	**Information Technology**	A30100 C30100D C30100E C30100F C30100A C30100B
Agricultural Systems Technology *– AAS Degree* Agricultural Systems Technology *– Diploma*	**Transportation Technologies**	A60410 D60410
Air Conditioning, Heating, and Refrigeration Technology Commercial Refrigeration Track *– AAS Degree* **Air Conditioning, Heating, and Refrigeration Technology Commercial A/C Track *– AAS Degree*** **Air Conditioning, Heating, and Refrigeration Technology Building Automation Track *– AAS Degree*** Air Conditioning, Heating, and Refrigeration Technology *– Diploma* Air Conditioning, Heating, and Refrigeration Technology *– Certificate* Building Automation *– Certificate* Commercial Refrigeration *– Certificate* Commercial A/C *– Certificate* Residential Advanced - *Certificate*	**Applied Engineering & Technologies**	A35100A A35100B A35100C D35100A C35100B C35100E C35100F C35100G C35100H
Architectural Technology *– AAS Degree* Architectural CAD *– Certificate* Architectural Building Design - *Certificate* Architectural Construction Technology - *Certificate* Architectural Graphics - *Certificate* Building Information Modeling (BIM) - *Certificate*	**Applied Engineering & Technologies**	A40100 C40100A C40100L C40100K C40100J C40100B
Associate Degree Nursing *– AAS Degree* **Associate Degree in Nursing** (LPN to RN Advance Placement Option – **AAS Degree** **Diploma Practical Nursing - *Diploma***	**Health Sciences**	A45110A A45110B D45660
Associate in Arts *– AA Degree*	**University Transfer**	A10100
Associate in Fine Arts in Visual Arts *– AFA Degree*	**University Transfer**	A10600
Associate in Sciences *– AAS Degree*	**University Transfer**	A10400
Associate in Engineering *– AE Degree*	**University Transfer**	A10500
Automotive Systems Technology *– AAS Degree* Automotive Brakes and Suspension *– Certificate* Automotive Introduction *– Certificate* Automotive Powertrains *– Certificate* Introduction to Light Duty Diesel *– Certificate*	**Transportation Technologies**	A60160 C60160C C60160D C60160B C60160A
Baking and Pastry Arts *– AAS Degree* Baking and Pastry Arts *– Diploma* Baking Fundamentals *– Certificate* Bread Baker *– Certificate* Cake Decorating *– Certificate* Confectioners *– Certificate*	**Business & Public Services Technologies**	A55130 D55130 C55130F C55130B C55130D C55130C

Program Names Continued	Division to Contact	Program Code
Biopharmaceutical Technology – *AAS Degree* Pharmaceutical Basics **–** *Certificate* BioMaintenance – *Certificate* BioQuality - *Certificate*	**Applied Engineering & Technologies**	A20180 C20180E C20180F C20180G
Biotechnology Technology – *AAS Degree*	**Applied Engineering & Technologies**	A20100
Business Administration: General Business Administration – *AAS Degree* Business Core **–** *Certificate* Career Success **-** *Certificate* Leadership **–** *Certificate*	**Business & Public Services Technologies**	A25120A C25120D C25120G C25120F
Business Administration: Human Resources Management – *AAS Degree* Human Resources Administration **-** *Certificate* Human Resources Management **–** *Certificate*	**Business & Public Services Technologies**	A25120H C25120HA C25120HB
Business Administration: Marketing – *AAS Degree* Advertising and Digital Media **-** *Certificate* Marketing and Sales **–** *Certificate*	**Business & Public Services Technologies**	A25120M C25120DM C25120MM
Business Administration: Project Management – *AAS Degree* Project Management **-** *Certificate*	**Business & Public Services Technologies**	A25120PM C25120PM
Business Analytics – *AAS Degree* Business Analyst **–** *Certificate* Business Intelligence **–** *Certificate* Finance Analytics **-** *Certificate* Logistics Analytics **–** *Certificate* Marketing Analytics **–** *Certificate*	**Information Technology**	A25350 C25350B C25350A C25350F C25350E C25350C
Civil Engineering Technology – *AAS Degree* Civil Tech I **-** *Certificate* Civil Design Elements I – *Certificate* Civil Design Elements II – *Certificate*	**Applied Engineering & Technologies**	A40140 C40140D C40140E C40140F
Collision Repair and Refinishing Technology – *AAS Degree* Collision Repair and Refinishing Technology - *Diploma* Fundamentals – *Certificate* Fundamentals II – *Certificate*	**Transportation Technologies**	A60130 D60130 C60130A C60130B
Cloud Infrastructure – *AAS Degree* Global Windows Security Administration **-** *Certificate* Linux Security Specialist – *Certificate* Linux Certified IT Professional **–** *Certificate* Microsoft Certified IT Professional **–** *Certificate*	**Information Technology**	A25590CI C25590WS C25590LS C25590LX C25590MS
Computer Programming and Development – *AAS Degree* C++ Programming **–** *Certificate* Java Programming **–** *Certificate* Programming Fundamentals **-** *Certificate*	**Information Technology**	A25590CP C25590CC C25590JV C25590PF
Computed Tomography Technology – *Certificate*	**Health Sciences**	C45200
Construction Equipment Systems Technology – *AAS Degree* Construction Equipment Systems Technology – *Diploma* Hydraulics, Engines, and Transmission – *Certificate* Fuel Injection, Electrics, and Electronics - *Certificate*	**Transportation Technologies**	A60450 D60450 C60450BB C60450BC
Construction Management Technology – *AAS Degree* Basic Construction Estimating **–** *Certificate* Construction Management Technology: Basic **–** *Certificate* Construction Safety Management **–** *Certificate*	**Applied Engineering & Technologies**	A35190 C35190D C35190C C35190E
Cosmetology – *AAS Degree* Cosmetology - *Diploma*	**Business & Public Services Technologies**	A55140 D55140A
Criminal Justice Technology – *AAS Degree* Criminal Justice Technology- Introduction **-** *Certificate* Police Records Specialist **–** *Certificate* Security and Intelligence Analysis **–** *Certificate* Financial Crime Specialist - *Certificate*	**Business & Public Services Technologies**	A55180 C55180P C55180R C55180S C55180F
Criminal Justice Technology/Forensic Science **Forensic Science –** *AAS Degree* Crime Scene Technician - *Certificate*	**Business & Public Services Technologies**	A5518C C5518C
Culinary Arts – *AAS Degree* Culinary Arts – *Diploma* Culinary Arts - *Certificate*	**Business & Public Services Technologies**	A55150 D55150 C55150A

CURRICULUM EDUCATION (FOR CREDIT): PROGRAMS OF STUDY

Program Name	Division to Contact	Program Code
Cybersecurity – *AAS Degree* Cyber Ops & Digital Forensics – *Certificate* Penetration Testing & Ethical Hacking - *Certificate*	**Information Technology**	A25590CS C25590CF C25590PE
Data Science and Programming Support – *AAS Degree*	**Information Technology**	A25590DS
Dental Assisting - *Diploma*	**Health Sciences**	D45240
Dental Hygiene – *AAS Degree*	**Health Sciences**	A45260
Diesel and Heavy Equipment Technology – *AAS Degree* Diesel and Heavy Equipment Technology - *Diploma* Fuel Injection, Electrical, and Electronics Forklift – *Certificate* Hydraulics, Engines, and Transmission Forklift – *Certificate*	**Transportation Technologies**	A60460 D60460 C60460BC C60460BB

Education: Associate in Arts in Teacher Preparation – *AAS Degree*
 Education: Associate in Science in Teacher Preparation – *AAS Degree*
 Early Childhood Education – *AAS Degree (Parent Program)*
 Early Childhood Education – *Diploma*
 Early Childhood Education – *Certificate*
 Infant/Toddler Care – *Certificate*
 Preschool Foundations - *Certificate*
 School-Age – *Certificate*
 Early Childhood Education: Birth-Kindergarten (B-K) Licensure
   Transfer – *AAS Degree*
 Early Childhood Education: Non-Teaching Licensure
   Track – *AAS Degree*
 Early Childhood Education: Career Track – *AAS Degree*
	Business & Public Services Technologies	A1010T
		 A1040T
		 A55220
		 D55220A
		 C55220D
		 C55290
		 C55220G
		 C55220E
		 A55220B
		 A55220E
		 A55220C

Electrical Systems Technology – *AAS Degree* Electrical Systems Technology – *Diploma* Commercial Wiring – *Certificate* Industrial Wiring – *Certificate* Renewable Energy - *Certificate* Residential Wiring – *Certificate* Wiring Methods – *Certificate*	**Applied Engineering & Technologies**	A35130 D35130 C35130B C35130C C35130E C35130A C35130D
Electroneurodiagnostic Technology – *AAS Degree*	**Health Sciences**	A45320
Electronics Engineering Technology – *AAS Degree* Basic Electronics – *Certificate* Embedded Systems – *Certificate* PLC Programming – *Certificate* SCADA Systems – *Certificate*	**Applied Engineering & Technologies**	A40200 C40200A C40200G C40200B C40200E
Emergency Medical Science – *AAS Degree*	**Health Sciences**	A45340
EMS (Credentialed Paramedics Bridge) – *AAS Degree*	**Health Sciences**	A45340B
Esthetics Technology - *Certificate*	**Business & Public Services Technologies**	C55230
Facility Maintenance Technology – *AAS Degree* Facility Maintenance Technology - *Diploma* Facility Maintenance Technology: Electrical Systems – *Certificate* Facility Maintenance Technology: HVACR – *Certificate* Basic Facilities Technology I – *Certificate* Basic Facilities Technology II – *Certificate*	**Applied Engineering & Technologies**	A50190 D50190 C50190A C50190B C50190D C50190E
Geomatics Technology – *AAS Degree* Geomatics Tech I – *Certificate* Geomatics Field Tech – *Certificate* Geomatics UAS Tech – *Certificate*	**Applied Engineering & Technologies**	A40420 C40420D C40420E C40420G
Health and Fitness Science – *AAS Degree* Health and Fitness – *Certificate*	**Health Sciences**	A45630 C45630
Hospitality Management – *AAS Degree* Hospitality Management – *Diploma* Hospitality Event Coordinator– *Certificate* Hospitality Hotel Operations – *Certificate* Hospitality Restaurant Management – *Certificate*	**Business & Public Services Technologies**	A25110 D25110A C25110A C25110H C25110D
Human Services Technology Human Services Technology – *AAS Degree* Human Services Technology/Gerontology – *AAS Degree* Human Services Technology/Gerontology – *Certificate* Human Services Technology/Mental Health – *AAS Degree* Human Services Technology/Mental Health – *Certificate* Human Services Technology/Substance Abuse – *AAS Degree* Substance Abuse Counseling - *Certificate* Substance Abuse Intervention – *Certificate*	**Health Sciences**	 A45380 A4538B C4538B A4538C C4538C A4538E C4538ECO C4538EI

CURRICULUM EDUCATION (FOR CREDIT): PROGRAMS OF STUDY

Program Name	Division to Contact	Program Code
Interior Design – *AAS Degree*	**Applied Engineering & Technologies**	A30220
Commercial Interior Design – *Certificate*		C30220C
Décor Focus Interior Design – *Certificate*		C30220B
Residential Interior Design – *Certificate*		C30220A
Magnetic Resonance Imaging - *Diploma*	**Health Sciences**	D45800
Mammography – *Certificate*	**Health Sciences**	C45830
Mechanical Engineering Technology – *AAS Degree*	**Applied Engineering & Technologies**	A40320A
Mechanical Engineering Technology Mechatronics – *AAS Degree*		A40320B
Mechanical Engineering Technology - *Diploma*		D40320A
Electromechanical Analysis – *Certificate*		C40320J
Mechanical Analysis and Design – *Certificate*		C40320K
Mechanical Analysis and Design II – *Certificate*		C40320L
Mechanical Design – *Certificate*		C40320B
Mechatronics – *Certificate*		C40320I
Medical Assisting – *AAS Degree*	**Health Sciences**	A45400
Medical Assisting - *Diploma*		D45400
Medical Laboratory Technology – *AAS Degree*	**Health Sciences**	A45420
Medical Office Administration	**Information Technology**	
Medical Office Administration – Medical Office Professional – *AAS Degree*		A25310P
Medical Office Administration – Medical Billing and Coding – *AAS Degree*		A25310B
Medical Office Administration - Healthcare Administration – *AAS Degree*		A25310H
Medical Office Professional – *Diploma*		D25310P
Medical Office Professional - *Certificate*		C25310P
Medical Sonography – *AAS Degree*	**Health Sciences**	A45440
Network Management – *AAS Degree*	**Information Technology**	A25590NM
Cisco Network Associate - *Certificate*		C25590CA
Cisco Network Professional – *Certificate*		C25590CP
Cisco Security - *Certificate*		C25590CX
Wireless Network - *Certificate*		C25590WN
Office Administration	**Information Technology**	
Office Administration – Office Professional – *AAS Degree*		A25370P
Office Administration - Legal Office – *AAS Degree*		A25370L
Office Professional - *Diploma*		D25370P
Office Professional - *Certificate*		C25370P
Office Administration - Office Software – *Certificate*		C25370S
Office Administration - Legal Office - *Certificate*		C25370L
Pharmacy Technology – *AAS Degree*	**Health Sciences**	A45580A
Pharmacy Technology – *AAS Degree Bridge*		A45580B
Phlebotomy - *Certificate*	**Health Sciences**	C45600
Plumbing - *Diploma*	**Applied Engineering & Technologies**	D35300
Plumbing AHR - *Certificate*		C35300G
Plumbing Applications - *Certificate*		C35300F
Plumbing Concepts – *Certificate*		C35300D
Public Safety Administration – *AAS Degree*	**Business & Public Services Technologies**	A55480
Public Safety Administration – *Leadership Certificate*		C55480L
Radiography – *AAS Degree*	**Health Sciences**	A45700
Simulation and Game Development:	**Information Technology**	
Simulation and Game Development - Art & Modeling – *AAS Degree*		A25450A
Simulation and Game Development - Programming – *AAS Degree*		A25450P
Business for Simulation and Game Development – *Certificate*		C25450G
Fundamentals I for Simulation and Game Development – *Certificate*		C25450D
Fundamentals II for Simulation and Game Development – *Certificate*		C25450E
Level Design - *Certificate*		C25450I
Mobile Game Development – *Certificate*		C25450C
Modeling and Animation – *Certificate*		C25450A
Production – *Certificate*		C25450B
Programming for Simulation and Game Development – *Certificate*		C25450H
Quality Assurance for Simulation and Game Development – *Certificate*		C25450F
Tech Art – *Certificate*		C25450J
Technical Animation - *Certificate*		C25450K

CURRICULUM EDUCATION (FOR CREDIT): PROGRAMS OF STUDY

Program Name	Division to Contact	Program Code
IT – Service and Support – *AAS Degree* Hardware Support and Repair – *Certificate* IT Foundations – *Certificate* IT Help Desk Technician – *Certificate* Networking Support – *Certificate* IT Service Technician - *Certificate*	**Information Technology**	A25590IS C25590HW C25590F C25590HD C25590NS C25590IS
Supply Chain Management: Distribution Management – *AAS Degree* Distribution Management Core – *Certificate* Transportation Management - *Certificate*	**Business & Public Services Technologies**	A25620D C25620DA C25620DB
Supply Chain Management: Global Logistics Technology – *AAS Degree* International Logistics - *Certificate* Logistics Core – *Certificate* Supply Chain - *Certificate*	**Business & Public Services Technologies**	A25620G C25620GB C25620GA C25620GC
Web Designer – *AAS Degree* Web Designer - *Certificate* Advanced Web Designer - *Certificate* Front-End Developer - *Certificate* Web Development Basics - *Certificate*	**Information Technology**	A25590DM C25590DM C25590AW C25590DV C25590WB
Web Developer – *AAS Degree* Web Developer - *Certificate* Advanced Web Developer - *Certificate*	**Information Technology**	A25590WD C25590WD C25590AD
Welding Technology – *AAS Degree* Welding Technology – *Diploma* Welding Technology – *Certificate* Computer Controlled Welding - *Certificate* Fabrication Design – *Certificate*	**Applied Engineering & Technologies**	A50420 D50420 C50420B C50420D C50420C

*Collaborative Agreements

None at this time

Special Notes about Curriculum Programs

Criminal Background Checks
Students should contact their advisors for updates to program offerings. Students admitted to programs that require a clinical or co-op component may be required to provide the college with an official criminal background check in order to meet the requirements of the clinical or co-op site. Convictions for certain crimes and/or evidence of drug use may disqualify students for participating in clinical or co-op experiences, which would limit their progress toward graduation.

Length of Programs
The length of Wake Tech programs is set by the North Carolina Community College System and published in the NCCCS Curriculum Procedures Reference Manual. All Wake Tech degree, diploma, and certificate programs are of the same quality and rigor and meet the same standards for student achievement regardless of the mode of instruction or location (traditional-seated, online, or hybrid). Website: http://curred.waketech.edu/.

Professional Licensure and Certifications

Wake Technical Community College does not offer online academic programs (credit and non-credit) that lead to professional licensure. The College's licensure and certification programs are either tied to the State of North Carolina or are national certifications.

If you intend to pursue professional licenses outside the State of North Carolina once you have completed your academic program at Wake Technical Community College, please refer to the Professional Licensure Section on the college's distance education authorization web page for additional information.

https://www.waketech.edu/online-learning/resources/state-authorization

Remember to check the online College Catalog for the most up-to-date information at
http://www.waketech.edu/student-services/catalog

APPLIED ENGINEERING & TECHNOLOGIES

Applied Engineering & Technologies Division

Dean Lora Eddington
Phone: 919-866-5332
Email: lmeddington@waketech.edu
Website: http://aet.waketech.edu/

Wake Technical Community College awards degrees, diplomas, and certificates in a variety of fields shown below. The highest credential given in each area is listed first, in bold type.

1. Click on the "**Program Name**" to go to the program's web page
2. Click on the "**Program of Study**" to see specific course requirements for that program

Programs may be offered during the day, evening, online, or a combination. Students should refer to Self Serve for the availability of classes. Click to see a list of Wake Tech's programs that can be completed fully online.

Program Name	Program Code
Air Conditioning, Heating, and Refrigeration Technology Commercial Refrigeration Track – *AAS Degree*	A35100A
Air Conditioning, Heating, and Refrigeration Technology Commercial A/C Track – *AAS Degree*	A35100B
Air Conditioning, Heating, and Refrigeration Technology Building Automation Track – *AAS Degree*	A35100C
Air Conditioning, Heating, and Refrigeration Technology *- Diploma*	D35100A
Air Conditioning, Heating, and Refrigeration Technology – *Certificate*	C35100B
Building Automation – *Certificate*	C35100E
Commercial Refrigeration – *Certificate*	C35100F
Commercial A/C – *Certificate*	C35100G
Residential Advanced - *Certificate*	C35100H
Architectural Technology – *AAS Degree*	A40100
Architectural CAD – *Certificate*	C40100A
Architectural Building Design - *Certificate*	C40100L
Architectural Construction Technology - *Certificate*	C40100K
Architectural Graphics - *Certificate*	C40100J
Building Information Modeling (BIM) - *Certificate*	C40100B
Biopharmaceutical Technology – *AAS Degree*	A20180
Pharmaceutical Basics – *Certificate*	C20180E
BioMaintenance – *Certificate*	C20180F
BioQuality - *Certificate*	C20180G
Biotechnology Technology – *AAS Degree*	A20100
Civil Engineering Technology – *AAS Degree*	A40140
Civil Tech I – *Certificate*	C40140D
Civil Design Elements I – *Certificate*	C40140E
Civil Design Elements II – *Certificate*	C40140F
Construction Management Technology – *AAS Degree*	A35190
Basic Construction Estimating – *Certificate*	C35190D
Construction Management Technology: Basic – *Certificate*	C35190C
Construction Safety Management – *Certificate*	C35190E
Electrical Systems Technology – *AAS Degree*	A35130
Electrical Systems Technology – *Diploma*	D35130
Commercial Wiring – *Certificate*	C35130B
Industrial Wiring – *Certificate*	C35130C
Renewable Energy – *Certificate*	C35130E
Residential Wiring – *Certificate*	C35130A
Wiring Methods – *Certificate*	C35130D

Program Name Continued	Program Code
Electronics Engineering Technology – *AAS Degree*	A40200
Basic Electronics **– *Certificate***	C40200A
Embedded Systems **– *Certificate***	C40200G
PLC Programming **– *Certificate***	C40200B
SCADA Systems **– *Certificate***	C40200E
Facility Maintenance Technology – *AAS Degree*	A50190
Facility Maintenance Technology **– *Diploma***	D50190
Facility Maintenance Technology: Electrical Systems **– *Certificate***	C50190A
Facility Maintenance Technology: HVACR **– *Certificate***	C50190B
Basic Facilities Technology I **– *Certificate***	C50190D
Basic Facilities Technology II **– *Certificate***	C50190E
Geomatics Technology – *AAS Degree*	A40420
Geomatics Tech I **– *Certificate***	C40420D
Geomatics Field Tech **– *Certificate***	C40420E
Geomatics UAS Tech - *Certificate*	C40420G
Interior Design – *AAS Degree*	A30220
Commercial Interior Design **– *Certificate***	C30220C
Décor Focus Interior Design **– *Certificate***	C30220B
Residential Interior Design **– *Certificate***	C30220A
Mechanical Engineering Technology – *AAS Degree*	A40320A
Mechanical Engineering Technology Mechatronics – *AAS Degree*	A40320B
Mechanical Engineering Technology **– *Diploma***	D40320A
Electromechanical Analysis **– *Certificate***	C40320J
Mechanical Analysis and Design **– *Certificate***	C40320K
Mechanical Analysis and Design II **– *Certificate***	C40320L
Mechanical Design **– *Certificate***	C40320B
Mechatronics – *Certificate*	C40320I
Plumbing – *Diploma*	D35300
Plumbing AHR **– *Certificate***	C35300G
Plumbing Applications **– *Certificate***	C35300F
Plumbing Concepts **– *Certificate***	C35300D
Welding Technology – *AAS Degree*	A50420
Welding Technology **– *Diploma***	D50420
Welding Technology **– *Certificate***	C50420B
Computer Controlled Welding - *Certificate*	C50420D
Fabrication Design **– *Certificate***	C50420C

*Collaborative Agreements
None at this time

APPLIED ENGINEERING & TECHNOLOGIES

AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY

Air Conditioning, Heating, and Refrigeration Technology Degree: Commercial Refrigeration Track - A35100A

The Air Conditioning, Heating, and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems. Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety.

AAS degree graduates should be able to assist in the start-up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems and should be able to demonstrate an understanding of system selection and balance and advanced systems.

Program Sequence

First Semester
AHR	110	Introduction to Refrigeration	5
AHR	111	HVACR Electricity	3
AHR	112	Heating Technology	4
AHR	180	HVACR Customer Relations	1
AHR	213	HVACR Building Code	2

Second Semester
AHR	113	Comfort Cooling	4
AHR	114	Heat Pump Technology	4
AHR	133	HVAC Servicing	4
ENG	110	Freshman Composition	3
		Major Elective	1

Third Semester
AHR	115	Refrigeration Systems	2
AHR	125	HVACR Electronics	3
BAT	111	Building Automation Systems	2
PSY	118	Interpersonal Psychology	3

Fourth Semester
AHR	211	Residential System Design	3
AHR	212	Advanced Comfort Systems	4
AHR	235	Refrigeration Design	3
MAT	110	Math Measurement and Literacy	3
		Major Elective	2

Fifth Semester
COM	120	Intro to Interpersonal Communication	3
HUM	121	The Nature of America	3
REF	116	Commercial Systems I	4
REF	117	Refrigeration Controls	4

Major Electives
(Select 3 hours from the following courses):
AHR	120	HVACR Maintenance	2
AHR	160	Refrigerant Certification	1
AHR	250	Heating, Venting, and AC Diagnostics	2
BAT	231	BAS Integration	4
BAT	251	Building Automation Controls	3
MNT	110	Intro to Maintenance Procedures	2
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning I	2

Graduation Requirements .... 70 Credit Hours

Air Conditioning, Heating, and Refrigeration Technology Degree: Commercial A/C Track - A35100B

Program Sequence

First Semester
AHR	110	Introduction to Refrigeration	5
AHR	111	HVACR Electricity	3
AHR	112	Heating Technology	4
AHR	180	HVACR Customer Relations	1
AHR	213	HVACR Building Code	2

Second Semester
AHR	113	Comfort Cooling	4
AHR	114	Heat Pump Technology	4
AHR	133	HVAC Servicing	4
ENG	110	Freshman Composition	3
		Major Elective	1

Third Semester
AHR	115	Refrigeration Systems	2
AHR	125	HVACR Electronics	3
BAT	111	Building Automation Systems	2
PSY	118	Interpersonal Psychology	3

Fourth Semester
AHR	212	Advanced Comfort Systems	4
AHR	215	Commercial HVAC Controls	2
AHR	250	Heating, Venting, and AC Diagnostics	2
MAT	110	Math Measurement and Literacy	3
		Major Elective	2

Fifth Semester
AHR	140	All-Weather Systems	2
AHR	211	Residential System Design	3
AHR	240	Hydronic Heating	2
AHR	245	Chiller Systems	2
COM	120	Intro to Interpersonal Communication	3
HUM	121	The Nature of America	3

Major Electives
(Select 3 hours from the following courses):
AHR	120	HVACR Maintenance	2
AHR	160	Refrigerant Certification	1
AHR	235	Refrigeration Design	3
BAT	231	BAS Integration	4
BAT	251	Building Automation Controls	3
MNT	110	Intro to Maintenance Procedures	2
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning I	2

Graduation Requirements .... 69 Credit Hours

APPLIED ENGINEERING & TECHNOLOGIES

Air Conditioning, Heating, and Refrigeration Technology Degree: Building Automation Track - A35100C

Program Sequence

First Semester

AHR	110	Introduction to Refrigeration	5
AHR	111	HVACR Electricity	3
AHR	112	Heating Technology	4
AHR	180	HVACR Customer Relations	1
AHR	213	HVACR Building Code	2

Second Semester

AHR	113	Comfort Cooling	4
AHR	114	Heat Pump Technology	4
AHR	133	HVAC Servicing	4
ENG	110	Freshman Composition	3
		Major Elective	1

Third Semester

AHR	115	Refrigeration Systems	2
AHR	125	HVACR Electronics	3
BAT	111	Building Automation Systems	2
PSY	118	Interpersonal Psychology	3

Fourth Semester

AHR	215	Commercial HVAC Controls	2
BAT	212	BAT Logic and Programming	3
BAT	221	BAS Networking	3
MAT	110	Math Measurement and Literacy	3
		Major Elective	2

Fifth Semester

AHR	211	Residential System Design	3
BAT	231	BAS Integration	4
BAT	251	Building Automation Controls	3
COM	120	Intro to Interpersonal Communication	3
HUM	121	The Nature of America	3

Major Electives
(Select 3 hours from the following courses):

AHR	120	HVACR Maintenance	2
AHR	160	Refrigerant Certification	1
AHR	212	Advanced Comfort Systems	4
AHR	235	Refrigeration Design	3
AHR	250	Heating, Venting, and AC Diagnostics	2
MNT	110	Intro to Maintenance Procedures	2
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning I	2

Graduation Requirements .... 70 Credit Hours

Air Conditioning, Heating, and Refrigeration Technology Diploma - D35100A

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. Diploma graduates should be able to assist in the start-up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems.

Program Sequence

First Semester

AHR	110	Introduction to Refrigeration	5
AHR	111	HVACR Electricity	3
AHR	112	Heating Technology	4
AHR	180	HVACR Customer Relations	1
AHR	213	HVACR Building Code	2

Second Semester

AHR	113	Comfort Cooling	4
AHR	114	Heat Pump Technology	4
AHR	133	HVAC Servicing	4
ENG	110	Freshman Composition	3
		Major Elective	1

Third Semester

AHR	115	Refrigeration Systems	2
AHR	125	HVACR Electronics	3
BAT	111	Building Automation Systems	2
PSY	118	Interpersonal Psychology	3

Major Electives
(Select 1 hour from the following courses):

AHR	120	HVACR Maintenance	2
AHR	160	Refrigerant Certification	1
AHR	212	Advanced Comfort Systems	4
AHR	235	Refrigeration Design	3
AHR	250	Heating, Venting, and AC Diagnostics	2
MNT	110	Intro to Maintenance Procedures	2
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning I	2

Graduation Requirements .... 41 Credit Hours

Air Conditioning, Heating, and Refrigeration Technology Evening Certificate - C35100B

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The certificate program covers air conditioning, furnaces, tools, and instruments. Certificate graduates should be able to assist in the start-up, preventive maintenance, service, repair, and/or installation of residential systems.

Program Sequence

First Semester

AHR	110	Introduction to Refrigeration	5
AHR	111	HVACR Electricity	3
AHR	112	Heating Technology	4

Second Semester

AHR	180	HVACR Customer Relations	1
AHR	213	HVACR Building Code	2

Graduation Requirements .... 15 Credit Hours

Building Automation Certificate – C35100E

The Air Conditioning, Heating, and Refrigeration Technology Building Automation Certificate is designed for individuals interested in the basics of how to implement building automation controls within the commercial HVAC context. Topics include HVACR electricity, electronics, system design, automation, and energy management concepts.

Program Sequence

First Semester
BAT   111   Building Automation Systems..................................2

Second Semester
AHR   111   HVACR Electricity 3
BAT   212   BAT Logic and Programming..................................3
BAT   221   BAS Networking 3

Third Semester
BAT   231   BAS Integration 4
BAT   251   Building Automation Controls 3

Graduation Requirements .... 18 Credit Hours

Commercial Refrigeration Certificate – C35100F

The Air Conditioning, Heating, and Refrigeration Technology Commercial Certificate is designed for individuals wishing to learn about commercial refrigeration systems. Topics covered in this certificate program include basic refrigeration processes used in mechanical refrigeration and air conditioning systems, electricity, the fundamentals of heating, hydronic heating systems, and the fundamentals of liquid chilling equipment. Certificate graduates should be able to assist in the startup, preventive maintenance, service, repair, and installation of commercial systems.

Program Sequence

First Semester
AHR   110   Introduction to Refrigeration 5
AHR   235   Refrigeration Design..3

Second Semester
AHR   115   Refrigeration Systems...2
REF   116   Commercial Systems I 4
REF   117   Refrigeration Controls...4

Graduation Requirements .... 18 Credit Hours

Commercial A/C Certificate – C35100G

Program Sequence

First Semester
AHR   110   Introduction to Refrigeration 5
AHR   112   Heating Technology 4

Second Semester
AHR   212   Advanced Comfort Systems 4
AHR   240   Hydronic Heating 2
AHR   245   Chiller Systems...2

Graduation Requirements .... 17 Credit Hours

Residential Advanced Certificate – C35100H
Program Sequence

First Semester
AHR   113   Comfort Cooling...4
AHR   114   Heat Pump Technology 4
AHR   133   HVAC Servicing 4

Second Semester
AHR   180   HVACR Customer Relations....................................1
AHR   213   HVACR Building Code..2

Graduation Requirements .... 15 Credit Hours

ARCHITECTURAL TECHNOLOGY

Architectural Technology Degree - A40100

The Architectural Technology curriculum provides individuals with knowledge and skills that can lead to employment in the field of architecture or one of the associated professions.

Students receive instruction in construction document preparation, materials and methods, environmental and structural systems, building codes and specifications, and computer applications as well as complete a design project. Optional courses may be provided to suit specific career needs.

Upon completion, graduates have career opportunities within the architectural, engineering, and construction professions as well as positions in industry and government.

Program Sequence

First Semester
ARC   111   Introduction to Architectural Technology 3
ARC   112   Construction Materials & Methods 4
ARC   114   Architectural CAD..2
ARC   114A   Architectural CAD Lab..1
ARC   250   Survey of Architecture 3
ENG   111   Writing and Inquiry 3

Second Semester
ARC   113   Residential Architectural Technology 3
ARC   212   Commercial Construction Technology 3
ARC   225   Architectural BIM I 2
ARC   225A   Architectural BIM I Lab 1
ARC   264   Digital Architecture 2
MAT   121   Algebra/Trigonometry I...3

Third Semester
HUM 115   Critical Thinking..3

Fourth Semester
ARC   131   Building Codes 3
ARC   132   Specifications & Contracts 2

ARC 211 Light Construction Technology 3
ARC 230 Environmental Systems 4
ARC 240 Site Planning... 3
         Major Elective……………………………………….. 2

Fifth Semester
ARC 141 Elementary Structures for Architecture 4
ARC 213 Design Project.. 4
ENG 114 Professional Research & Reporting........................... 3
SST 140 Green Building and Design Concepts........................ 3
         Major Elective……………………………………….. 3

Sixth Semester
PSY 150 General Psychology.. 3

Major Electives
(Select 5 hours from the following courses):
ARC 220 Advanced Architectural CAD 2
ARC 226 Architectural BIM II.. 2
ARC 226A Architectural BIM II Lab.. 1
ARC 231 Architectural Presentations 4
ARC 235 Architectural Portfolio... 3
WBL 111 Work-Based Learning I 1
WBL 112 Work-Based Learning I 2

Graduation Requirements .... 70 Credit Hours

Architectural CAD Certificate - C40100A

The evening Architectural CAD certificate is designed for students employed full-time in architectural engineering or construction positions that require microcomputer knowledge. Courses include basic hands-on architectural drafting in residential construction and computer courses in different types of computer-aided drafting software from basic to advanced levels.

Opportunities for employment exist as junior technicians within architectural practices and engineering and contracting companies.

Courses in this program can be transferred directly into the Architectural Technology associate degree program.

Program Sequence

First Semester
ARC 111 Introduction to Architectural Technology..................... 3
ARC 112 Construction Materials & Methods............................. 4
ARC 114 Architectural CAD 2
ARC 114A Architectural CAD Lab 1

Second Semester
ARC 113 Residential Architectural Technology.......................... 3
ARC 212 Commercial Construction Technology........................ 3
ARC 220 Advanced Architectural CAD 2

Graduation Requirements .... 18 Credit Hours

Building Information Modeling (BIM) Certificate – C40100B

The Building Information Modeling Certificate presents coursework in civil/surveying CAD, architectural building information modeling, commercial construction technology, and additional topics.

Program Sequence

First Semester
ARC 211 Light Construction Technology....................................3
ARC 225 Architectural BIM I 2
ARC 225A Architectural BIM I Lab 1
ARC 264 Digital Architecture 2

Second Semester
ARC 212 Commercial Construction Technology 3
ARC 226 Architectural BIM II 2
ARC 226A Architectural BIM II Lab 1
ARC 231 Architectural Presentations 4

Graduation Requirements ....18 Credit Hours

Architectural Graphics Certificate – C40100J

The Architectural Graphics Certificate is an upper level certificate that requires students to take content from hand drawing, CAD software, BIM software, Adobe Photoshop, and additional elective courses to prepare students in generating higher level architectural rendering and portfolio graphics skills.

First Semester
ARC 111 Introduction to Architectural Technology 3
ARC 114 Architectural CAD...2
ARC 114A Architectural CAD Lab 1
ARC 225 Architectural BIM I 2
ARC 225A Architectural BIM I Lab 1

Second Semester
ARC 231 Architectural Presentations 4
ARC 235 Architectural Portfolio 3
ARC 264 Digital Architecture 2

Graduation Requirements ....18 Credit Hours

Architectural Construction Technology Certificate – C40100K

This certificate focuses on students' understanding, knowledge, and application of architectural construction technology as it relates to use of software with residential and commercial building construction. After completion of this certificate, students will be able to apply construction knowledge through building codes, systems, contracts, and specifications, and generate detailed architectural drawings using both CAD and BIM software.

First Semester
ARC 113 Residential Architectural Technology 3

Second Semester
ARC 131 Building Codes 3
ARC 211 Light Construction Technology....................................3

Third Semester
ARC 132 Specifications & Contracts 2
ARC 212 Commercial Construction Technology 3
ARC 230 Environmental Systems..4

Graduation Requirements .... 18 Credit Hours

Architectural Building Design Certificate – C40100L

The Architectural Building Design Certificate demonstrates students' skills and knowledge as it relates to basic building design concepts. As part of this certificate, students will complete a final design project to demonstrate an understanding and knowledge of basic architectural design systems.

Program Sequence

First Semester
ARC 131   Building Codes 3
ARC 240   Site Planning 3

Second Semester
ARC 141   Elementary Structures for Architecture 4
ARC 213   Design Project 4
ARC 230   Environmental Systems 4

Graduation Requirements .... 18 Credit Hours

BIOPHARMACEUTICAL TECHNOLOGY

Biopharmaceutical Technology Degree - A20180

The Biopharmaceutical Technology curriculum is designed to prepare graduates for employment in pharmaceutical manufacturing and related industries, including chemical quality assurance, microbiological quality assurance, product inspection, documentation review, manufacturing, and product/process validation.

Program Sequence

First Semester
BPM 110   Bioprocess Practices 5
CIS 110   Introduction to Computers 3
ENG 111   Writing and Inquiry 3
ISC 121   Environmental Health & Safety 3
PTC 110   Industrial Environment 3

Second Semester
BIO 110   Principles of Biology 4
CHM 131   Introduction to Chemistry 3
CHM 131A   Introduction to Chemistry Lab 1
MAT 121   Algebra/Trigonometry I 3
PTC 120   Pharmaceutical Quality Control 4
            English/Communication Elective 3

Third Semester
            Major Elective 2

Fourth Semester
CHM 132   Organic and Biochemistry 4

ELN 260   Prog Logic Controllers 4
ISC 278   cGMP Quality Systems 2
MNT 110   Intro to Maintenance Procedures 2
PTC 212   Applied Microbiology 4

Fifth Semester
HUM 110   Technology and Society 3
ISC 280   Validation Fundamentals 2
MNT 270   Bioprocess Equipment Maintenance 2
PTC 210   Pharmaceutical Industrial Processes 4
            Social Science Elective 3

English/Communication Electives
(Select 3 hours from the following courses):
ENG 112   Writing and Research in the Disciplines 3
ENG 114   Professional Research & Reporting 3

Social Science Electives
(Select 3 hours from the following courses):
PSY 118   Interpersonal Psychology 3
PSY 150   General Psychology 1

Major Electives
(Select 2 hours from the following courses):
BTC 150   Bioethics 3
WBL 112   Work-Based Learning I 2

Graduation Requirements .... 67 Credit Hours

Pharmaceutical Basics Certificate - C20180E

The courses in this certificate provide instruction on the basics of pharmaceutical manufacturing, the environment, quality, and bio-processes.

Program Sequence

First Semester
BPM 110   Bioprocess Practices 5
PTC 110   Industrial Environment 3

Second Semester
PTC 120   Pharmaceutical Quality Control 4

Graduation Requirements .... 12 Credit Hours

BioMaintenance Certificate - C20180F

This certification provides instruction on maintenance procedures and equipment control. Emphasis is placed on cGMP, OSHA regulations, and manufacturing processes applicable to the biopharmaceutical industry.

Program Sequence

First Semester
BPM 110   Bioprocess Practices 5
PTC 110   Industrial Environment 3
MNT 110   Intro to Maintenance Procedures 2

Second Semester
ELN 260   Prog Logic Controllers 4
PTC 120   Pharmaceutical Quality Control 4

Graduation Requirements .... 18 Credit Hours

APPLIED ENGINEERING & TECHNOLOGIES

BioQuality Certificate - C20180G

This certification provides instruction on quality concepts. Emphasis is placed on quality control and assurance, validation, and bioprocessing practices applicable to the biopharmaceutical industry.

Program Sequence

First Semester
BPM	110	Bioprocess Practices	5
MNT	110	Intro to Maintenance Procedures	2
PTC	110	Industrial Environment	3

Second Semester
ELN	260	Prog Logic Controllers	4
MNT	270	Bioprocess Equipment Maintenance	2

Graduation Requirements   16 Credit Hours

BIOTECHNOLOGY TECHNOLOGY

Biotechnology Technology Degree - A20100

The Biotechnology curriculum, which has emerged from molecular biology and chemical engineering, is designed to meet the increasing demands for skilled laboratory technicians in various fields of biological and chemical technology.

Course work emphasizes biology, chemistry, mathematics, and technical communications. The curriculum objectives are designed to prepare graduates to serve in three distinct capacities: research assistant to a biologist or chemist, laboratory technician/instrumentation technician, and quality control/quality assurance technician.

Graduates should be qualified for employment in various areas of industry and government, including research and development, manufacturing, sales and customer service.

The Biotechnology AAS degree focuses on the application of the biological sciences, biochemistry, and genetics to the preparation of new and enhanced agricultural, environmental, clinical, and industrial products, including the commercial exploitation of microbes, plants, and animals. Potential course work includes instruction in general biology, general and organic chemistry, physics, biochemistry, molecular biology, immunology, microbiology, genetics, and cellular biology.

Program Sequence

First Semester
BIO	111	General Biology I	4
BTC	181	Basic Laboratory Techniques	4
ENG	111	Writing and Inquiry	3
ISC	121	Environmental Health & Safety	3
MAT	171	Precalculus Algebra	4

Second Semester
BIO	112	General Biology II	4
BTC	281	Bioprocess Techniques	4
CHM	151	General Chemistry I	4
CIS	110	Introduction to Computers	3

Third Semester
		Major Elective	2

Fourth Semester
BIO	250	Genetics	4
BTC	275	Industrial Microbiology	4
CHM	132	Organic and Biochemistry	4
ENG	112	Writing and Research in the Disciplines	3

Fifth Semester
BTC	150	Bioethics	3
BTC	270	Recombinant DNA Technology	4
BTC	285	Cell Culture	3
HUM	110	Technology and Society	3
PSY	150	General Psychology	3

Major Electives
(Select 2 hours from the following courses):
ISC	278	cGMP Quality Systems	2
WBL	112	Work-Based Learning I	2

Graduation Requirements.................................. 66 Credit Hours

CIVIL ENGINEERING TECHNOLOGY

Civil Engineering Technology Degree - A40140

The Civil Engineering Technology curriculum provides the application of relevant theory of engineering needed by technicians to carry out planning and supervisory tasks in the construction of transportation systems, residential and commercial buildings, bridges, dams, and water and wastewater treatment systems.

Course work includes the communication and computational skills required to support the fields such as materials testing, structures, estimating, project management, hydraulics, environmental technology, and surveying. Additional course work will cover the operation of computers and application software including computer-aided drafting.

Graduates should qualify for technician-level jobs with both public and private engineering, construction, and surveying agencies and are also eligible to continue on at East Carolina University and UNC-Charlotte as a junior.

Program Sequence

First Semester
CEG	151*	CAD for Engineering Technology	3
EGR	115	Intro to Technology	3
EGR	115A	Intro to Technology Lab	1
SRV	110	Surveying I	4
		Math Elective	3

Second Semester
CEG	111	Introduction to GIS and Gnss	4
CIV	125	Civil/Surveying CAD	3
ENG	111	Writing and Inquiry	3
SRV	111	Surveying II	4
UAS	111	Unmanned Aircraft Systems	3

Third Semester
ENG	112	Writing and Research in the Disciplines	3
UAS	150	UAS Flight Simulation	3

Fourth Semester

CEG 210	Construction Materials & Methods	3
CEG 211	Hydrology & Erosion Control	3
EGR 251	Statics	3
GIS 121	Georeferencing & Mapping	3
PSY 150	General Psychology	3

Fifth Semester

CEG 212	Introduction to Environmental Tech	3
CEG 230	Subdivision Planning & Design	3
CEG 235	Project Management and Estimating	3
CIV 111	Soils and Foundations	4
EGR 252	Strength of Materials	3

Sixth Semester

PHI 240	Introduction to Ethics	3
	Major Elective	2

Math Electives
(Select 3 hours from the following courses):

MAT 121	Algebra/Trigonometry I	3
MAT 171	Precalculus Algebra	4

Major Electives
(Select 2 hours from the following courses):

ISC 121	Environmental Health & Safety	3
MAT 172	Precalculus Trigonometry	4
SRV 240	Topo/Site Surveying	4
UAS 230	UAS Aerial Photo Survey	3
WBL 112	Work-Based Learning I	2
WBL 120	Career Readiness, Explor, & Employ	3

*DFT 151 may substitute for CEG 151.

Graduation Requirements .... 73 Credit Hours

Civil Engineering Technology: Civil Tech I - C40140D

This certificate introduces the primary fundamental elements of Civil Engineering Technology.

Program Sequence
First Semester

CEG 151	CAD for Engineering Technology	3
EGR 115	Intro to Technology	3
EGR 115A	Intro to Technology Lab	1

Second Semester

CEG 111	Introduction to GIS and Gnss	4
CIV 125	Civil/Surveying CAD	3

Graduation Requirements .... 14 Credit Hours

Civil Engineering Technology: Civil Design Elements I – C40140E

This certificate includes courses that demonstrate an understanding of a variety of upper-level topics included in the Civil Engineering Technology field.

Program Sequence
First Semester

CEG 210	Construction Materials & Methods	3

CEG 211	Hydrology & Erosion Control	3
EGR 251	Statics	3

Second Semester

CIV 111	Soils and Foundations	4
EGR 252	Strength of Materials	3

Graduation Requirements .... 16 Credit Hours

Civil Engineering Technology: Civil Design Elements II – C40140F

This certificate includes courses that demonstrate a thorough understanding of Civil Engineering Technology design processes and calculations.

Program Sequence
First Semester

CEG 212	Introduction to Environmental Tech	3
CIV 125	Civil/Surveying CAD	3

Second Semester

CEG 230	Subdivision Planning & Design	3
CEG 235	Project Management and Estimating	3

Graduation Requirements .... 12 Credit Hours

CONSTRUCTION MANAGEMENT TECHNOLOGY

Construction Management Technology Degree - A35190

The Construction Management Technology curriculum is designed to provide training for individuals interested in project management and other related positions in the construction industry.

Coursework focuses on such topics as construction materials, methods and techniques of modern construction, building codes, contractor licensing law, contractor business law, OSHA and safety on the construction site, project management, project scheduling, project costs and productivity, residential and commercial estimating, residential and commercial blueprint reading, and human relations issues in the construction industry.

Graduates should quality for entry-level positions as project manager assistants, site superintendents, construction foremen, building inspectors, estimators, and other construction management-related jobs.

Program Sequence

First Semester

BPR 130	Print Reading - Construction	3
CMT 112	Construction Management I	6
CMT 120	Codes and Inspections	3
MAT 121	Algebra/Trigonometry I	3

Second Semester

BPR 230	Commercial Blueprints	2
CMT 210	Construction Management Fund	3

CMT	212	Total Safety Performance	3
ENG	110	Freshman Composition	3
SST	140	Green Building and Design Concepts	3

Third Semester

| COM | 120 | Intro to Interpersonal Communication | 3 |
| PSY | 118 | Interpersonal Psychology | 3 |

Fourth Semester

ACC	120	Principles of Financial Accounting	4
CMT	214	Planning and Scheduling	3
CMT	218	Human Relations Issues	3
CST	150	Building Science	3
CST	241	Planning/Estimating I	3

Fifth Semester

BUS	139	Entrepreneurship I	3
CIV	240	Project Management	3
CMT	216	Costs and Productivity	3
CST	242	Planning/Estimating II	4
HUM	115	Critical Thinking	3

Sixth Semester

| | | Major Elective | 2 |

Major Electives

(Select 2 hours from the following courses):

| CMT | 226 | Applications Project | 3 |
| WBL | 112 | Work-Based Learning I | 2 |

Graduation Requirements.....................................69 Credits Hours

Construction Management Technology: Basic Certificate – C35190C

The Construction Management Technology Basic Certificate is designed for individuals already in the construction industry who want to study the basic principles of construction management. Topics include safety/OSHA regulations and compliance, residential and commercial blueprint reading, project planning and scheduling, human relations, issues, and professional construction supervision.

Individuals who complete this certificate will have taken an essential step in the process of qualifying as a construction project manager, superintendent, foreman, or estimator.

Program Sequence

First Semester

| BPR | 130 | Print Reading - Construction | 3 |
| CMT | 112 | Construction Management I | 6 |

Second Semester

BPR	230	Commercial Blueprints	2
CIV	240	Project Management	3
CMT	210	Construction Management Fund	3

Graduation Requirements.....................................17 Credits Hours

Construction Management Technology: Basic Construction Estimating – C35190D

The Basic Construction Estimating Certificate provides instruction on print-reading, planning, estimating, and other related topics.

Program Sequence

First Semester

ACC	120	Principles of Financial Accounting	4
CMT	214	Planning and Scheduling	3
CST	241	Planning/Estimating I	3

Second Semester

| CMT | 216 | Costs and Productivity | 3 |
| CST | 242 | Planning/Estimating II | 4 |

Graduation Requirements................................... 17 Credits Hours

Construction Management Technology: Construction Safety Management – C35190E

The Construction Safety Management Certificate provides instruction on construction management fundamentals, safety performance, OSHA, and other related topics.

Program Sequence

First Semester

| CMT | 120 | Codes and Inspections | 3 |
| CMT | 210 | Construction Management Fund | 3 |

Second Semester

CMT	212	Total Safety Performance	3
CMT	218	Human Relations Issues	3
SST	140	Green Building and Design Concepts	3

Graduation Requirements................................... 15 Credits Hours

ELECTRICAL SYSTEMS TECHNOLOGY

Electrical Systems Technology Degree - A35130

The Electrical Systems Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential, commercial, and industrial facilities.

Training, most of which is hands-on, will include such topics as photovoltaic AC/DC theory, basic wiring practices, programmable logic controllers, industrial motor controls, the National Electrical Code, and other subjects as local needs require.

Graduates should qualify for a variety of jobs in the electrical field as an on-the-job trainee or apprentice assisting in the layout, installation, and maintenance of electrical systems.

Program Sequence

First Semester

BPR	130	Print Reading-Construction	3
ELC	112	DC/AC Electricity	5
ELC	113	Residential Wiring	4
ELC	118	National Electrical Code	2
ELC	126	Electrical Computations	3

Second Semester

ELC	114	Commercial Wiring	4
ELC	117	Motors and Controls	4
ELC	119	NEC Calculations	2
ENG	110	Freshman Composition	3

Third Semester

ELC	128	Introduction to PLC	3
ISC	121	Environmental Health & Safety	3
		Major Elective	3

Fourth Semester

ELC	115	Industrial Wiring	4
HUM	115	Critical Thinking	3
MAT	110	Math Measurement and Literacy	3
		Major Elective	3
		Work-Based Learning Elective	2

Fifth Semester

COM	120	Intro to Interpersonal Communication	3
ELC	127	Software for Technicians	2
ELC	134	Transformer Applications	2
PSY	118	Interpersonal Psychology	3
		Major Elective	3

Major Electives List I – Renewable Energy Track
(Select 9 hours from the following courses):

ALT	120	Renewable Energy Technologies	3
ELC	220	Photovoltaic System Technology	3
ELC	221	Advanced Photovoltaic System Design	3

Major Electives List II - Business Track
(Select 9 hours from the following courses):

BUS	110	Introduction to Business	3
BUS	115	Business Law I	3
BUS	139	Entrepreneurship I	3

Work-Based Learning Elective List
(Select 2 hours from the following courses):

ELC	121	Electrical Estimating	2
WBL	112	Work-Based Learning I	2

Graduation Requirements .... 67 Credit Hours

Electrical Systems Technology Diploma - D35130

The Electrical Systems Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential, commercial, and industrial facilities.

Training, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, programmable logic controllers, industrial motor controls, the National Electrical Code, and other subjects as local needs require.

Diploma graduates should qualify for a variety of jobs in the electrical field as an on-the-job trainee or apprentice assisting in the layout, installation, and maintenance of electrical/electronic systems.

Program Sequence

First Semester

ELC	112	DC/AC Electricity	5
ELC	113	Residential Wiring	4
ELC	118	National Electrical Code	2

ELC	126	Electrical Computations	3
ENG	110	Freshman Composition	3

Second Semester

BPR	130	Print Reading-Construction	3
ELC	114	Commercial Wiring	4
ELC	117	Motors and Controls	4
ELC	119	NEC Calculations	2
PSY	118	Interpersonal Psychology	3

Third Semester

ALT	120	Renewable Energy Technologies	3
ELC	128	Introduction to PLC	3

Graduation Requirements .... 39 Credit Hours

Residential Wiring Certificate – C35130A

The Residential Wiring Certificate will introduce students to the National Electric Code and how it applies to residential applications. Students will learn how to install residential circuits, interpret the NEC, and read blueprints for residential installations.

Program Sequence

First Semester

BPR	130	Print Reading-Construction	3
ELC	112	DC/AC Electricity	5

Second Semester

ELC	113	Residential Wiring	4
ELC	118	National Electrical Code	2

Graduation Requirements .... 14 Credit Hours

Commercial Wiring Certificate – C35130B

The Commercial Wiring Certificate provides an understanding of the National Electric Code as well as how to install commercial wiring systems. Students will learn how to bend conduit, install raceways, and use the NEC to calculate wiring sizing for residential and commercial applications.

Program Sequence

First Semester

ELC	114	Commercial Wiring	4
ELC	117	Motors and Controls	4

Second Semester

ELC	119	NEC Calculations	2
ELC	121	Electrical Estimating	2

Graduation Requirements .... 12 Credit Hours

Industrial Wiring Certificate – C35130C

The Industrial Wiring Certificate focuses on the NEC as it applies to industrial installations including hazardous locations installing rigid conduit. Students will also work with transformers and programmable logic controllers used in the industry.

Program Sequence

First Semester

ELC	115	Industrial Wiring	4
ELC	128	Introduction to PLC	3

Second Semester
ELC 134 Transformer Applications 2
ISC 121 Environmental Health & Safety 3

Graduation Requirements .... 12 Credit Hours

Wiring Methods Certificate – C35130D

The Wiring Methods Certificate is a mixture of both residential and commercial training that focuses on the wiring methods for each type of installation. Students will also learn how to interpret the National Electric Code as it applies to residential and commercial installations and calculations.

Program Sequence

First Semester
ELC 113 Residential Wiring 4
ELC 114 Commercial Wiring... 4

Second Semester
ELC 118 National Electrical Code... 2
ELC 119 NEC Calculations 2

Graduation Requirements .... 12 Credit Hours

Renewable Energy Certificate – C35130E

The Renewable Energy Certificate provides knowledge of alternative and renewable energy that will not only help the environment but can provide power for entire communities, countries, and even the world. The focus of the certificate is hand-on Photovoltaic Systems training and how they can be applied to harness the energy from the sun in accordance with the NAMCEP standards.

Program Sequence

First Semester
ELC 112 DC/AC Electricity.. 5

Second Semester
ALT 120 Renewable Energy Technologies 3
Third Semester
ELC 220 Photovoltaic System Technology................................ 3

Fourth Semester
ELC 221 Advanced Photovoltaic System Design 3

Graduation Requirements .... 14 Credit Hours

ELECTRONICS ENGINEERING TECHNOLOGY

Electronics Engineering Technology Degree - A40200

The Electronics Engineering Technology curriculum is designed to prepare individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems.

A broad-based core of courses, including basic electricity, solid-state fundamentals, digital concepts, and microprocessors, ensures the student will develop the skills necessary to perform entry-level tasks. Emphasis is placed on developing the student's ability to analyze and troubleshoot electronic systems.

Graduates should qualify for employment as engineering assistants or electronic technicians with job titles such as electronics engineering technician, field service technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

Program Sequence

First Semester
ELC 131 Circuit Analysis I...4
ELC 131A Circuit Analysis I Lab...1
ELN 133 Digital Electronics...4
ENG 111 Writing and Inquiry...3
MAT 121 Algebra/Trigonometry I...3

Second Semester
ELN 131 Analog Electronics I..4
ELN 260 Prog Logic Controllers 4
ELN 275 Troubleshooting...2
HUM 110 Technology and Society 3
PSY 118 Interpersonal Psychology 3

Third Semester
ELN 132 Analog Electronics II...4
ELN 231 Industrial Controls...3

Fourth Semester
CSC 133 C Programming 3
ELN 232 Introduction to Microprocessors 4
ELN 234 Communication Systems...4
        Major Elective 3

Fifth Semester
ELN 150 Computer-Aided Drafting for Electronics 2
ELN 233 Microprocessor Systems 4
ELN 235 Data Communication Systems 4
ENG 114 Professional Research & Reporting 3
        Major Elective 3

Major Electives
(Select 6 hours from the following courses):
ATR 214 Advanced PLCs..4
ATR 215 Sensors and Transducers 3
PCI 172 SCADA Systems 4
PCI 262 Intro to Process Control...4
WBL 111 Work-Based Learning I..1
WBL 112 Work-Based Learning I..2

Graduation Requirements ....68 Credit Hours

Basic Electronics Certificate - C40200A

The Basic Electronics certificate provides the student with a program of study necessary for developing basic electronic skills. The student will gain an understanding of AC/DC basic circuits, digital circuits, and basic electronic devices. Courses are an adjunct of the Electronics Engineering Technology program and may be

transferred directly toward completion of the A.A.S. degree in Electronics Engineering Technology.

Program Sequence

First Semester
ELC 131 Circuit Analysis I.. 4
ELC 131A Circuit Analysis I Lab.. 1
ELN 133 Digital Electronics... 4

Second Semester
ELN 131 Analog Electronics I 4
ELN 275 Troubleshooting 2

Graduation Requirements .... 15 Credit Hours

PLC Programming Certificate - C40200B

The PLC Programming Certificate provides the student with the basic technical skills and knowledge necessary to work with the Programmable Logic Controllers typically found in an industrial environment. The program investigates the operation and programming of PLCs and the interfacing of PLCs to electronic devices and sensors routinely found in industrial controls. Students entering the program are expected to have a basic knowledge of AC and DC electrical circuits.

Program Sequence

First Semester
ATR 215 Sensors and Transducers.. 3
ELN 260 Prog Logic Controllers.. 4

Second Semester
ELN 231 Industrial Controls 3

Third Semester
ATR 214 Advanced PLCs 4

Graduation Requirements .... 14 Credit Hours

SCADA Systems Certificate - C40200E

The SCADA Systems Certificate provides the student with technical skills and knowledge necessary to work with data acquisition systems commonly found in industrial process control applications. The program includes the operation, programming, and interfacing of PLCs as well as using data acquisition software to monitor, gather, and process real-time data. Students entering the program are expected to have a basic knowledge of AC and DC electrical circuits.

Program Sequence

First Semester
ATR 215 Sensors and Transducers.. 3
ELN 260 Prog Logic Controllers.. 4

Second Semester
ATR 214 Advanced PLCs 4
PCI 172 SCADA Systems... 4

Graduation Requirements .... 15 Credit Hours

Embedded Systems Certificate – C40200G

The Embedded Systems Certificate program provides the student with the technical skills and knowledge necessary to work in the design and development of embedded systems commonly found in industrial control, communications, and building automation. The program includes coursework in digital electronics, C programming, and programming and interfacing microprocessors and microcontrollers. Students entering the program are expected to have a basic knowledge of electrical circuits.

Program Sequence

First Semester
ELN 133 Digital Electronics 4

Second Semester
CSC 133 C Programming 3
ELN 232 Introduction to Microprocessors 4

Third Semester
ELN 233 Microprocessor Systems 4

Graduation Requirements .... 15 Credit Hours

FACILITY MAINTENANCE TECHNOLOGY

Facility Maintenance Technology Degree – A50190

The Facility Maintenance Technology curriculum prepares individuals to repair and maintain electrical and mechanical systems and physical structures of commercial and industrial institutions. Emphasis is on multi-disciplined systems maintenance, troubleshooting, and problem resolution.

Course work includes plumbing, electrical, air conditioning, heating, blueprint reading, building codes, and OSHA regulations, as well as computer applications.

Graduates should qualify for positions as general building mechanics or maintenance technician.

Program Sequence

First Semester
AHR 110 Introduction to Refrigeration 5
AHR 112 Heating Technology.. 4
BPR 130 Print Reading-Construction 3
ELC 118 National Electrical Code 2
ELC 131* Circuit Analysis I 4

Second Semester
AHR 120 HVACR Maintenance 2
ELC 114 Commercial Wiring 4
ENG 110 Freshman Composition 3
MNT 110 Intro to Maintenance Procedures 2

Third Semester
BAT 111 Building Automation Systems..................................... 2
ELC 127 Software for Technicians 2
ELN 231 Industrial Controls... 3

| | | Major Elective | 2 |

Fourth Semester

AHR	215	Commercial HVAC Controls	2
BAT	221	BAS Networking	3
BAT	251	Building Automation Controls	3
COM	120	Intro to Interpersonal Communication	3
ELN	235	Data Communication Systems	4

Fifth Semester

HUM	110	Technology and Society	3
ISC	121	Environmental Health & Safety	3
MAT	110	Math Measurement & Literacy	3
PSY	118	Interpersonal Psychology	3
		Major Elective	3

Major Electives

(Select 5 hours from the following courses):

AHR	113	Comfort Cooling	4
BAT	212	BAT Logic and Programming	3
ELC	113	Residential Wiring	4
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning I	2

*ELC 112 is an allowable substitution for ELC 131.

Graduation Requirements .... 68 Credit Hours

Facility Maintenance Technology Diploma – D50190

The Facility Maintenance Technology Diploma prepares individuals to repair and maintain electrical and mechanical systems in commercial and industrial institutions. Emphasis is placed on multi-disciplined systems maintenance, troubleshooting, and problem resolution. Included in the program are courses in air conditioning, heating, refrigeration, electrical, building automation and print reading. Graduates should qualify for entry-level positions related to facility operation.

Program Sequence

First Semester

AHR	110	Introduction to Refrigeration	5
AHR	112	Heating Technology	4
ELC	118	National Electrical Code	2
ELC	131*	Circuit Analysis I	4

Second Semester

AHR	120	HVACR Maintenance	2
BAT	111	Building Automation Systems	2
ELC	114	Commercial Wiring	4
ENG	110	Freshman Composition	3
MNT	110	Intro to Maintenance Procedures	2

Third Semester

BPR	130	Print Reading-Construction	3
ELC	127	Software for Technicians	2
ELN	231	Industrial Controls	3
PSY	118	Interpersonal Psychology	3

*ELC 112 is an allowable substitution for ELC 131.

Graduation Requirements .... 39 Credit Hours

Facility Maintenance Technology: Electrical Systems Certificate – C50190A

The Electrical Systems Certificate is designed for individuals wishing to advance their knowledge of electrical wiring. Coursework includes residential wiring, commercial wiring, and national electric code. Graduates should qualify for entry-level positions in residential or light commercial facility maintenance.

Program Sequence

First Semester

| ELC | 113 | Residential Wiring | 4 |
| ELC | 118 | National Electrical Code | 2 |

Second Semester

| ELC | 112* | DC/AC Electricity | 4 |
| ELC | 114 | Commercial Wiring | 4 |

Third Semester

| ELC | 127 | Software for Technicians | 2 |

*ELC 131 is an allowable substitution for ELC 112.

Graduation Requirements .... 17 Credit Hours

Facility Maintenance Technology: HVACR Certificate – C50190B

The HVACR Certificate is designed for individuals wishing to advance their knowledge of air conditioning, refrigeration, heating operation, and maintenance. Coursework includes electricity, heating and cooling technology, maintenance, and print reading. Graduates should qualify for entry-level positions in residential or light commercial facility maintenance.

Program Sequence

First Semester

| AHR | 111 | HVACR Electricity | 3 |
| AHR | 112 | Heating Technology | 4 |

Second Semester

AHR	113	Comfort Cooling	4
AHR	120	HVACR Maintenance	2
BPR	130	Print Reading-Construction	3

Graduation Requirements .... 16 Credit Hours

Basic Facilities Technology I Certificate – C50190D

The Basic Facilities Technology I Certificate is designed for individuals wishing to learn about air conditioning, heating, and electrical wiring. Graduates should qualify for entry-level positions in residential facility maintenance.

Program Sequence

First Semester

| AHR | 112 | Heating Technology | 4 |
| ELC | 113 | Residential Wiring | 4 |

Second Semester
AHR 111 HVACR Electricity 3
AHR 113 Comfort Cooling 4

Graduation Requirements .... 15 Credit Hours

Basic Facilities Technology II Certificate – C50190E

The Basic Facilities Technology II Certificate is designed for individuals wishing to advance their knowledge of electrical wiring, print reading, and workplace safety. Graduates should qualify for entry level positions in residential or light commercial facility maintenance.

Program Sequence

First Semester
BPR 130 Print Reading-Construction 3
ELC 114 Commercial Wiring 4

Second Semester
ELC 118 National Electrical Code 2
ELC 127 Software for Technicians 2
ISC 121 Environmental Health & Safety 3

Graduation Requirements .... 14 Credit Hours

GEOMATICS TECHNOLOGY

Geomatics Technology Degree - A40420

The Geomatics Technology curriculum provides training for technicians in the many areas of surveying. Surveyors are involved in land surveying, route surveying, construction surveying, photogrammetry, mapping, global positioning systems, geographical information systems, and other areas of property description and measurements.

Course work includes the communication and computational skills required for boundary, construction, route, and control surveying, photogrammetry, topography, drainage, surveying law, and subdivision design, with emphasis upon applications of electronic data collection and related software including CAD.

Graduates should qualify for jobs as survey party chief, instrument person, surveying technician, highway surveyor, mapper, GPS technician, and CAD operator. Graduates will be prepared to pursue the requirements necessary to become a Registered Land Surveyor in North Carolina.

Program Sequence

First Semester
CEG 151 CAD for Engineering Technology 3
EGR 115 Intro to Technology 3
EGR 115A Intro to Technology Lab 1
SRV 110 Surveying I 4
             Math Elective 3

Second Semester
CEG 111 Introduction to GIS and Gnss 4
CIV 125 Civil/Surveying CAD 3
ENG 111 Writing and Inquiry 3
SRV 111 Surveying II 4
UAS 111 Unmanned Aircraft Systems 3

Third Semester
ENG 112 Writing and Research in the Disciplines 3
UAS 150 UAS Flight Simulation 3

Fourth Semester
CEG 211 Hydrology & Erosion Control 3
GIS 121 Georeferencing & Mapping 3
SRV 210 Surveying III 4
SRV 250 Advanced Surveying 4
UAS 230 UAS Aerial Photography and Surveys 3

Fifth Semester
CEG 230 Subdivision Planning & Design 3
PHI 240 Introduction to Ethics 3
PSY 150 General Psychology 3
SRV 220 Surveying Law 3
SRV 240 Topo/Site Surveying 4

Sixth Semester
             Major Elective 2

Math Electives
(Select 3 hours from the following courses):
MAT 121 Algebra/Trigonometry I 3
MAT 171 Precalculus Algebra 4

Major Electives
(Select 2 hours from the following courses):
CEG 210 Construction Materials & Methods 3
CEG 235 Project Management and Estimating 3
ISC 121 Environmental Health & Safety 3
MAT 172 Precalculus Trigonometry 4
WBL 112 Work-Based Learning I 2
WBL 120 Career Readiness, Explor, & Employ. 3

Graduation Requirements .... 72 Credit Hours

Geomatics Tech I Certificate – C40420D

This certificate emphasizes fundamental computation and mapping skills.

Program Sequence

First Semester
CEG 151 CAD for Engineering Technology 3
EGR 115 Intro to Technology 3
EGR 115A Intro to Technology Lab 1

Second Semester
CEG 111 Introduction to GIS and Gnss 4
CIV 125 Civil/Surveying CAD 3

Graduation Requirements .... 14 Credit Hours

Geomatics Field Tech Certificate – C40420E

This certificate emphasizes essential field skills required for instrument operation, data collection, construction staking, and boundary surveying.

Program Sequence

First Semester
SRV 110   Surveying I 4
            Math Elective.. 3

Second Semester
SRV 111   Surveying II 4
UAS 111   Unmanned Aircraft Systems 3

Math Electives
(Select 3 hours from the following courses):
MAT 121   Algebra/Trigonometry I.. 3
MAT 171   Precalculus Algebra 4

Graduation Requirements .... 14 Credit Hours

Geomatics UAS Tech Certificate – C40420G

This certificate covers the use of Unmanned Aircraft Systems (UAS) and drone surveying.

Program Sequence

First Semester
CEG 111   Introduction to GIS and Gnss.................................... 4
UAS 111   Unmanned Aircraft Systems 3

Second Semester
UAS 150   UAS Flight Simulation 3

Third Semester
GIS 121   Georeferencing & Mapping 3
UAS 230   UAS Aerial Photography and Surveys 3

Graduation Requirements .... 16 Credit Hours

INTERIOR DESIGN

Interior Design Degree - A30220

The Interior Design curriculum is designed to prepare students for a variety of job opportunities in the field of both residential and non-residential interior design. The focus of the studies is technical knowledge, professional practices, and aesthetic principles.

Students receive instruction in basic design, graphic presentation, construction document preparation, materials and methods, environmental and structural systems, building codes and specifications, computer-aided design, history of interiors and furnishings, color theory, products, business practices, and general education courses.

Upon completion, graduates have career opportunities in residential or commercial interior design, architecture, set design, showroom design, furniture/textiles/accessories sales, and any business dealing with interiors.

Program Sequence

First Semester
ARC 111   Introduction to Architectural Technology 3
ARC 114   Architectural CAD..2
ARC 114A   Architectural CAD Lab..1
DES 112   Building and Construction Sys 3
DES 125   Visual Presentation I 2
DES 135   Principles and Elements of Design I...........................4

Second Semester
DES 138   Space Planning 3
DES 220   Interior Design Fundamentals 3
DES 235   Products 3
DES 255   History of Interior & Furnishings I 3
            Major Elective...4

Third Semester
ENG 111   Writing and Inquiry 3
            Math Elective..3

Fourth Semester
ARC 225   Architectural BIM I 2
ARC 225A   Architectural BIM I Lab 1
COM 231   Public Speaking..3
DES 230   Residential Design I 3
DES 240   Commercial and Contract Design I 3
DES 280   Codes and Standards/Int Design 3

Fifth Semester
DES 210   Professional Practices for Interior Design 2
DES 265   Lighting/Interior Design 2
DES 285   Capstone/Interior Design..4
PSY 150   General Psychology 3
            Humanities/Fine Arts Elective 3

Sixth Semester
            Work-Based Learning or BUS Elective 2

Major Electives
(Select 4 hours from the following courses):
ARC 220   Advanced Architectural CAD......................................2
ARC 264   Digital Architecture 2
DES 225   Textiles for Interiors 3
DES 256   History of Interiors and Furnishings II.........................3

Math Electives
(Select 3 hours from the following courses):
MAT 110   Math Measurement and Literacy.................................3
MAT 121   Algebra/Trigonometry I...3
MAT 171   Precalculus Algebra 4

Humanities/Fine Arts Electives
(Select 3 hours from the following courses):
ART 111   Art Appreciation..3
HUM 110   Technology and Society...3

Work-Based Learning or BUS Electives
(Select 2 hours from the following courses):
BUS 151   People Skills..3
BUS 255   Organizational Behavior in Bus 3
BUS 260   Business Communication...3
WBL 111   Work-Based Learning I..1
WBL 112   Work-Based Learning I..2
WBL 121   Work-Based Learning II...1

Graduation Requirements…………………………68 Credit Hours

APPLIED ENGINEERING & TECHNOLOGIES

Residential Interior Design Certificate – C30200A

The content of this certificate introduces the learner to residential design and the steps required in the design process, including programming, design development, schematic design, and construction documentation. Chief Architect, a 3D modeling software is introduced and incorporated into the required projects. There is a focus on efficient planning of spaces, as well as designing to required codes and standards.

Program Sequence

First Semester
DES 125   Visual Presentation I 2

Second Semester
DES 138   Space Planning 3
DES 220   Interior Design Fundamentals 3
DES 256   History of Interiors and Furnishings II 3

Third Semester
DES 230   Residential Design I 3

Graduation Requirements…………………..………14 Credit Hours

Décor Focus Interior Design Certificate – C30200B

The content of this certificate introduces the learner to history, furniture, and styles of design ranging from Ancient Egypt to the present day. It provides an introduction to the Principles and Elements of design as they relate to interiors. Also examined are typical products, materials, textiles, and lighting as they apply to interior spaces.

Program Sequence

First Semester
DES 135   Principles and Elements of Design I 4

Second Semester
DES 225   Textiles for Interiors 3
DES 235   Products 3
DES 255   History of Interior & Furnishings I 3

Third Semester
DES 256   History of Interiors and Furnishings II 3
DES 265   Lighting/Interior Design 2

Graduation Requirements…………………..………18 Credit Hours

Commercial Interior Design Certificate – C30200C

The content of this certificate introduces the learner to the contract and professional realm of interior design. Revit software is introduced and incorporated into commercial projects. There is a focus on commercial code compliance, technical requirements, and construction documents.

Program Sequence

First Semester
ARC 225   Architectural BIM I 2
ARC 225A   Architectural BIM I Lab 1
DES 240   Commercial and Contract Design I 3

Second Semester
DES 210   Professional Practices for Interior Design 2
DES 285   Capstone/Interior Design..4

Third Semester
DES 280   Codes and Standards/Int Design 3

Graduation Requirements…………………..………15 Credit Hours

Mechanical Engineering Technology

Mechanical Engineering Technology Degree - A40320A

The Mechanical Engineering Technology curriculum provides a board and diverse educational experience. Course work includes computer-aided drafting and design, applied mechanics, materials engineering, quality control manufacturing methods and processes, computer usage, mathematics, physics and oral and written communications. The courses will stress critical thinking, planning and problem solving.

The diversity of Mechanical Engineering Technology degree enables students to pursue exciting careers in following fields:
- Engineering/Architectural
- Mechanical Design
- Manufacturing
- Quality
- Service

If elected, students can pursue a 4 year Engineering Technology degree after graduation.

Program Sequence

First Semester
DFT 151   CAD I..3
EGR 115   Introduction to Technology 3
EGR 115A   Intro to Technology Lab..1
MEC 161   Manufacturing Processes I 3
            Math Elective..3

Second Semester
DFT 152   CAD II...3
DFT 154   Intro to Solid Modeling...3
ENG 111   Writing and Inquiry...3
MEC 130   Mechanisms 3
            Physics Elective...4

Third Semester
PSY 150   General Psychology 3
            English/Communication Elective 3

Fourth Semester
DFT 254   Interm Solid Modeling & Rendering.............................3
EGR 251   Statics...3
ELN 260   Prog Logic Controllers 4

HYD 180 Fluid Power in Automation 3
HYD 191 Selected Topics in Fluid Power Lab 1
MEC 180 Engineering Materials 3

Fifth Semester
EGR 252 Strength of Materials 3
EGR 285 Design Project 2
ISC 121 Environmental Health & Safety 3
 Humanities Elective... 3
 Major Elective... 2

Sixth Semester
 Major Elective... 3

Math Electives
(Select 3 hours from the following courses)
MAT 121 Algebra/Trigonometry I 3
MAT 171 Precalculus Algebra 4

Physics Electives
(Select 4 hours from the following courses)
PHY 131 Physics-Mechanics 4
PHY 151 College Physics I... 4

English/Communication Electives
(Select 3 hours from the following courses)
ENG 112 Writing and Research in the Disciplines..................... 3
ENG 114 Professional Research & Reporting 3

Humanities Electives
(Select 3 hours from the following courses)
HUM 110 Technology and Society.. 3
HUM 115 Critical Thinking.. 3
PHI 240 Introduction to Ethics.. 3

Major Electives
(Select 5 hours from the following courses)
ARC 225 Architectural BIM I... 2
ARC 225A Architectural BIM I Lab 1
ATR 115 Introduction to Mechatronics 4
CEG 111 Intro to Gis and Gnss 4
DFT 153 CAD III.. 3
ELC 131 Circuit Analysis I.. 4
ELC 131A Circuit Analysis I Lab.. 1
TDP 110 Introduction to 3-D Printing 3
WBL 111 Work-Based Learning I 1
WBL 112 Work-Based Learning I 2
WBL 113 Work-Based Learning I 3
WBL 120 Career Readiness, Explor, & Employ 3
WBL 121 Work-Based Learning II 1
WBL 122 Work-Based Learning II 2
WBL 123 Work-Based Learning II 3

Graduation Requirements .... 68 Credit Hours

Mechanical Engineering Technology Degree – Mechatronics Concentration - A40320B

Program Sequence

First Semester
DFT 151 CAD I... 3
EGR 115 Introduction to Technology....................................... 3
EGR 115A Intro to Technology Lab 1
ELC 131 Circuit Analysis I.. 4
ELC 131A Circuit Analysis I Lab.. 1
 Math Elective 3

Second Semester
DFT 152 CAD II.. 3
DFT 154 Intro to Solid Modeling.. 3
MEC 130 Mechanisms 3
MEC 161 Manufacturing Processes I 3
 Physics Elective 4

Third Semester
ENG 111 Writing and Inquiry... 3
PSY 150 General Psychology 3

Fourth Semester
EGR 251 Statics... 3
ELN 260 Prog Logic Controllers 4
HYD 180 Fluid Power in Automation.. 3
HYD 191 Selected Topics in Fluid Power Lab 1
MEC 180 Engineering Materials... 3
 English/Communication Elective................................ 3

Fifth Semester
ATR 115 Introduction to Mechatronics 4
EGR 252 Strength of Materials 3
ISC 121 Environmental Health & Safety................................. 3
 Humanities Elective 3
 Major Elective 3

Math Electives
(Select 3 hours from the following courses)
MAT 121 Algebra/Trigonometry I... 3
MAT 171 Precalculus Algebra 4

Physics Electives
(Select 4 hours from the following courses)
PHY 131 Physics-Mechanics... 4
PHY 151 College Physics I... 4

English/Communication Electives
(Select 3 hours from the following courses)
ENG 112 Writing and Research in the Disciplines 3
ENG 114 Professional Research & Reporting 3

Humanities Electives
(Select 3 hours from the following courses)
HUM 110 Technology and Society 3
HUM 115 Critical Thinking... 3
PHI 240 Introduction to Ethics.. 3

Major Electives
(Select 3 hours from the following courses)
ATR 214 Advanced PLCs.. 4
ATR 215 Sensors and Transducers 3
ELN 231 Industrial Controls... 3
ELN 232 Introduction to Microprocessors 4
ELN 235 Data Communication Systems 4
WBL 111 Work-Based Learning I.. 1
WBL 112 Work-Based Learning I.. 2
WBL 113 Work-Based Learning I.. 3
WBL 120 Career Readiness, Explor, & Employ 3
WBL 121 Work-Based Learning II... 1
WBL 122 Work-Based Learning II... 2
WBL 123 Work-Based Learning II... 3

Graduation Requirements ....70 Credit Hours

APPLIED ENGINEERING & TECHNOLOGIES

Mechanical Engineering Technology Diploma – D40320A

The Mechanical Engineering Technology diploma program includes course work in computer-aided drafting and design (using AutoCAD), solid modeling (using SolidWorks), materials engineering, manufacturing methods and processes, mechanisms, safety, computer usage, mathematics, and written communications.

Program Sequence

First Semester
DFT 151 CAD I..3
EGR 115 Introduction to Technology.........................3
EGR 115A Intro to Technology Lab 1
MAT 121 Algebra/Trigonometry I..............................3
MEC 161 Manufacturing Processes I 3

Second Semester
DFT 152 CAD II...3
DFT 154 Intro to Solid Modeling 3
ENG 111 Writing and Inquiry 3
ISC 121 Environmental Health & Safety 3
MEC 130 Mechanisms...3

Third Semester
DFT 254 Interm Solid Modeling & Rendering 3
MEC 180 Engineering Materials 3
PSY 150 General Psychology.....................................3

Graduation Requirements .... 37 Credit Hours

Mechanical Design Certificate - C40320B

The Mechanical Design certificate program introduces students to computer-aided drafting and design (CAD) and solid modeling. Course work includes computer-aided drafting and design (using AutoCAD), solid modeling (using SolidWorks), and mechanisms.

The Mechanical Design certificate program cannot be completed in a single semester because students must complete a 2-course sequence in computer-aided drafting and design.

Program Sequence

First Semester
DFT 151 CAD I..3

Second Semester
DFT 152 CAD II...3
DFT 154 Intro to Solid Modeling 3
MEC 130 Mechanisms..3

Graduation Requirements .... 12 Credit Hours

Mechatronics Certificate – C40320I

The Mechatronics certificate program provides an overview of the technology used in the field of mechatronics. Course work includes mechatronics, programmable logic controllers (PLCs), fluid power in automation, and solid modeling (using SolidWorks).

Program Sequence

First Semester
ELN 260 Prog Logic Controllers..............................4
MEC 180 Engineering Materials.................................3

Second Semester
ATR 115 Introduction to Mechatronics 4
DFT 154 Intro to Solid Modeling................................3

Graduation Requirements ....14 Credit Hours

Electromechanical Analysis Certificate - C40320J

The Electromechanical Analysis certificate program includes course work in mechanical analysis, mechatronics, programmable logic controllers (PLCs), and fluid power in automation.

Some of the courses for the Electromechanical Analysis certificate have one or more prerequisite courses that must be completed.

Program Sequence

First Semester
HYD 180 Fluid Power in Automation..........................3
HYD 191 Selected Topics in Fluid Power Lab 1
EGR 251 Statics...3

Second Semester
EGR 252 Strength of Materials 3
ELN 260 Prog Logic Controllers.................................4
MEC 130 Mechanisms 3

Graduation Requirements ....17 Credit Hours

Mechanical Analysis and Design Certificate - C40320K

The Mechanical Analysis and Design certificate program includes course work in mechanical analysis (Statics), programmable logic controllers (PLCs), and fluid power in automation. Students will then apply the knowledge gained from this course work in a capstone design project course.

Some of the courses for the Mechanical Analysis and Design certificate program have one or more prerequisite courses that must be completed.

Program Sequence

First Semester
HYD 180 Fluid Power in Automation..........................3
HYD 191 Selected Topics in Fluid Power Lab 1
EGR 251 Statics...3

Second Semester
EGR 285 Design Project 2
ELN 260 Prog Logic Controllers.................................4

Graduation Requirements ....13 Credit Hours

APPLIED ENGINEERING & TECHNOLOGIES

Mechanical Analysis and Design II Certificate - C40320L

The Mechanical Analysis and Design II certificate program builds on the Mechanical Analysis and Design certificate and includes course work in engineering materials, strength of materials, safety, and solid modeling (using SolidWorks).

Some of the courses for the Mechanical Analysis and Design II certificate program have one or more prerequisite courses that must be completed.

Program Sequence

First Semester
DFT	254	Interm Solid Modeling & Rendering	3
MEC	180	Manufacturing Materials	3

Second Semester
EGR	252	Strength of Materials	3
ISC	121	Environmental Health & Safety	3

Graduation Requirements .... 12 Credit Hours

PLUMBING

Plumbing Diploma - D35300

The Plumbing curriculum is designed to give individuals the opportunity to acquire basic skills to assist with the installation and repair of plumbing systems in residential and small buildings.

Course work includes sketching diagrams, interpretation of blueprints, and practices in plumbing assembly. Students will gain knowledge of state codes and requirements.

Graduates should qualify for employment at parts supply houses, maintenance companies, and plumbing contractors to assist with various plumbing applications.

Program Sequence

First Semester
BPR	130	Print Reading-Construction	3
ENG	110	Freshman Composition	3
PLU	110AB	Modern Plumbing, Part 1	5
PLU	110BB	Modern Plumbing, Part 2	4

Second Semester
PLU	120AB	Plumbing Applications, Part 1	5
PLU	120BB	Plumbing Applications, Part 2	4
PSY	118	Interpersonal Psychology	3
		Major Elective	1

Third Semester
PLU	130AB	Plumbing Systems, Part 1	3
PLU	130BB	Plumbing Systems, Part 2	3
		Major Elective	2

Major Electives
(Choose 3 hours from the following):
AHR	111	HVACR Electricity	3
AHR	120	HVACR Maintenance	2
AHR	160	Refrigeration Certification	1
CST	131	OSHA/Safety/Certification	3

WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning I	2
WBL	121	Work-Based Learning II	1

Graduation Requirements .... 36 Credit Hours

Plumbing Concepts Certificate - C35300D

The Plumbing Concepts certificate curriculum is designed to give individuals the opportunity to acquire basic skills to assist with the installation and repairs of plumbing systems in residential and small buildings.

Course work includes sketching diagrams, interpretation of blueprints, and practices in plumbing assembly. Students will gain additional knowledge of state codes and requirements. Graduates should qualify for employment at parts supply houses, and for entry-level positions with maintenance companies and plumbing contractors to assist with various plumbing applications.

Program Sequence

First Semester
BPR	130	Print Reading-Construction	3
PLU	110AB	Modern Plumbing, Part 1	5

Second Semester
ENG	110	Freshman Composition	3
PLU	110BB	Modern Plumbing, Part 2	4

Graduation Requirements .... 15 Credit Hours

Plumbing Applications Certificate - C35300F

The Plumbing Applications certificate curriculum is designed to cover general plumbing layout, fixtures, and water heaters. Students will be introduced to the North Carolina State Building Plumbing Code and the math applications used in the plumbing industry.

Topics include drainage, waste and venting, water service and distribution, fixture installations, faucet installations, water heaters, and other related topics. Upon completion students should be able to safely install common fixtures, faucets, and systems in compliance with state and local building codes.

Program Sequence

First Semester
BPR	130	Print Reading-Construction	3
PLU	120AB	Plumbing Applications, Part 1	5

Second Semester
PLU	120BB	Plumbing Applications, Part 2	4

Graduation Requirements .... 12 Credit Hours

Plumbing AHR Certificate - C35300G

Program Sequence

First Semester
AHR	111	HVACR Electricity	3
PLU	130	Plumbing System	6

Second Semester
AHR	120	HVACR Maintenance	2
AHR	160	Refrigeration Certification	1

Graduation Requirements .... 12 Credit Hours

WELDING TECHNOLOGY

Welding Technology Degree - A50420

The Welding Technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provides the student with industry-standard skills developed through classroom training and practical application.

Program Sequence

First Semester
ENG	110	Freshman Composition	3
WLD	110	Cutting Processes	2
WLD	115	SMAW (Stick) Plate	5
WLD	121	GMAW (MIG) FCAW/Plate	4
WLD	141	Symbols & Specifications	3

Second Semester
MAT	110	Math Measurement & Literacy	3
WLD	116	SMAW (Stick) Plate/Pipe	4
WLD	122	GMAW (MIG) Plate/Pipe	3
WLD	131	GTAW (TIG) Plate	4

Third Semester
WLD	132	GTAW (TIG) Plate/Pipe	3
WLD	151	Fabrication I	4
WLD	262	Inspection & Testing	3

Fourth Semester
ISC	121	Environmental Health & Safety	3
PSY	118	Interpersonal Psychology	3
WLD	215	SMAW (Stick) Pipe	4
		Major Elective	3

Fifth Semester
COM	110	Introduction to Communication	3
HUM	121	The Nature of America	3
WLD	231	GTAW (TIG) Pipe	3
WLD	265	Automated Welding/Cutting	4

Major Electives
(Select 3 hours from the following courses):
BUS	110	Introduction to Business	3

MEC	180	Engineering Materials	3
PHY	121	Applied Physics I	4
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning I	2

Graduation Requirements .... 67 Credit Hours

Welding Technology Diploma - D50420

Successful graduates of the Welding Technology diploma curriculum may be employed as entry-level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

Program Sequence

First Semester
ENG	110	Freshman Composition	3
WLD	110	Cutting Processes	2
WLD	115	SMAW (Stick) Plate	5
WLD	121	GMAW (MIG) FCAW/Plate	4
WLD	141	Symbols & Specifications	3

Second Semester
MAT	110	Math Measurement & Literacy	3
WLD	116	SMAW (Stick) Plate/Pipe	4
WLD	122	GMAW (MIG) Plate/Pipe	3
WLD	131	GTAW (TIG) Plate	4

Third Semester
WLD	132	GTAW (TIG) Plate/Pipe	3
WLD	151	Fabrication I	4
WLD	262	Inspection & Testing	3

Graduation Requirements .... 41 Credit Hours

Welding Technology Certificate - C50420B

Instruction includes an introduction to consumable and non-consumable electrode welding and cutting processes. Additional courses in blueprint reading, metallurgy, and destructive testing provides the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology certificate curriculum may be employed as entry-level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, and welding-related self-employment.

Program Sequence

First Semester
WLD	110	Cutting Processes	2
WLD	115	SMAW (Stick) Plate	5

Second Semester
WLD	121	GMAW (MIG) FCAW/Plate	4
WLD	141	Symbols & Specifications	3

Graduation Requirements .... 14 Credit Hours

Fabrication Design Certificate - C50420C

Instruction includes an introduction to fabrication design as it applies to Welding Technology.

Program Sequence

First Semester
WLD   110   Cutting Processes 2
WLD   115   SMAW (Stick) Plate..5
WLD   141   Symbols & Specifications 3

Second Semester
WLD   151   Fabrication I..4

Graduation Requirements..14 Credit Hours

Computer Controlled Welding Certificate - C50420D

Instruction includes an introduction to computer controlled welding.

Program Sequence

First Semester
WLD   110   Cutting Processes 2
WLD   115   SMAW (Stick) Plate..5
WLD   121   GMAW (MIG) FCAW/Plate......................................4

Second Semester
WLD   141   Symbols & Specifications 3
WLD   265   Automated Welding/Cutting.....................................4

Graduation Requirements..18 Credit Hours

BUSINESS & PUBLIC SERVICES TECHNOLOGIES

Business & Public Services Technologies Division

Dean Catherine B. Lassiter, JD
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Wake Technical Community College awards degrees, diplomas, and certificates in a variety of fields shown below. The highest credential given in each area is listed first, in bold type.

1. Click on the "**Program Name**" to go to the program's web page
2. Click on the "**Program of Study**" to see specific course requirements for that program

Programs may be offered during the day, evening, online, or a combination. Students should refer to Self Serve for the availability of classes. Click to see a list of Wake Tech's programs that can be completed fully online.

Program Names	Program Code
Accounting – *AAS Degree*	A25800
Accounting **– *Diploma***	D25800
Accounting Software Applications **– *Certificate***	C25800D
Accounting Core **- *Certificate***	C25800A
Advanced Accounting Core – ***Certificate***	C252800G
Bookkeeping – ***Certificate***	C252800S
Fraud Examination – ***Certificate***	C252800J
Income Tax Preparer **– *Certificate***	C25800B
Management Accountant – ***Certificate***	C25800M
Payroll Accounting **– *Certificate***	C25800C
Baking and Pastry Arts – *AAS Degree*	A55130
Baking and Pastry Arts **– *Diploma***	D55130
Baking Fundamentals – ***Certificate***	C55130F
Bread Baker – ***Certificate***	C55130B
Cake Decorator – ***Certificate***	C55130D
Confectioners – ***Certificate***	C55130C
Business Administration: General Business Administration – *AAS Degree*	A25120A
Business Core **– *Certificate***	C25120D
Career Success **- *Certificate***	C25120G
Leadership **– *Certificate***	C25120F
Business Administration: Human Resources Management – *AAS Degree*	A25120H
Human Resources Administration – ***Certificate***	C25120HA
Human Resources Management – ***Certificate***	C25120HB
Business Administration: Marketing – *AAS Degree*	A25120M
Advertising and Digital Media **– *Certificate***	C25120DM
Marketing and Sales – ***Certificate***	C25120MM
Business Administration: Project Management – *AAS Degree*	A25120PM
Project Management – ***Certificate***	C25120PM
Cosmetology – *AAS Degree*	A55140
Cosmetology – *Diploma*	D55140A
Criminal Justice Technology – *AAS Degree*	A55180
Criminal Justice Technology - Introduction – ***Certificate***	C55180P
Police Records Specialist **– *Certificate***	C55180R
Security and Intelligence Analysis **– *Certificate***	C55180S
Financial Crime Specialist **- *Certificate***	C55180F
Criminal Justice Technology/Forensic Science	
Forensic Science – ***AAS Degree***	A5518C
Crime Scene Technician – ***Certificate***	C5518C

BUSINESS & PUBLIC SERVICES TECHNOLOGIES

Program Names Continued	Program Code
Culinary Arts – *AAS Degree*	A55150
Culinary Arts **– *Diploma***	D55150
Culinary Arts **– *Certificate***	C55150A
Education: Associate in Arts in Teacher Preparation – *AAS Degree*	A1010T
Education: Associate in Science in Teacher Preparation – *AAS Degree*	A1040T
Early Childhood Education – *AAS Degree (Parent Program)*	A55220
Early Childhood Education **– *Diploma***	D55220A
Early Childhood Education **– *Certificate***	C55220D
Infant/Toddler Care **– *Certificate***	C55290
Preschool Foundation **– *Certificate***	C55220G
School-Age **– *Certificate***	C55220E
Early Childhood Education: Birth-Kindergarten (B-K) Licensure Transfer **– *AAS Degree***	A55220B
Early Childhood Education: Non-Teaching Licensure Track **– *AAS Degree***	A55220E
Early Childhood Education: Career Track **– *AAS Degree***	A55220C
Esthetics Technology – *Certificate*	C55230
Hospitality Management – *AAS Degree*	A25110
Hospitality Management **– *Diploma***	D25110A
Hospitality Event Coordinator **– *Certificate***	C25110A
Hospitality Hotel Operations **– *Certificate***	C25110H
Hospitality Restaurant Management **– *Certificate***	C25110D
Public Safety Administration – *AAS Degree*	A55480
Public Safety Administration **– *Leadership Certificate***	C55480L
Supply Chain Management: Distribution Management – *AAS Degree*	A25620D
Distribution Management Core **– *Certificate***	C25620DA
Transportation Management **– *Certificate***	C25620DB
Supply Chain Management: Global Logistics Technology – *AAS Degree*	A25620G
International Logistics **– *Certificate***	C25620GB
Logistics Core **– *Certificate***	C25620GA
Supply Chain **– *Certificate***	C25620GC

*Collaborative Agreements

None at this time

BUSINESS & PUBLIC SERVICES TECHNOLOGIES

ACCOUNTING AND FINANCE

Accounting Degree - A25800

The Accounting curriculum is designed to provide students with the knowledge and skills necessary for employment and growth in the accounting profession. Using the "language of business," accountants assemble, analyze, process, and communicate essential information about financial operations.

In addition to course work in accounting principles, theories, and practices, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

A.A.S PROGRAM SEQUENCE

First Semester

ACC	120	Principles of Financial Accounting	4
BUS	115	Business Law I	3
CIS	110	Introduction to Computers	3
ENG	111	Writing and Inquiry	3
MAT	143	Quantitative Literacy	3

Second Semester

ACC	121	Principles of Managerial Accounting	4
ACC	140	Payroll Accounting	2
ACC	149	Introduction to Accounting Spreadsheets	2
ACC	150	Accounting Software Applications	2
HUM	115	Critical Thinking	3
		(Select one course from below)	
ENG	112	Writing and Research in the Discipline OR	3
ENG	114	Professional Research and Reporting	3

Third Semester

ACC	129	Individual Income Taxes	3
ACC	220	Intermediate Accounting I	4
ACC	268	Information Systems & Internal Controls	3
		(Select one course – ECO 251 is recommended)	
ECO	151	Survey of Economics OR	3
ECO	251	Principles of Microeconomics	3
___	___	*Major Elective	3

Choose approximately 3 credit hours from the Major Elective List

Fourth Semester

ACC	215	Ethics in Accounting	3
ACC	221	Intermediate Accounting II	4
ACC	227	Practices in Accounting	3
BUS	225	Business Finance	3
ECO	252	Principles of Macroeconomics	3
___	___	*Major Elective	3

Choose approximately 3 credit hours from the Major Elective List

Major Elective List

ACC	130	Business Income Taxes	3
ACC	132	NC Business Taxes	2
ACC	151	Accounting Spreadsheet Applications	2
ACC	152	Advanced Software Applications	2
ACC	180	Practices in Bookkeeping	3
ACC	225	Cost Accounting	3
ACC	226	Advanced Managerial Accounting	3
ACC	240	Governmental & Not-for-Profit Accounting	3
ACC	249	Forensic Accounting & Cybersecurity	3
ACC	267	Fraud Examination	3
ACC	269	Auditing and Assurance Services	3
BAF	235	Analyzing Financial Statements	3
BAS	120	Introduction to Analytics	3
BUS	116	Business Law II	3
BUS	121	Business Math	3
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning I	2
WBL	121	Work-Based Learning II	1

Graduation Requirements ....67 Credit Hours

Accounting Diploma - D25800

The Accounting Diploma provides students with a basic accounting skill set and overall knowledge enhanced by selected accounting electives and a potential **work-based learning** education experience. After beginning the Accounting Diploma program, a student may elect to pursue an A.A.S Degree in Accounting or after the Accounting Diploma is awarded, a student may return to Wake Tech to earn an A.A.S. Degree in Accounting.

The curriculum is designed to provide students with the knowledge and skills necessary for employment and growth in the accounting profession. Diploma graduates should be able to pursue a variety of entry-level accounting positions in private industry, accounting firms, and government agencies. In order to complete the diploma program in three semesters, the program must begin in the summer semester.

DIPLOMA PROGRAM SEQUENCE

First Semester

ACC	120	Principles of Financial Accounting	4
BUS	115	Business Law I	3
CIS	110	Introduction to Computers	3
ENG	111	Writing and Inquiry	3

Second Semester

ACC	121	Principles of Managerial Accounting	4
ACC	140	Payroll Accounting	2
ACC	149	Introduction to Accounting Spreadsheets	2
ACC	150	Accounting Software Applications	2
ACC	129	Individual Income Taxes	3

Third Semester

ACC	215	Ethics in Accounting	3
ACC	130	Business Income Taxes	3
ECO	151	Survey of Economics	3
___	___	*Major Elective	3

Choose approximately 3 credit hours from the Major Elective List

Major Elective List

ACC	132	NC Business Taxes	2
ACC	152	Advanced Software Applications	2
ACC	240	Governmental & Not-for-Profit Accounting	3
ACC	268	Information Systems & Internal Controls	3
BUS	121	Business Math	3
BUS	225	Business Finance	3
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning I	2

Graduation Requirements ....38 Credit Hours

As you complete the Accounting Diploma, you will complete courses where you are eligible to earn the following Accounting Certificates (must be added to your student account):

C25800A Accounting Core, C25800B Income Tax Preparer, C25800C Payroll Accounting Clerk.

Accounting Core Certificate - C25800A

This certificate is designed to prepare students in the core of accounting and business concepts and includes all university transferrable courses. Credits earned in this program may be transferred toward an Associate in Applied Science Degree in Accounting, provided the student meets the entrance requirements for the Accounting program, as well as either the Associate in Arts or Associate in Science for College Transfer.

Course Requirements: *ACC 120, ACC 121, BUS 115, ENG 111*

Income Tax Preparer Certificate - C25800B

This certificate program is designed to prepare students for job opportunities in the accounting field in the specific area of income tax preparation. Credit earned in this program may be transferred toward an Associate in Applied Science Degree in Accounting, provided the student meets the entrance requirements for the Accounting program.

Course Requirements: *ACC 120, ACC 129, ACC 140 + Choose Elective ACC 130 and ACC 132*

Payroll Accounting Certificate - C25800C

This certificate program is designed to prepare students for job opportunities in the accounting field in the specific area of payroll accounting. Credits earned in this program may be transferred toward an Associate in Applied Science Degree in Accounting, provided the student meets the entrance requirements for the Accounting program.

Course Requirements: *ACC 120, CIS 110, ACC 140, ACC 149, ACC 150*

Accounting Software Applications Certificate C25800D

This certificate program will expose students to various software packages used in the industry. The certificate exposes students to Microsoft Excel, Quickbooks, and other accounting software applications that will assist in preparing accounting students to take industry software certification tests with the goal of increasing the marketability of accounting students upon entering the workforce. Credit earned in this program may be transferred toward an Associate in Applied Science Degree in Accounting, provided the student meets the entrance requirements for the Accounting program.

Course Requirements: *ACC 120, ACC 149, ACC 150, + Choose Elective ACC 151 and ACC 152*

Advanced Accounting Core Certificate - C25800G

This certificate is designed to expand knowledge in the core of accounting concepts. Credits earned in this program may be transferred toward an Associate in Applied Science Degree in Accounting, provided the student meets the entrance requirements for the Accounting program, as well as count towards additional accounting courses required by a Master's degree program for select universities.

Course Requirements: *ACC 129, ACC 220, ACC 221, ACC 269*

Management Accountant Certificate – C25800M

The certificate program is designed to prepare students for employment in management accounting. Students will gain a deeper understanding of managerial accounting concepts. Accounting **prerequisite** courses must be completed prior to enrolling in the certificate.

Course Requirements: *ACC 149, ACC 268, BUS 225, ACC 226, ACC 151, BAF 235.*

Fraud Examination Certificate – C25800J

The program provides an overview of fraud deduction skills to individuals interested in accounting careers as well as law enforcement and other industries where there is high potential for financial fraud. Students will gain an understanding of fraud principles in relation to the accounting industry and learn skills to expose embezzlement, corruption and unlawful manipulation of accounting records. Accounting **prerequisite** courses must be completed prior to enrolling in the certificate

Course Requirements: *ACC 220, ACC 268, ACC 267, ACC 249, ACC 269.*

Bookkeeping Certificate - C25800S

This certificate program is designed to prepare students for job opportunities in the accounting field in the area of small business accounting. Office technology skills included are: Quickbooks, Microsoft Excel, and Payroll. The study of general business knowledge and recordkeeping skills are included. Credit earned in this program may be transferred toward an Associate in Applied Science Degree in Accounting, provided the student meets the entrance requirements for the Accounting program.

Course Requirements: *ACC 120, BUS 121, ACC 140, ACC 149, ACC 150, ACC 132, ACC 180*

BAKING & PASTRY ARTS
All core classes are taught in 8 week semesters

Baking and Pastry Arts Degree - A55130
-Day Only

The Baking and Pastry Arts curriculum is designed to prepare students with the skills and knowledge required for employment in the baking/pastry industry including restaurants, hotels, independent bakeries/pastry shops, wholesale/retail markets, and high-volume bakeries.

Course offerings emphasizing practical application, a strong theoretical knowledge base, and professionalism provide the critical competencies to meet industry demands. Course work includes specialty/artisan breads, desserts, pastries, candies, decorative work, high-volume production and food marketing.

Graduates should qualify for entry-level positions, such as pastry/bakery assistant, area pastry chef and assistant pastry chef. American Culinary Federation certification is available to graduates.

BUSINESS & PUBLIC SERVICES TECHNOLOGIES

Baking and Pastry Arts Diploma - D55130
-Day Only

The Baking and Pastry Arts diploma includes basic and more advanced courses to help prepare students for entry into the baking field or to advance in their current foodservice positions.

Courses address both the art and the science of baking. Students can learn basic sanitation, cooking and baking principles, along with garnishing and presentation skills. Modern supervision techniques are also studied and practiced. The majority of class time is devoted to actual hands on kitchen skill development.

Baking and Pastry Arts Certificates
Bread Baker Certificate - C55130B
Confectioner's Certificate - C55130C
Cake Decorator Certificate - C55130D
Baking Fundamentals Certificate - C55130F

-Day Only

The Baking and Pastry Arts certificate includes basic courses to help prepare students for entry into the baking field or to advance in their current food service jobs. Course addresses both the art and the science of baking. Students can learn basic sanitation, cooking and baking principles, as well as pastry, confection and production baking skills. The majority of class is devoted to actual hands-on baking skill development.

PROGRAM SEQUENCE

First Semester (1st 8 weeks)
CUL 110	Sanitation and Safety	2
CUL 142	Fundamentals of Food	5
CUL 160	Baking I	3

First Semester (2nd 8 weeks)
BPA 120	Petits Fours & Pastries	3
CUL 150	Food Science	2
CUL 260	Baking II	3

Complete Baking and Pastry Arts Certificate (C55130A)
16 credit hours:
CUL 110, CUL 142, CUL 160, BPA 120 and CUL 260

Second Semester (1st 8 weeks)
CUL 112A	Nutrition for Foodservice Lab	1
CUL 112	Nutrition for Foodservice	3
BPA 210	Cake Design and Decorating	3
BPA 220	Confection Artistry	4

Second Semester (2nd 8 weeks)
BPA 130	European Cakes & Tortes	3
BPA 150	Artisan & Specialty Breads	4
HRM 245	Human Resources Management Hosp	3

Third Semester (1st 8 weeks)
BPA 230	Chocolate Artistry	3
BPA 230A	Chocolate Artistry Lab	1
BPA 260	Pastry & Baking Marketing	3
WBL 132	Work-Based Learning I (16 week course)	2

Third Semester (2nd 8 weeks)
BPA 240	Plated Desserts	3
BPA 250	Dessert & Bread Production	5
WBL 132	Work-Based Learning I (16 week course)	2

General Education Credits (Take Any Semester)
PSY 118	Interpersonal Psychology	3
ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disc	3
	Humanities/Fine Arts Elective	3
MAT 110	Math Measurement & Literacy	3

Humanities/Fine Arts Electives
HUM 115	Critical Thinking	3
ART 131	Drawing I	3

Graduation Requirements ....71 Credit Hours

BUSINESS ADMINISTRATION

Business Administration: General Business Administration Degree - A25120A
-Day, Evening, and Online

The Business Administration curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, human resources, entrepreneurship, management, and marketing. Skills related to the application of these concepts are developed through the study of effective communications, critical thinking, collaboration, leadership, management and supervision, and team building.

Students can obtain a sound business foundation, which leads to lifelong learning and growth opportunities. Graduates are prepared for employment opportunities in marketing, management, entrepreneurship, retail, sales, and finance.

Business Core Certificate - C25120D
-Day, Evening, and Online

This program allows students to earn a certificate comprised of our Business Core courses, which are all designated as college transfer courses. In as little as one semester, students can complete a certificate which can set them apart in the interview and selection process.

Leadership Certificate - C25120F
-Day, Evening, and Online

This certificate is designed to be an overview of the major functions of leadership and management with an emphasis on critical thinking. Emphasis is placed on exploring the theories and techniques of leadership and teamwork coupled with the management principles of planning, organizing, controlling, directing, and communicating. Students will be able to identify and analyze a personal philosophy and style of leadership and integrate these concepts in various practical situations using moral and ethical judgments honed during this program. Upon completion, students should be able to work as contributing members of a team utilizing these functions of leadership and management.

BUSINESS & PUBLIC SERVICES TECHNOLOGIES

Career Success Certificate - C25120G

-Day, Evening, and Online

This certificate is designed to help students develop the knowledge and skills they need to make the successful transition from college to career. The program includes courses on managing personal finances, ethics, successful communication, and interpersonal skill development, as well as a course in business. Together, these courses address the "employability skills" that are in high demand from employers today. A student will need to be sure that they are ready to find and succeed in a great job with this professional transition toolkit.

PROGRAM SEQUENCE

First Semester

BUS	110	Introduction to Business	3
BUS	137	Principles of Management	3
CIS	110	Introduction to Computers	3
ENG	111	Writing and Inquiry	3
MAT		Mathematics Elective	3
BUS	139	Entrepreneurship I	3

Second Semester

ECO		Social Science Elective	3
ACC	120	Principles of Financial Accounting	4
BUS	115	Business Law I	3
BUS	121	Business Math	3
MKT	120	Principles of Marketing	3

Complete Business Core Certificate (C25120D):
ACC 120, BUS 110, BUS 115, BUS 137, + One Social Science Elective

Third Semester

ACC	121	Principles of Managerial Accounting	4
BUS	153	Human Resources Management	3
BUS	240	Business Ethics	3
ENG	114	Professional Research and Reporting	3
BUS	255	Organizational Behavior in Business	3

Complete Leadership Certificate (C2520F):
BUS 137, BUS 153, BUS 255, BUS 240

Complete Career Success Certificate (C25120G):
BUS 110, BUS 255, BUS 240 + Choose BUS 125

Fourth Semester

HUM	115	Critical Thinking	3
MKT	221	Consumer Behavior	3
BUS	285	Business Management Issues	3
		Business Administration Major Electives	6

Social Science Elective (choose 3 credit hours):

ECO	151	Survey of Economics	3
ECO	251	Principles of Microeconomics	3
ECO	252	Principles of Macroeconomics	3

Mathematics Elective (choose 3 credit hours):

MAT	110	Mathematical Measurement & Literacy	3
MAT	143	Quantitative Literacy	3

Business Administration Major Electives (choose 6 credit hours):

BAS	120	Introduction to Analytics	3
BUS	116	Business Law II	3
BUS	125	Personal Finance	3
BUS	151	People Skills	3

BUS	228	Business Statistics	3
BUS	230	Small Business Management	3
BUS	260	Business Communications	3
INT	110	International Business	3
INT	210	International Trade	3
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning II	2
WBL	113	Work-Based Learning III	3

Graduation Requirements................................65 Credit Hours

Business Administration: Human Resources Management Degree - A25120H

-Day, Evening, and Online

Human Resource Management (HR) is the organizational function responsible for creating and supporting the systems that are used to effectively manage an organization's employees. HR managers, professionals, and support staff work in areas such as compensation, benefits, staffing and training, and development of human resources in organizations.

The human resources management degree prepares students to perform these roles in organizations of varying size and type and, depending on individual and organizational factors, roles can be performed at the administrative support, individual contributor, and/or professional or managerial level.

Critical thinking, project, and problem solving skills are emphasized in the program course work. Because the degree requires the general study of business and management as well as HRM, students are prepared to explore careers in both disciplines.

Business Administration: Human Resources Management Certificate- C25120HB

This program is intended to provide formal classroom training in Human Resources Management to individuals interested in careers in Human Resources. Course work includes studies in human resources, management, employment law, recruitment and selection, training and development, and compensation and benefits.

Business Administration: Human Resources Administration Certificate - C25120HA

-Day, Evening, and Online

This certificate is intended to provide formal classroom training in Human Resources (HR) to individuals interested in careers in HR. Course work includes studies in human resource management, people skills or customer service, and word processing or office software applications.

PROGRAM SEQUENCE

First Semester

BUS	110	Introduction to Business	3
BUS	137	Principles of Management	3
MKT	120	Principles of Marketing	3
CIS	110	Introduction to Computers	3
ECO		Social Science Elective	3
ENG	111	Writing and Inquiry	3

Second Semester

ACC	120	Principles of Financial Accounting	4
BUS	115	Business Law I	3
BUS	121	Business Math	3
BUS	217	Employment Law and Regulations*	3

BUS 153 Human Resources Management 3

Complete Business Core Certificate (C25120D):
ACC 120, BUS 110, BUS 115, BUS 137, + One Social Science Elective

Third Semester
ENG 114 Professional Research and Reporting 3
BUS 234 Training and Development* 3
BUS 256 Recruit Select & Per Plan 3
BUS 258 Compensation and Benefits 3
BUS 240 Business Ethics 3

Complete Human Resources Management Certificate (C25120HB):
BUS 153, BUS 217, BUS 234, BUS 256, BUS 258

Fourth Semester
ACC 121 Principles of Managerial Accounting 4
BUS 259 HRM Applications 3
HUM 115 Critical Thinking 3
MAT Mathematics Elective 3
BUS 255 Organizational Behavior 3

Complete Human Resources Administration Certificate (C25120HA):
BUS 137, BUS 153, BUS 240 + Choose BUS 255 OR BUS 260

Social Science Elective (choose 3 credit hours):
ECO 151 Survey of Economics 3
ECO 251 Principles of Microeconomics 3
ECO 252 Principles of Macroeconomics 3

Mathematics Elective (choose 3 credit hours):
MAT 110 Mathematical Measurement & Literacy 3
MAT 143 Quantitative Literacy 3

*Indicates prerequisite: Must take BUS 217 or BUS 234 before taking BUS 259

Graduation Requirements………………………….65 Credit Hours

Business Administration: Marketing Degree - A25120M
-Day, Evening, and Online

The marketing degree program helps students develop skills in advertising and sales, marketing research and applications, social media marketing, service marketing, consumer behavior, as well as core business concepts.

It is designed to meet the demands of government agencies, financial institutions, and large to small business or industry. Skills related to the application of these concepts can be developed through the study of marketing principles, digital literacy, and sales techniques.

Advertising and Digital Media Certificate - C25120DM
-Day, Evening, and Online

This certificate provides instruction on advertising communication, marketing strategy, and other general digital media design principles. Focusing on digital and social media concepts, this certificate prepares students for careers in digital and social media marketing and advertising.

Marketing and Sales Certificate - C25120MM
-Day, Evening, and Online

This certificate introduces innovative marketing concepts and sales strategies skills necessary for today's highly competitive environment. Focusing on core marketing competencies, students are introduced to theories and practices necessary to meet the challenges and opportunities faced by today's marketers. The marketing and sales certificate provides opportunities for students to learn key marketing and sales concepts and apply them to learn skills needed to be successful in marketing, sales, advertising, consumer behavior, and social media marketing.

PROGRAM SEQUENCE

First Semester
BUS 110 Introduction to Business 3
BUS 137 Principles of Management 3
CIS 110 Introduction to Computers 3
ECO Social Science Elective 3
ENG 111 Writing and Inquiry 3
MKT 120 Principles of Marketing 3

Second Semester
ACC 120 Principles of Financial Accounting 4
BUS 115 Business Law I 3
BUS 121 Business Math 3
MKT 220 Advertising and Sales Promotion 3
MAT Mathematics Elective 3

Complete Business Core Certificate (C25120D):
ACC 120, BUS 110, BUS 115, BUS 137, + Choose Social Science Elective

Third Semester
ENG 114 Professional Research and Reporting 3
MKT 221 Consumer Behavior 3
MKT 225 Marketing Research 3
MKT 228 Service Marketing 3
MKT 232 Social Media Marketing 4

Complete Advertising and Digital Media Certificate (C25120DM):
MKT 120, MKT 220, MKT 228, MKT 232

Fourth Semester
BUS 139 Entrepreneurship I 3
HUM 115 Critical Thinking 3
MKT 227 Marketing Applications 3
Marketing Major Elective 3
MKT 123 Fundamentals of Selling ………………………………3

Complete Marketing and Sales Certificate (C25120MM):
MKT 120, MKT 123, MKT 220 and MKT 232

Social Science Elective (choose 3 credit hours):
ECO 151 Survey of Economics 3
ECO 251 Principles of Microeconomics 3
ECO 252 Principles of Macroeconomics 3

Mathematics Elective (choose 3 credit hours):
MAT 110 Mathematical Measurement & Literacy 3
MAT 143 Quantitative Literacy 3

Marketing Elective (choose 3 credit hours):
BUS 125 Personal Finance 3
BUS 228 Business Statistics 3
BUS 230 Small Business Management 3
BUS 240 Business Ethics …………………………………………3

BUS	260	Business Communications…………………….......3
WBL	111	Work-Based Learning I 1
WBL	112	Work-Based Learning II 2
WBL	113	Work-Based Learning III 3

Graduation Requirements...............................65 Credit Hours

PROJECT MANAGEMENT

Project Management Degree - A25120PM
-Day & Online

The project management curriculum is designed to provide students with the knowledge and skills necessary for employment and advancement in the growing field of project management. Students learn to define, initiate, plan, execute, monitor, and control all aspects of a given project to bring the project to a positive end. Students will study accounting, finance, economics, business ethics and human capital management. Students of the program should be able to apply their skills to the principals and practices aligned with the Project Management Institute. The curriculum is designed with a mix of theory and practical application that aligns itself with government, industry, and entrepreneurship.

Project Management Certificate – C25120PM
-Day & Online

The project management certificate program equips individuals with the basic skills needed to successfully managing projects of varying sizes and complexity. Included are project management methodologies and processes as well as culture, team building, and behavior management in a global context.

PROGRAM SEQUENCE

First Semester

BUS	110	Introduction to Business... 3
BUS	137	Principles of Management.. 3
CIS	110	Introduction to Computers... 3
ENG	111	Writing and Inquiry……………………………………3
MAT	143	Quantitative Literacy 3
OMT	222	Project Management.. 3

Second Semester

ACC	120	Principles of Financial Accounting 4
BUS	115	Business Law I 3
ECO		Social Science Elective 3
MKT	223	Customer Service…………………………………… 3
HUM	115	Critical Thinking... 3

Complete Business Core Certificate (C25120D):
ACC 120, BUS 110, BUS 115, BUS 137, + Choose Social Science Elective

Third Semester

ENG	114	Professional Research and Reporting 3
BUS	173	Procurement.……………………….......................... 3
BUS	225	Business Finance... 3
BUS	240	Business Ethics.. 3
BUS	260	Business Communication……………………………3
PMT	215	Project Management Leadership 3

Fourth Semester

BUS	274	Contract Administration………………………………3
MKT	120	Principles of Marketing.. 3
PMT	111	Project Management Assessing Risk 3

PMT	210	Project Management Issues....................................... 3
		Project Management Elective..................................... 3

Social Science Elective (choose 3 credit hours):

ECO	151	Survey of Economics 3
ECO	251	Principles of Microeconomics…………………………3
ECO	252	Principles of Macroeconomics………………………..3

Project Management Elective
(choose a minimum of 3 credit hours):

LOG	110	Intro to Logistics………………………………………3
BAS	120	Intro Analytics…………………………………………3
BUS	228	Business Statistics……………………………………3
BUS	255	Organizational Behavior……………………………...3
WBL	111	Work-Based Learning I…………………………………1
WBL	112	Work-Based Learning II…………………….................2
WBL	113	Work Based Learning III………………………………3

Graduation Requirements…………………………67 Credit Hours

COSMETOLOGY

Cosmetology Degree - A55140
-Day

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and related businesses.

Cosmetology Diploma - D55140A
Day-Evening

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/computer principles, product knowledge, and other selected topics.

Diploma graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and related businesses.

PROGRAM SEQUENCE

First Semester
COS	111	Cosmetology Concepts I	4
COS	112	Salon I	8
COS	224	Trichology & Chemistry	2

Second Semester
COS	113	Cosmetology Concepts II	4
COS	114	Salon II	8
COS	115ab	Cosmetology Concepts III, Part I	2
COS	116ab	Salon III, Part I	2

First Summer Term
ENG	110	Freshman Composition	3
PSY	118	Interpersonal Psychology	3
MAT	110	Mathematical Measurement & Literacy	3

Third Semester
COS	115bb	Cosmetology Concepts III, Part II	2
COS	116bb	Salon III, Part II	2
COS	117	Cosmetology Concepts IV	2
COS	118	Salon IV	7
COS	223	Contemporary Hair Coloring	2

Complete Cosmetology Diploma –D55140A (47 Credits)
COS 111, COS 112, ENG 110, PSY 118, COS 113, COS 114, COS 115, COS 116, COS 117, COS 118

Fourth Semester
COM	120	Intro Interpersonal Communication	3
HUM	121	The Nature of America	3
COS	240	Contemporary Design	2
COS	225	Adv Contemp Hair Coloring	2

Total Graduation Requirements 64 Semester Credit Hours

CRIMINAL JUSTICE TECHNOLOGY

Criminal Justice Technology Degree - A55180
-Day & Online

The Criminal Justice Technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system's role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

Criminal Justice Technology - Introduction C55180P
-Day & Online

Individuals seeking a career in law enforcement should realize that additional credentials may be required to enter into the field of criminal justice. Understanding the role of policing in America, which is the gateway to the criminal justice process is essential. The foundations of police processes, occupational roles and tasks of law enforcement, and the nature and designs of typical, as well as innovative police systems are the foundation of the certificate. A broad introduction to the criminal laws, including the structure and function of the courts; the legal profession, legal education, and the politics of judicial selection are reviewed and applied in the course material. This certificate is taught by knowledgeable faculty members with years of real-world, hands-on experience.

Police Records Specialist – C55180R
Performs responsible technical work in developing and validating the police database. Conducts analysis of incident data, assists in the preparation of special reports, works in conjunction with all local, state, and national law enforcement agencies on wanted and missing persons, stolen or recovered property and criminal history information. Operates and enters files into the N.C.I.C. and D.C.I computer systems and may be required to prepare clear, comprehensive reports from information obtained directly from offices or citizens.

Security & Intelligence Analysis – C55180S
The typical job requirements for Homeland Security in North Carolina is more oriented towards Intelligence Analysis, Security Management and Critical Incidents. This certificate would prepare students to perform extensive security audits for private corporations and for local and state government, identifying weaknesses in their overall security. Emphasis placed on risk analysis studies that examine the methods, procedures, and systems for security gaps and vulnerabilities

Financial Crime Specialist – C55180F
Utilizes banking systems to investigate and research all transaction information to ensure Banking Secrecy Act (BSA) and Anti-Money Laundering (AML) laws and regulations. Responsible for compiling and distributing a monthly report that details the banking networks' BSA/AML errors for the previous month and year-to-date. Responsible for providing and making updates to internal policy and procedures as well as annual updates to the Bank operations manual.

The typical job is found under: Bank Secrecy Act Analyst, Risk Analyst, Financial Crime Prevention Onboarding Analyst, Analyst-Fraud & Breach, AML Surveillance Monitoring Analyst, and Financial Investigative Analyst

PROGRAM SEQUENCE

First Semester
CJC	111	Intro to Criminal Justice	3
CJC	112	Criminology	3
CJC	122	Community Policing	3
CJC	131	Criminal Law	3
ENG	111	Writing and Inquiry	3

Second Semester
CJC	113	Juvenile Justice	3
CJC	132	Court Procedure and Evidence	3
CJC	141	Corrections	3
CJC	225	Crisis Intervention	3
ENG	114	Prof Research and Reporting	3

Third Semester

CJC	121	Law Enforcement Operations	3
CJC	212	Ethics and Community Relations	3
CJC	221	Investigative Principles	4
CJC	231	Constitutional Law	3
HUM	115	Critical Thinking	3

Fourth Semester

CJC		Major Elective	3
CJC		Major Elective	3
CJC		Major Elective	3
PSY	118	Interpersonal Psychology	3
CJC	255	Issues in CJ Application	3
BIO	161	Intro to Human Biology	3

Total Graduation Requirements…………………64 Credit Hours

Major Elective (Option)

CJC	120	Interview/Interrogations	2
CJC	161	Introduction to Homeland Security	3
CJC	162	Intel Analysis & Security Management	3
CJC	170	Critical Incident Management Public Safety	3
CJC	211	Counseling	3
CJC	213	Substance Abuse	3
CJC	214	Victimology	3
CJC	232	Civil Liability	3
CJC	233	Correctional Law	3
CJC	240	Law Enforcement Management & Supervision	3
OST	184	Records Management	3
PAD	151	Introduction to Public Administration	3
PAD	152	Ethics in Government	3

CRIMINAL JUSTICE TECHNOLOGY/ FORENSIC SCIENCE

Forensic Science Degree - A5518C
-Day, Hybrid, & Online

Forensic Science is a concentration under the curriculum of Criminal Justice Technology, which focuses on the application of the physical, biomedical, and social sciences to the analysis and evaluation of physical evidence, human testimony and criminal suspects. Study will focus on local, state, and federal law enforcement, evidence processing and procedures.

Students will learn both theory and hands-on analysis of latent evidence. They will learn fingerprint classification, identification, and chemical development. Students will record, cast, and recognize footwear and tire-tracks; and process crime scenes. Issues and concepts of communications and the use of computers and computer assisted design programs in crime scene technology will be discussed.

Graduates should qualify for employment in a variety of criminal justice organizations especially in local, state, and federal law enforcement, and correctional agencies

Crime Scene Technician Certificate – C5518C
-Day & Online

Crime scene technician certificate programs are targeted education options that focus on the skills needed to get an entry-level job with a local, county, or state law enforcement program. This certificate will include coursework on how to properly process a crime scene, including establishing chains of custody for evidence, identifying

potential materials for analysis, and taking crime scene photos, identifying footwear and tire imprint and recognition of trace evidence.

Crime scene technicians must have a keen eye for detail and patience as the job has a high degree of unpredictability. Students on track to receive a crime scene technician certificate are focused on using a particular methodology from various sources to compile accurate information and patterns to support law enforcement decisions.

PROGRAM SEQUENCE

First Semester

CJC	111	Introduction to Criminal Justice	3
CJC	112	Criminology	3
CJC	115	Crime Scene Photography	3
CJC	131	Criminal Law	3
CJC	245	Friction Ridge Analysis	3
ENG	111	Writing and Inquiry	3

Second Semester

CJC	113	Juvenile Justice	3
CJC	244	Footwear and Tire Imprint	3
CJC	246	Advanced Friction Ridge Analysis	3
PSY	118	Interpersonal Psychology	3
ENG	114	Prof Research & Reporting	3
OR			
ENG	112	Writing/Research in the Disc.	3

Third Semester

CJC	146	Trace Evidence	3
CJC	212	Ethics and Community Relations	3
CJC	221	Investigative Principles	4
CJC	231	Constitutional Law	3
BIO	161	Intro to Human Biology	4
OR			
MAT	143	Quantitative Literacy	3

Fourth Semester

CJC	132	Court Procedure & Evidence	3
CJC	144	Crime Scene Processing	3
CJC	250	Forensic Biology I	3
CJC	251	Forensic Chemistry I	4
HUM	115	Critical Thinking	3
CJC	255	Issues in CJ Application	3

Complete Crime Scene Technician (C5518C): CJC 115, CJC 144, CJC 146, CJC 244, CJC 250

Total Graduation Requirements........................... 68 Credit Hours

CULINARY ARTS
Culinary Arts Degree - A55150
-Day Only

The Culinary Arts curriculum provides specific training required to prepare students to assume positions as trained culinary professionals in a variety of food service settings including full service restaurants, hotels, resorts, clubs, catering operations, contract food service, and health care facilities.

Course offerings emphasize practical application, a strong theoretical knowledge base, and professionalism and provide the critical competencies to successfully meet industry demands. Courses also include sanitation, food/beverage service and control,

baking, garde manger, American/International cuisines, and hospitality supervision.

Graduates should qualify for entry-level positions such as line cook, station chef, and assistant pastry chef. American Culinary Federation certification is available to graduates. With experience, graduates may advance to positions such as sous-chef, executive chef, or food service manager.

Culinary Arts Diploma - D55150
-Day Only

The culinary arts diploma includes basic and more advanced courses to help prepare students for entry into the culinary field or to advance in their current foodservice positions.

Courses address both the art and the science of food preparation. Students learn basic sanitation, cooking and baking principles, and garnishing and presentation skills. Modern supervision techniques are also studied and practiced. The majority of class time is devoted to actual hands on kitchen skill development.

Course credits are transferable to the Culinary Arts associate degree program.

Culinary Arts Certificate - C55150A
-Day and Evening

The Culinary certificate includes basic courses to help prepare students for entry into the culinary field or to advance in their current foodservice jobs.

Courses address both the art and the science of food preparation. Students learn basic sanitation, cooking and baking principles, and garnishing and presentation skills. Modern supervision techniques are also studied and practiced. The majority of class time is devoted to actual hands-on kitchen skill development.

Courses credits are transferable to the Culinary Arts associate degree program.

PROGRAM SEQUENCE

First Semester
CUL	110	Sanitation and Safety	2
CUL	140	Culinary Skills I	5
ENG	111	Writing and Inquiry	3
MAT	110	Math Measurement & Literacy	3

Second Semester
CUL	160	Baking I	3
CUL	170	Garde-Manger I	3
CUL	240	Culinary Skills II	5
HRM	245	Human Resources Management Hosp	3

Complete Culinary Arts certificate (C55150A):
CUL 110, CUL 140, CUL 160 or CUL 170, CUL 240, HRM 245

Third Semester
CUL	112	Nutrition for Foodservice	3
CUL	112A	Nutrition for Fdsv Lab	1
ENG	112	Writing/Research in the Disc	3
HRM	260	Procurement for Hospitality	3

Fourth Semester
CUL	135	Food and Beverage Service	2
CUL	135A	Food and Beverage Service Lab	1
CUL	250	Classical Cuisine	5
WBL	112	Work-Based Learning I	2

		Fall Elective List I	2
CUL	260	Baking II	3

Fifth Semester
CUL	230	Global Cuisines	5
HRM	220	Cost Control-Food and Beverage	3
SPA	120	Spanish for the Workplace	3
CUL	270	Garde Manger II	3

Sixth Semester
PSY	118	Interpersonal Psychology	3
		Humanities/ Fine Arts Elective	3

Complete Culinary Arts Diploma (D55150):
CUL 110, CUL 140, ENG 111, MAT 110, CUL 160, CUL 170, CUL 240 and HRM 245, + Select six credits from HRM 260, HRM 220, and CUL 112/A, and select ten credits from BPA 150, CUL 130, CUL 214, CUL 260 or CUL 270.

Fall Elective List (Select one of the following):
CUL	130	Menu Design	2
CUL	214	Wine Appreciation	2

Other Electives
BPA	150	Artisan & Specialty Bread	4
WBL	122	Work-Based Learning II	2

Humanities Elective (Select one course from the following):
HUM	115	Critical Thinking	3
ART	131	Drawing I	3

Graduation Requirements ....72 Credit Hours

EDUCATION

Associate in Arts in Teacher Preparation – A1010T
-Day Only

The Associate in Arts in Teacher Preparation is a university transfer degree program for students interested in becoming licensed elementary, middle, high school or special education teachers. It is designed for those who want to teach in the humanities or social sciences and is comprised of 60 credit hours of college transfer courses allowing students who meet the requirements an opportunity to transfer as a junior to 15 University of North Carolina System institutions and a number of North Carolina private colleges and universities.

In addition to 45 credit hours of general education courses, teacher prep degree students will also complete a social diversity course as well as the following four teacher education courses: Teaching and Learning for All, Foundations of Education, Literacy Development and Instruction, and Teacher Licensure Preparation.

A.A. in Teacher Preparation
PROGRAM SEQUENCE

First Semester
ENG	111	Writing and Inquiry	3
MAT	143	Quantitative Literacy	3
or			
MAT	171	Precalculus Algebra	4
COM	120	Intro to Interpersonal Communication	3
or			

COM 231 Public Speaking 3
EDU 187 Teaching and Learning for All 4
ACA 122 College Transfer Success.. 1

Second Semester
ENG 112 Writing and Research in the Disciplines...................... 3
BIO 110 Principles of Biology... 4
SOC 210 Introduction to Sociology... 3
EDU 216 Foundations of Education 3
___ ___ *General Education 3

Third Semester
___ ___ *Humanities/Fine Arts 3
PSY 150 General Psychology 3
PHI 240 Introduction to Ethics.. 3
___ ___ *General Education 3
EDU 250 Teacher Licensure Preparation.................................... 3

Fourth Semester
SOC 225 Social Diversity.. 3
POL 120 American Government 3
EDU 279 Literacy Development and Instruction........................... 4
___ ___ *General Education 3
___ ___ *General Education 3

Graduation Requirements .... 60 Credit Hours

Associate in Science in Teacher Preparation – A1040T
-Day Only

The Associate in Science in Teacher Preparation is a university transfer degree program for students interested in becoming licensed elementary, middle, high school or special education teachers, and is tailored for those with an interest in STEM – science, technology, engineering and math.

It is comprised of 60 credit hours of college transfer courses allowing students who meet the requirements an opportunity to transfer as a junior to 15 University of North Carolina System institutions and a number of North Carolina private colleges and universities.

In addition to 45 credit hours of general education courses, teacher prep degree students will also complete a social diversity course as well as the following four teacher education courses: Teaching and Learning for All, Foundations of Education, Literacy Development and Instruction, and Teacher Licensure Preparation.

A.S. in Teacher Preparation
PROGRAM SEQUENCE

First Semester
ENG 111 Writing and Inquiry 3
___ ___ UGETC Mathematics 4
COM 120 Intro to Interpersonal Communication 3
or
COM 231 Public Speaking 3
EDU 187 Teaching and Learning for All 4
ACA 122 College Transfer Success... 1

Second Semester
ENG 112 Writing and Research in the Disciplines...................... 3
BIO 111 General Biology I... 4
___ ___ UGETC Mathematics 4
EDU 216 Foundations of Education 3

Third Semester
___ ___ *Humanities/Fine Arts.. 3
PSY 150 General Psychology 3
BIO 112 General Biology II 4
___ ___ *General Education 3
EDU 250 Teacher Licensure Preparation 3

Fourth Semester
SOC 225 Social Diversity... 3
POL 120 American Government 3
EDU 279 Literacy Development and Instruction 4
___ ___ *General Education 3
___ ___ *General Education 3

Graduation Requirements……………… .... 60 Credit Hours

Early Childhood Education Degree - A55220
-Day and Evening

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical sills, and basic use of computers.

Early Childhood Education Diploma - D55220A
-Day and Evening

The Early Childhood Education diploma prepares individuals to work as assistants with early childhood specialists in children's centers, nursery schools, kindergartens, child development centers, hospitals, institutions, camps, and recreation centers.

Early Childhood Education Certificate - C55220D
-Day, Evening, Online

The Early Childhood Education Certificate provides a strong foundation for early childhood professionals working with young children through six courses. The Early Childhood Education Certificate is stackable within the diploma and associate degree.

Upon successful completion of EDU 119, the student earns the NC Early Childhood Credential and qualifies to be the lead teacher in a child care center. Additionally, all courses with EDU prefixes are used to evaluate the educational level of each child care

provider by the NC Division of Child Development and Early Education.

School-Age Certificate - C55220E
- Online

The School-Age Certificate provides a strong foundation for early childhood professionals working with school-age children through six courses. The School-Age Certificate enables the student to receive two state credentials.

Upon successful completion of EDU 119, the student earns the NC Early Childhood Credential and qualifies to be the lead teacher in a child care center.

By successfully completing EDU 145 and either EDU 235 or EDU 263, the student receives the NC School-Age Credential.

Additionally, all courses with EDU prefixes are used to evaluate the educational level of each child care provider by the NC Division of Child Development and Early Education.

Preschool Foundation Certificate - C55220G
-Day, Evening, Online

The Early Childhood Education Certificate provides a foundation for early childhood professionals working with young children through five courses. The Early Childhood Education Certificate is stackable within the diploma and associate degree.

Upon completion of EDU 119, the student earns the NC Early Childhood Credential and qualifies to be the lead teacher in a child care center. Additionally, all courses with EDU prefixes are used to evaluate the educational level of each child care provider by the NC Division of Child Development and Early Education.

Infant/Toddler Care Certificate - C55290
-Day, Evening, Online

The Infant/Toddler Care Certificate introduces the student to the field of ECE with a concentration of study of children birth through the age of two years through six courses. The Infant/Toddler Care Certificate is stackable within the diploma and associate degree.

Upon successful completion of EDU 119, the student earns the NC Early Childhood Credential and qualifies to be the lead teacher in a child care center. Additionally, all courses with EDU prefixes are used to evaluate the educational level of each child care provider by the NC Division of Child Development and Early Education. This certificate is listed as one option in obtaining quality points in the Star Rated License System.

Birth-Kindergarten (B-K) Licensure Transfer - A55220B

PROGRAM SEQUENCE

First Semester

EDU	119	Introduction to Early Childhood Education	4
EDU	131	Child, Family, and Community	3
EDU	144	Child Development I	3
ENG	111	Writing and Inquiry	3
PSY	150	General Psychology	3

Second Semester

EDU	145	Child Development II	3
EDU	146	Child Guidance	3
EDU	153	Health, Safety, and Nutrition	3
COM	231	Public Speaking	3
MAT	143	Quantitative Literacy	3

Complete Preschool Foundation Certificate (C55220G): EDU 119, EDU 131, EDU 144, EDU 145, EDU 146

Third Semester

EDU	151	Creative Activities	3
EDU	162	Observ & Assess in ECE	3
OR			
EDU	184	Early Child Intro Pract	2
EDU	234	Infants, Toddlers, and Twos	3
HUM/FINE ARTS			
ART	111	Art Appreciation *OR*	3
MUS	110	Music Appreciation *OR*	3
PHI	240	Introduction to Ethics	3

Complete Infant/Toddler Care Certificate (C55290):
EDU 119, EDU 131, EDU 144, EDU 153, EDU 234

Complete Early Childhood Education ECE Certificate (C55220D):
EDU 119, EDU 131, EDU 145, EDU 146, EDU 153

Fourth Semester

BIO	110	Principles of Biology	4
EDU	216	Foundations of Education	3
EDU	221	Children with Exceptionalities	3
ENG	112	Writing/Research in the Disc	3
SOC/BEHAVIORAL			
ECO	251	Principles of Microeconomics *OR*	3
POL	120	American Government *OR*	3
SOC	210	Introduction to Sociology	3

Fifth Semester

EDU	250	Teacher Licensure Preparation	3
EDU	280	Language & Literacy Exp	3
EDU	284	Early Child Capstone Prac	4
NAT SCIENCE			
GEL	111	Geology *OR*	4
PHY	110	Conceptual Physics *OR*	3
PHY	110A	Conceptual Physics Lab	1

Total Graduation Requirements........................... **73 Credit Hours**

Career Track - A55220C
PROGRAM SEQUENCE

First Semester

EDU	119	Introduction to Early Childhood Education	4
EDU	131	Child, Family, and Community	3
EDU	144	Child Development I	3
ENG	111	Writing and Inquiry	3
PSY	150	General Psychology	3

Second Semester

EDU	145	Child Development II	3
EDU	146	Child Guidance	3
EDU	153	Health, Safety, and Nutrition	3
COM	231	Public Speaking	3
MAT	110	Math Measurement & Literacy	3

Complete Preschool Foundation Certificate (C55220G): EDU 119, EDU 131, EDU 144, EDU 145, EDU 146

Third Semester

EDU	151	Creative Activities	3
EDU	162	Observ & Assess in ECE	3
OR			
EDU	184	Early Child Intro Pract	2
EDU	234	Infants, Toddlers, and Twos	3
HUM/FINE ARTS			
ART	111	Art Appreciation *OR*	3
MUS	110	Music Appreciation *OR*	3
PHI	240	Introduction to Ethics	3

Complete Early Childhood Education Diploma (D55220A):
ENG 111, COM 231, PSY 150, MAT 110, EDU 119, EDU 131, EDU 144, EDU 145, EDU 146, EDU 151, EDU 153, EDU 184, or EDU 162, EDU 234.

Complete Infant/Toddler Care Certificate (C55290):
EDU 119, EDU 131, EDU 144, EDU 153, EDU 234, EDU 184

Complete Early Childhood Education ECE Certificate (C55220D):
EDU 119, EDU 131, EDU 145, EDU 146, EDU 153

Fourth Semester

EDU	282	Early Childhood Literature	3
EDU	221	Children with Exceptionalities	3
EDU	157	Active Play	3
___	___	Elective I (Choose a minimum of 3 credit hours)	3

Fifth Semester

EDU	251	Exploration Activities	3
EDU	280	Language & Literacy Exp	3
EDU	284	Early Child Capstone Prac	4
___	___	Elective II (Choose a minimum of 3 credit hours)	3

Total Graduation Requirements ....**67 Credit Hours**

Elective List I and II (Choose a minimum of 6 credit hours)

EDU	163	Classroom Mgt & Instruct	3
EDU	235	School-Age Dev & Program	3
EDU	261	Early Childhood Administration I	3
EDU	*262	Early Childhood Administration II	3
EDU	263	School-Age Program Admin	2

*EDU 262 has a prerequisite of 261. Take EDU 261 as Elective 1 and EDU 262 as Elective 2.

Early Education Non-Teaching Licensure Transfer - A55220E
PROGRAM SEQUENCE

First Semester

EDU	119	Introduction to Early Childhood Education	4
EDU	131	Child, Family, and Community	3
EDU	144	Child Development I	3
ENG	111	Writing and Inquiry	3
PSY	150	General Psychology	3

Second Semester

EDU	145	Child Development II	3
EDU	146	Child Guidance	3
EDU	153	Health, Safety, and Nutrition	3
COM	231	Public Speaking	3
MAT	143	Quantitative Literacy OR	3

Complete Preschool Foundation Certificate (C55220G): EDU 119, EDU 131, EDU 144, EDU 145, EDU 146

Third Semester

EDU	151	Creative Activities	3
EDU	162	Observ & Assess in ECE	3
OR			
EDU	184	Early Child Intro Pract	2
EDU	234	Infants, Toddlers, and Twos	3
HUM/FINE ARTS			
ART	111	Art Appreciation *OR*	3
MUS	110	Music Appreciation *OR*	3
PHI	240	Introduction to Ethics	3

Complete Infant/Toddler Care Certificate (C55290):
EDU 119, EDU 131, EDU 144, EDU 153, EDU 234

Complete Early Childhood Education ECE Certificate (C55220D):
EDU 119, EDU 131, EDU 145, EDU 146, EDU 153

Fourth Semester

BIO	110	Principles of Biology	4
EDU	261	Early Childhood Admin I	3
EDU	221	Children with Exceptionalities	3
ENG	112	Writing/Research in the Disc	3
SOC/BEHAVIORAL			
ECO	251	Principles of Microeconomics *OR*	3
POL	120	American Government *OR*	3
SOC	210	Introduction to Sociology	3

Fifth Semester

EDU	262	Early Childhood Admin II	3
EDU	280	Language & Literacy Exp	3
EDU	284	Early Child Capstone Prac	4
NAT SCIENCE			
GEL	111	Geology *OR*	4
PHY	110	Conceptual Physics *OR*	3
PHY	110A	Conceptual Physics Lab	1

Total Graduation Requirements ....**73 Credit Hours**

ESTHETICS TECHNOLOGY

Esthetics Technology Certificate - C55230

The Esthetics Technology curriculum provides competency-based knowledge, scientific/artistic principles and hands-on fundamentals associated with the art of skin care. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional Esthetics Technology, business/human relations, product knowledge, and other related topics.

Graduates should be prepared to take the North Carolina Cosmetology State Board Licensing Exam and upon passing be licensed and qualify for employment in beauty and cosmetic/skin care salons, as a platform artist, and in related businesses.

PROGRAM SEQUENCE

First Semester

COS	119	Esthetics Concepts I	2
COS	120	Esthetics Salon I	6

Second Semester

COS 125 Esthetics Concepts II.. 2
COS 126 Esthetics Salon II... 6

Total Graduation Requirements ....16 Credit Hours

HOSPITALITY MANAGEMENT

Hospitality Management Degree - A25110
-Day and online

The Hospitality Management curriculum prepares students to understand and apply the administrative and practical skills needed for supervisory and managerial positions in hotels, motels, resorts, inns, restaurants, institutions, and clubs.

Course work includes front office management, guest services, sanitation, menu writing, quality management, purchasing, and other areas critical to the success of hospitality professionals.

Upon completion, graduates should qualify for supervisory or entry-level management positions in food and lodging including: front office, reservations, housekeeping, purchasing, dining room, and marketing. Opportunities are also available in the support areas of food and equipment sales.

Hospitality Management Diploma - D25110A
-Day

The hospitality management diploma prepares students to understand and apply the administrative and practical skills needed for positions in the hospitality industry. It also applies advanced classes in the hospitality and business field. Students may also choose concentrations in restaurant or hotel management. Course work includes guest services, human resource management, and other areas critical to the success of hospitality professionals. Upon completion, graduates should qualify for entry level supervisory or management training positions in the hospitality industry.

Hospitality Restaurant Management Certificate - C25110D
-Day

The restaurant management certificate prepares students to understand and apply the administrative and practical skills needed for positions in the restaurant industry. Course work includes guest services, sanitation, human resource management, and other areas critical to the success of restaurant professionals. Upon completion, graduates should qualify for entry level supervisory or management training positions in the restaurant industry.

Hospitality Event Coordinator Certificate - C25110A
-Day Only

The event management certificate prepares students to understand and apply the administrative and practical skills needed for positions in the field of meeting and convention planning. Course work includes guest services, event planning, marketing, and other areas critical to the success of industry professionals. Upon completion, graduates should qualify for entry level supervisory or management training positions in the meeting and convention planning field.

Hospitality Hotel Operations Certificate - C25110H
-Day

The hotel management certificate prepares students to understand and apply the administrative and practical skills needed for positions in the hotel industry. Course work includes guest services, sanitation, human resource management, and other areas critical to the success of hotel professionals. Upon completion, graduates should qualify for entry level supervisory or management training positions in the hotel industry.

PROGRAM SEQUENCE

First Semester

CUL 110 Sanitation and Safety 2
ENG 111 Writing and Inquiry..3
HRM 110 Introduction to Hosp & Tourism 3
MAT 110 Math Measurement & Literacy 3
OST 137 Office Applications...3

Second Semester

CUL 135 Food and Beverage Service..2
CUL 135A Food and Beverage Service Lab................................1
HRM 245 Human Resource Mgmt- Hosp....................................3
CUL 142 Fundamentals of Food
or
CUL 140 Culinary Skills I..5
HUM 115 Critical Thinking...3

Third Semester

HRM 220 Cost Control - Food and Beverage..............................3
HRM 275 Leadership-Hospitality 3
HRM 240 Marketing for Hospitality 3

Fourth Semester

WBL 112 Work-Based Learning I...2
SPA 120 Spanish for the Workplace 3
HRM 210 Meetings & Event Planning 3
PSY 118 Interpersonal Psychology 3
___ ___ *Elective List I 3

Fifth Semester

ACC 175 Hotel and Restaurant Accounting................................4
HRM 140 Legal Issues – Hospitality...3
HRM 275 Leadership-Hospitality 3
ENG 112 Writing/Research 3
Elective List II..2

Complete Hospitality Restaurant Management certificate (C25110D): CUL 110, HRM 110, HRM 225, HRM 245, , CUL 135 and CUL 135A

Complete Hospitality Event Coordinator certificate (C25110A): HRM 110, HRM 240, CUL 135/A, CUL 110and HRM 210

Complete Hospitality Hotel Operations certificate (C25110H): CUL 110, HRM 110, HRM 120, HRM 210 and HRM 245.

Complete Hospitality Management diploma (D25110): CUL 110, ENG 111, HRM 110, MAT 110, HRM 140, HRM 240, HRM 220, HRM 245; HRM 210, CUL 135/A, OST 137, HRM 280; Take one course from HRM 120 or HRM 225

Elective List I (Select one or both courses from the following list):
HRM 120 Front Office Procedures 3
HRM 225 Beverage Management 3

Elective List II (Select one or both courses from the following list):
CUL 130 Menu Design 2

CUL 214 Wine Appreciation 2

Graduation Requirements .... 66 Credit Hours

Public Safety Administration
Public Safety Administration Degree – A55480-
Hybrid-Online Career Cluster: Law, Public Safety, Corrections & Security Cluster Description: Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.
Pathway: Public Safety Technologies Effective Term: Fall 2021 (2021*1) Program Majors Under Pathway: Program Major / Classification of Instruction Programs (CIP) Code
Credential Level(s) Offered Program Major Code Public Safety Administration CIP Code 43.9999 AAS/Diploma/Certificate A55480 Pathway Description: The Public Safety Administration curriculum is designed to provide students, as well as practitioners, with knowledge and skills in the technical, managerial, and administrative areas necessary for entrance or advancement within various public safety and government organizations.

Course work in diverse subject areas includes public safety administration and education, interagency operations, crisis leadership, government and agency financial management, professional standards, incident management, administrative law, and supervision, while providing a streamlined pathway that recognizes the value of previously earned skillsets and credentials within the public safety sector.

Employment opportunities exist with fire or police departments, emergency management organizations, governmental agencies, industrial firms, correctional facilities, private industries, insurance organizations, educational organizations, security and protective organizations, and through self-employment opportunities.

PROGRAM SEQUENCE

First Semester
ACA	122	College Transfer Success	1
ENG	111	Writing & Inquiry	3
PAD	151	Introduction to Public Administration	3
PAD	152	Ethics in Government	3
EPT	150	Incident Management	3
CJC	121	Law Enforcement Operations	3

Second Semester
ENG	114	Prof Research & Reporting	3
COM	231	Public Speaking	3
PAD	251	Public Finance & Budgeting	3
PAD	252	Public Policy Analysis	3
EPT	124	EM Services Law & Ethics	3
POL	120	American Government	3

Third Semester
MAT	152	Statistical Methods I	4
HUM	115	Critical Thinking	3
PAD	254	Grant Writing	3
EPT	230	Emergency Planning	3
FIP	276	Managing Fire Services	3
EPT	140	Emergency Management	3

Fourth Semester
EPT	210	Response & Recovery	3

PSY	150	General Psychology	3
POL	130	State & Local Government	3
CJC	111	Introduction to Criminal Justice	3
CJC	240	Law Enforcement Mgmt & Supervision	3

Total Graduation Requirements .... **68 Credit Hours**

Leadership Certificate – C55480L
Public Safety in the 21st century requires a holistic approach. Effective leadership and collaboration between public safety disciplines is essential to meet the complex challenges facing society today. The Leadership Certificate provides students with a solutions-centered approach to public safety. It is designed to meet the demand for leadership education at the federal, state, and local government levels, as well as throughout the private sector. It is tailored toward the needs of current and future professionals and officials in a variety of public safety fields, including planning, legal affairs, public policy, research and technology, leadership, and contemporary public safety practice.

Positions in Public Safety often involve emergency preparedness and response, as well as the coordination of resources. The goal of Public Safety administration and coordination is to protect citizens through the cooperative work of fire, police, and emergency medical response services and coordinated areas of responsibility within areas of management, operations, and administrative skill sets.

SUPPLY CHAIN MANAGEMENT

SUPPLY CHAIN MANAGEMENT (DISTRIBUTION MANAGEMENT) DEGREE - A25620D
-Online

The Global Logistics / Distribution Management Technology curriculum prepares individuals for a multitude of career opportunities in distribution, transportation, warehousing, supply chain, and manufacturing organizations.

Course work includes the international and domestic movement of goods from the raw materials source(s) through production and ultimately to the consumer. Courses in transportation, warehousing, inventory control, material handling, purchasing, computerization, supply chain operations and federal transportation and OSHA regulations are emphasized.

Graduates should qualify for positions in a wide range of logistics-related positions in government agencies, manufacturing, and service organizations. Employment opportunities include entry-level purchasing, material management, warehousing, inventory, transportation, international freight, and logistics analysts. Upon completion, graduates may be eligible to pursue professional credentials through APICS, AST&L, CSCMP, and ISM.

A.A.S PROGRAM SEQUENCE

First Semester
CIS	110	Introduction to Computers	3
ACC	120	Principles of Financial Accounting	4
ENG	111	Writing & Inquiry	3

LOG 110 Introduction to Logistics 3
MAT 121 Algebra/ Trigonometry 1..3

Second Semester
ACC 149 Introduction to Accounting Spreadsheets 2
ENG 114 Professional Research and Reporting 3
LOG 120 Global Logistics...3
LOG 211 Distribution Management 3
LOG 215 Supply Chain Management.......................................3
BUS 110 Introduction to Business... 3

Third Semester
HUM 115 Critical Thinking...3
BUS 115 Business Law I..3
LOG 230 Transportation Management.....................................3
LOG 240 Purchasing Logistics 3
___ ___ *Major Elective 3
Choose approximately 3 credit hours from the Major Elective List

Fourth Semester
LOG 220 Logistics Management 3
LOG 210 Fleet Management 3
ECO 251 Principles of Microeconomics...................................3
LOG 225 Logistics Systems 4
___ ___ *Major Elective 3

Major Electives (choose a minimum of 6 credit hours)
ACC 121 Principles of Managerial Accounting 4
ACC 225 Cost Accounting..3
BAS 120 Business Analytics I 3
BUS 228 Business Statistics 3
OMT 222 Project Management...3
WBL 111 Work-Based Learning I 1
WBL 112 Work-Based Learning I 2
WBL 121 Work-Based Learning II 1

Total Graduation Requirements .... 64 Semester Credit Hours

Distribution Management Core Certificate - C25620DA
- Online

This certificate is designed to give students a broad foundation in distribution management. Emphasis is placed on providing an overview of the major functions of arranging and coordinating the transportation of products globally. Students can gain an understanding of all activities involved in the flow of products and information between the suppliers, customers, producers, and service providers. Upon completion students should understand the basics of distribution management.

Course Requirements: ACC 120, LOG 110, LOG 120, LOG 211

Transportation Management Certificate - C25620DB
- Online

This certificate is designed to give students a broad foundation in distribution management. Emphasis is placed on providing an overview of the major functions of arranging and coordinating the transportation of products globally. Students can gain an understanding of all activities involved in the flow of products and information between the suppliers, customers, producers, and service providers. Upon completion students should understand the basics of distribution management.

Course Requirements: LOG 210, LOG 215, LOG 230, LOG 225

SUPPLY CHAIN MANAGEMENT (GLOBAL LOGISTICS TECHNOLOGY) DEGREE - A25620G
-Online

The Global Logistics / Distribution Management Technology curriculum prepares individuals for a multitude of career opportunities in distribution, transportation, warehousing, supply chain, and manufacturing organizations.

Course work includes the international and domestic movement of goods from the raw materials source(s) through production and ultimately to the consumer. Courses in transportation, warehousing, inventory control, material handling, purchasing, computerization, supply chain operations and federal transportation and OSHA regulations are emphasized.

Graduates should qualify for positions in a wide range of logistics-related positions in government agencies, manufacturing, and service organizations. Employment opportunities include entry-level purchasing, material management, warehousing, inventory, transportation, international freight, and logistics analysts. Upon completion, graduates may be eligible to pursue professional credentials through APICS, AST&L, CSCMP, and ISM.

A.A.S. PROGRAM SEQUENCE

First Semester
CIS 110 Introduction to Computers 3
ACC 120 Principles of Financial Accounting............................. 4
ENG 111 Writing & Inquiry 3
LOG 110 Introduction to Logistics.. 3
LOG 125 Transportation Logistics 3

Second Semester
MAT 121 Algebra/ Trigonometry 1 3
ACC 149 Introduction to Accounting Spreadsheets................... 2
ENG 114 Professional Research and Reporting....................... 3
LOG 211 Distribution Management... 3
LOG 215 Supply Chain Management 3
LOG 120 Global Logistics 3

Third Semester
HUM 115 Critical Thinking 3
INT 110 International Business 3
LOG 235 Import/Export Management....................................... 3
LOG 240 Purchasing Logistics.. 3
___ ___ *Major Elective.. 3
Choose approximately 3 credit hours from the Major Elective List

Fourth Semester
ECO 251 Principles of Microeconomics 3
BUS 115 Business Law I 3
LOG 225 Logistics Systems.. 4
LOG 250 Advanced Global Logistics 4
___ ___ *Major Elective.. 3
Choose approximately 3 credit hours from the Major Elective List

Major Electives (choose a minimum of 6 credit hours)
ACC 121 Principles of Managerial Accounting 4
ACC 225 Cost Accounting 3
BAS 120 Business Analytics I..3
BUS 110 Introduction to Business 3
BUS 274 Contract Administration 3
INT 210 International Trade 3
LOG 220 Logistics Management...3
OMT 222 Project Management 3
WBL 111 Work-Based Learning I..1
WBL 112 Work-Based Learning I..2
WBL 121 Work-Based Learning II...1

Total Graduation Requirements .... 65 Semester Credit Hours

Logistics Core Certificate – C25620GA
-Online

This certificate is designed to give students a broad foundation in logistics. Emphasis is placed on the various modes of domestic transportation, the movement and storage of goods from raw materials sources to end consumers, warehouse and distribution center management, and management skills. Upon completion students should understand the basics of logistics management

Course Requirements: LOG 110, LOG 125, LOG 211, LOG 215

International Logistics Certificate – C25620GB
-Online

This certificate is designed to give students a broad foundation in the global supply chain. Emphasis is placed on import/export management, purchasing and the impact on materials management, supply chain, transportation, and global logistics processes. Upon completion students should understand the global supply chain.

Course Requirements: LOG 215, INT 110, LOG 235, LOG 240

Supply Chain Certificate – C25620GC
-Online

This certificate is designed to give students a broad foundation in the supply chain. Emphasis is placed on the activities of logistics, the various modes of domestic transportation, warehousing and distribution center management, and supply chain management. Upon completion students should understand the supply chain.

Course Requirements: ACC 120, LOG 110, LOG 215, LOG 240

Associate in Arts Degree

To earn the **Associate in Arts (AA)** degree, all students are required to complete:
- 6 credits of UGETC English Composition
  - ENG-111 & ENG-112
- 3 - 4 credits of UGETC Mathematics
  - MAT-143, MAT-152, or MAT-171
- 4 credits of UGETC Natural Sciences
  - AST-151 & AST-151A, BIO-110, BIO-111, CHM-151. GEL-111, or PHY-110 & PHY-110A
- 9 credits of UGETC Communication / Humanities / Fine Arts, from at least 2 subjects
  - ART-111, ART-114, ART-115, COM-120, COM-231, DRA-111, ENG-231, ENG-232, ENG-241, ENG-242, MUS-110, MUS-112, PHI-215, or PHI-240
- 9 credits of UGETC Social / Behavioral Sciences, from at least 2 subjects
  - ECO-251, ECO-252, HIS-111, HIS-112, HIS-131, HIS-132, POL-120, PSY-150, or SOC-210
- 14 credits of additional General Education Courses
- 1 credit of ACA-122
- 14 credits of electives chosen from the list of [Transferable](#) Courses
- In addition, at least one of COM-110, COM-120, or COM-231 must be taken as part of the above coursework

The course sequence outlined below is suggested for **full-time students** pursuing an **Associate in Arts (AA)** degree, who have placed out of all developmental courses.

First Semester	Credit Hours
ENG-111	3
UGETC Mathematics	3-4
UGETC Social / Behavioral Science	3
UGETC Communication / Humanities / Fine Arts	3
UGETC Communication / Humanities / Fine Arts Be sure to choose 2 subjects	3
ACA-122	1
Total Number of Credit Hours 1st Semester	**16-17**

Second Semester	Credit Hours
ENG-112	3
UGETC Social / Behavioral Science Be sure to choose 2 subjects	3
UGETC Natural Science	4
General Education Course	3
General Education Course	3
Total Number of Credit Hours 2nd Semester	**16**

Third Semester	Credit Hours
UGETC Communication / Humanities / Fine Arts Be sure to choose 2 subjects	3
UGETC Social / Behavioral Science Be sure to choose 2 subjects	3
General Education Course	3
General Education Course	3
General Education Course	3
Total Number of Credit Hours 3rd Semester	**15**

Fourth Semester	Credit Hours
Communications Take COM-110, COM-120, or COM-231 if not previously selected If COM-110, COM-120, or COM-231 was previously selected, then choose an elective from the list of transferable courses	3
Elective - from the list of transferable courses	3
Elective - from the list of transferable courses	3
Elective - from the list of transferable courses	3
Elective - from the list of transferable courses	1
Total Number of Credit Hours 4th Semester	**13**

THIS SHEET IS FOR ADVISING PURPOSES ONLY. Students should work with their Advisor to determine course selections that will result in the greatest transferrable credit, for the intended program, upon transfer to the four-year school.
Note Semester outlines based upon no pre-requisite classes required
Note Students choosing 3 hour General Education and Elective courses may exceed the required 60-61 credits
Note Transfer students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution. Students who wish to take Foreign Language should begin the sequence in the first or second semester. Foreign Language courses will count toward the additional General Education or pre-major courses for degree completion. For students who select Foreign Language courses, the required UGETC courses in Humanities/Fine Arts and/or in Behavioral/Social Sciences can be delayed until the third semester.

Associate in Fine Arts – Visual Arts Degree

To earn the **Associate in Fine Arts – Visual Arts (AFA)** degree, all students are required to complete:

- 6 credits of UGETC English Composition
  - ENG-111 & ENG-112
- 3 - 4 credits of UGETC Mathematics
  - MAT-143, MAT-152, or MAT-171
- 4 credits of UGETC Natural Sciences
  - AST-151 & AST-151A, BIO-110, BIO-111, CHM-151. GEL-111, or PHY-110 & PHY-110A
- 6 credits of UGETC Communication / Humanities / Fine Arts, from at least 2 subjects
  - COM-120, COM-231, DRA-111, ENG-231, ENG-232, ENG-241, ENG-242, MUS-110, MUS-112, PHI-215, or PHI-240
- 6 credits of UGETC Social / Behavioral Sciences, from at least 2 subjects
  - ECO-251, ECO-252, HIS-111, HIS-112, HIS-131, HIS-132, POL-120, PSY-150, or SOC-210
- 15 credits of required ART courses
  - ART-114, ART-115, ART-121, ART-122, ART-131
- 1 credit of ACA-122
- 19 credits of electives chosen from the list of Transferable Courses

The course sequence outlined below is suggested for **full-time students** pursuing an **Associate in Fine Arts - Visual Arts (AFA)** degree, who have placed out of all developmental courses.

First Semester	Credit Hours
ENG-111	3
UGETC Mathematics	3 - 4
Required ART course: ART-121	3
Required ART course: ART-114	3
Required ART course: ART-131	3
ACA-122	1
Total Number of Credit Hours 1st Semester	**16-17**

Second Semester	Credit Hours
ENG-112	3
UGETC Social/Behavioral Science	3
Required ART course: ART-122	3
Required ART course: ART-115	3
Elective (ART-132 Recommended)	3
Total Number of Credit Hours 2nd Semester	**15**

Third Semester	Credit Hours
UGETC Social/Behavioral Science Be sure to choose at least 2 subjects	3
UGETC Communications/Humanities/Fine Arts	3
Elective (ART-231 Recommended)	3
Elective (ART-240 or ART-281 Recommended)	3
Elective (ART-171 or ART-275 Recommended)	3
Total Number of Credit Hours 3rd Semester	**15**

Fourth Semester	Credit Hours
UGETC Communications/Humanities/Fine Arts Be sure to choose at least 2 subjects	3
UGETC Natural Science	4
Elective (ART-232, ART-241, or ART-282 Recommended)	3
Elective (ART-281 , ART-244, or ART-171 Recommended)	3
Elective (ART-214 Recommended)	1-3
Total Number of Credit Hours 4th Semester	**14-16**

THIS SHEET IS FOR ADVISING PURPOSES ONLY. Students should work with their Advisor to determine course selections that will result in the greatest transferrable credit, for the intended program, upon transfer to the four-year school.
Note Semester outlines based upon no pre-requisite classes required
Note Students choosing 3 hour Elective courses may exceed the required 60-61 credits
Note Transfer students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution. Students who wish to take Foreign Language should begin the sequence in the first or second semester. Foreign Language courses will count toward the additional General Education or pre-major courses for degree completion. For students who select Foreign Language courses, the required UGETC courses in Humanities/Fine Arts and/or in Behavioral/Social Sciences can be delayed until the third semester.

Associate in Science Degree

To earn the **Associate in Science (AS)** degree, all students are required to complete:
- 6 credits of UGETC English Composition
  - ENG-111 and ENG-112
- 8 credits of UGETC Mathematics
  - MAT-171, MAT-172, MAT-263, MAT-271, MAT-272
- 8 credits of UGETC Natural Sciences as a one year sequence in one discipline area
  - BIO-111 & BIO-112, CHM-151 & CHM-152, PHY-151 & PHY-152, PHY-251 & PHY-252, or AST-151, AST-151A & GEL-111
- 6 credits of UGETC Communication/Humanities/Fine Arts, from two different subjects
  - ART-111, ART-114, ART-115, COM-120, COM-231, DRA-111, ENG-231, ENG-232, ENG-241, ENG-242 MUS-110, MUS-112, PHI-215, or PHI-240
- 6 credits of UGETC Social/Behavioral Sciences, from two different subjects
  - ECO-251, ECO-252, HIS-111, HIS-112, HIS-131, HIS-132, POL-120, PSY-150, or SOC-210
- 11 credits of additional General Education Courses
- 1 credit of ACA 122
- 14 credits of electives chosen from the list of Transferable Courses
- In addition, at least one of COM-110, COM-120, or COM-231 must be taken as part of the above coursework

The course sequence outlined below is suggested for **full-time students** pursuing an **Associate of Sciences (AS)** degree, who have placed out of all developmental courses.

First Semester	Credit Hours
ENG-111	3
UGETC Mathematics	4
UGETC Social / Behavioral Science	3
UGETC Communication / Humanities / Fine Arts	3
ACA-122	1
Total Number of Credit Hours 1st Semester	**14**

Second Semester	Credit Hours
ENG-112	3
UGETC Mathematics	4
UGETC Natural Science	4
UGETC Social / Behavioral Science Be sure to choose 2 subjects	3
UGETC Communication / Humanities / Fine Arts Be sure to choose 2 subjects	3
Total Number of Credit Hours 2nd Semester	**17**

Third Semester	Credit Hours
UGETC Natural Science	4
General Education Course	3
General Education Course	3
General Education Course	3
General Education Course	3
Total Number of Credit Hours 3rd Semester	**16**

Fourth Semester	Credit Hours
Communications Take COM-110, COM-120, or COM-231 if not previously selected If COM-110, COM-120, or COM-231 was previously selected, then choose an elective from the list of transferable courses	3
Elective - from the list of transferable courses	3
Elective - from the list of transferable courses	3
Elective - from the list of transferable courses	3
Elective - from the list of transferable courses	1
Total Number of Credit Hours 4th Semester	**13**

THIS SHEET IS FOR ADVISING PURPOSES ONLY. Students should work with their Advisor to determine course selections that will result in the greatest transferrable credit, for the intended program, upon transfer to the four-year school.
Note Semester outlines based upon no pre-requisite classes required
Note Students choosing 3 hour General Education and Elective courses may exceed the required 60-61 credits
Note Transfer students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution. Students who wish to take Foreign Language should begin the sequence in the first or second semester. Foreign Language courses will count toward the additional General Education or pre-major courses for degree completion. For students who select Foreign Language courses, the required UGETC courses in Humanities/Fine Arts and/or in Behavioral/Social Sciences can be delayed until the third semester.

Associate in Engineering Degree

To earn the **Associate in Engineering (AE)** degree, all students are required to complete:

- 6 credits of UGETC English Composition
  - ENG-111 and ENG-112
- 3 credits of Humanities from
  - ENG-231, ENG-232, PHI-215, PHI-240, or REL-110ᵗ
- 3 credits of Fine Arts/Communications from
  - ART-111, ART-114, ART-115, COM-231, MUS-110, or MUS-112
- 3 credits of Microeconomics
  - ECO-251
- 3 credits of Social/Behavioral Sciences from
  - HIS-111, HIS-112, HIS-131, HIS-132, POL-120, PSY-150, or SOC-210
- 12 credits of Mathematics
  - MAT-271, MAT-272, and MAT-273
- 12 credits of Natural Sciences
- CHM-151, PHY-251, and PHY-252
- 3 credits of approved General Education from
  - BIO-111, CHM-152, COM-110, COM-231, ECO-252, GEL-111, HUM-110, and PHI-240
- 1 credit of ACA-122
- 2 credits of EGR-150
- 12 credits of approved *Engineering electives from
  - BIO-111, CHM-152, CHM-251, CHM-252 COM-110, COM-231, CSC-134, CSC-151, DFT-170, ECO-252, EGR-212, EGR-220, EGR-225, EGR-228, GEL-111 HUM-110, MAT-280, MAT-285, PED-110

*Engineering Electives should be selected based on the Engineering discipline and University to which you plan to transfer. Please speak to your advisor prior to selecting any Engineering electives
ᵗREL-110 will transfer for equivalency to the engineering programs at all five UNC Institutions that have undergraduate engineering programs. It may not transfer with equivalency to other programs.

The course sequence outlined below is suggested for **full-time students** pursuing an **Associate of Engineering (AE)** degree, who have placed out of all developmental courses.

First Semester	Credit Hours
MAT-271	4
CHM-151	4
ENG-111	3
ACA-122	1
EGR-150	2
Total Number of Credit Hours 1ˢᵗ Semester	**14**

Second Semester	Credit Hours
MAT-272	4
PHY-251	4
ENG-112	3
ECO-251	3
Total Number of Credit Hours 2ⁿᵈ Semester	**14**

Third Semester	Credit Hours
MAT-273	4
Humanities ENG-231, ENG-232, PHI-215, PHI-240, or REL-110ᵗ	3
Fine Arts/Communication ART-111, ART-114, ART-115, COM-231, MUS-110, or MUS-112	3
* Engineering Elective	3
* Engineering Elective	3
Total Number of Credit Hours 3ʳᵈ Semester	**16**

Fourth Semester	Credit Hours
PHY-252	4
Social/Behavioral Science HIS-111, HIS-112, HIS-131, HIS-132, POL-120, PSY-150, or SOC-210	3
* Engineering Elective	3
* Engineering Elective	3
* Engineering Elective	3
Total Number of Credit Hours 4ᵗʰ Semester	**16**

THIS SHEET IS FOR ADVISING PURPOSES ONLY. Students should work with their Advisor to determine course selections that will result in the greatest transferrable credit, for the intended program, upon transfer to the four-year school.
Note Students taking 4 credit electives may exceed the required 60 credit hours.
Note Transfer students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution. Students who wish to take Foreign Language should begin the sequence in the first or second semester. Foreign Language courses will count toward the additional General Education or pre-major courses for degree completion. For students who select Foreign Language courses, the required UGETC courses in Humanities/Fine Arts and/or in Behavioral/Social Sciences can be delayed until the third semester.

Health Sciences Division

Health Sciences Information: 919-747-0400

Dean Dr. Angela Washington
Phone: 919-747-0031
Email: aewashington@waketech.edu

Wake Technical Community College awards degrees, diplomas, and certificates in a variety of fields shown below. The highest credential given in each area is listed first, in bold type.

1. Click on the "**Program Name**" to go to the program's web page
2. Click on the "**Program of Study**" to see specific course requirements for that program

Programs may be offered during the day, evening, online, or a combination. Students should refer to Self Serve for the availability of classes. Click to see a list of Wake Tech's programs that can be completed fully online.

Program Name	Program Code
Associate Degree Nursing – *AAS Degree*	A45110A
Associate Degree in Nursing (LPN to RN Advanced Placement Option) **– *AAS Degree***	A45110B
Diploma Practical Nursing - *Diploma*	D45660
Computed Tomography Technology - *Certificate*	C45200
Dental Assisting - *Diploma*	D45240
Dental Hygiene – *AAS Degree*	A45260
Electroneurodiagnostic Technology – *AAS Degree*	A45320
Emergency Medical Science – *AAS Degree*	A45340A
EMS (Credentialed Paramedics Bridge) – *AAS Degree*	A45340B
Health and Fitness Science – *AAS Degree* Health and Fitness Science **– *Certificate***	A45630 C45630
Human Services Technology Human Services Technology **– *AAS Degree*** Human Services Technology/Gerontology – ***AAS Degree*** Human Services Technology/Gerontology - ***Certificate*** Human Services Technology/Mental Health **– *AAS Degree*** Human Services Technology/Mental Health **- *Certificate*** Human Services Technology/Substance Abuse **– *AAS Degree*** Substance Abuse Counseling **- *Certificate*** Substance Abuse Intervention **- *Certificate***	 A45380 A4538B C4538B A4538C C4538C A4538E C4538ECO C4538EI
Magnetic Resonance Imaging - *Diploma*	D45800
Mammography – ***Certificate***	C45830
Medical Assisting – *AAS Degree* Medical Assisting **- *Diploma***	A45400 D45400
Medical Laboratory Technology – *AAS Degree*	A45420
Medical Sonography – *AAS Degree*	A45440
Pharmacy Technology – *AAS Degree* **Pharmacy Technology –*AAS Degree Bridge***	A45580A A45580B
Phlebotomy - *Certificate*	C45600
Radiography – AAS Degree	A45700

*Collaborative Agreements
None at this time

HEALTH SCIENCES

ASSOCIATE DEGREE NURSING

The Associate Degree Nursing curriculum provides knowledge, skills, and strategies to integrate safety and quality into nursing care, to practice in a dynamic environment, and to meet individual needs which impact health, quality of life, and achievement of potential.

Course work includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes the nurse as a member of the interdisciplinary team providing safe, individualized care while employing evidence-based practice, quality improvement, and informatics.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN). Employment opportunities are vast within the global health care system and may include positions within acute, chronic, extended, industrial, and community health care facilities.

Associate Degree Nursing - A45110A
-Day

First Term
NUR	111	Introduction to Health Concepts	8
BIO	168	Anatomy and Physiology I	4
PSY	150	General Psychology	3
ENG	111	Writing and Inquiry	3

Second Term
NUR	112	Health-Illness Concepts	5
NUR	114	Holistic Health Concepts	5
BIO	169	Anatomy and Physiology II	4
PSY	241	Developmental Psychology	3

Third Term
| NUR | 211 | Health Care Concepts | 5 |
| *BIO | 175 | General Microbiology | 3 |

Fourth Term
NUR	113	Family Health Concepts	5
NUR	212	Health System Concepts	5
SOC	210	Introduction to Sociology	3
*ENG	112	Writing/Research in the Disc	3

Fifth Term
| NUR | 213 | Complex Health Concepts | 10 |
| | | Humanities/Fine Arts Elective | 3 |

Graduation Requirements .... 72 Credit Hours

*HUMANITIES/FINE ARTS ELECTIVE:
Choose one from:
HUM 115
PHI 215, 240

Acceptable Substitutions for the following Required Courses:
ENG 113 or ENG 114 for ENG 112
BIO 275 for BIO 175

**Demonstrate a chemistry or biology proficiency. This proficiency requirement may be satisfied by completing ONE of the following: one unit of a high school chemistry course with a grade of "C" or better; or CHM 090 (Chemistry Concepts) or an equivalent CHM 090 with a grade of "C" or better; or completion of Wake Tech's chemistry tutorial (CheMOOC); or completion of BIO 110, BIO 111, or CHM 130 or higher (or a transfer equivalent class) with a grade of "C" or better; or completion of BIO 168 (or a transfer equivalent class) with a grade of "C" or higher within 5 years of beginning the first clinical Nursing (NUR) class

Associate Degree Nursing - A45110B
LPN to RN – Advanced Placement Option
-Day

First Term
BIO	168	Anatomy and Physiology I	4
PSY	150	General Psychology	3
ENG	111	Writing and Inquiry	3
SOC	210	Introduction to Sociology	3

Second Term
BIO	169	Anatomy and Physiology II	4
PSY	241	Developmental Psychology	3
*BIO	175	General Microbiology	3

Third Term
| NUR | 214 | Nursing Transition Concepts | 4 |
| | | Humanities/Fine Arts Elective | 3 |

Fourth Term
NUR	114	Holistic Health Concepts	5
NUR	212	Health System Concepts	5
*ENG	112	Writing/Research in the Disc	3

Fifth Term
| NUR | 213 | Complex Health Concepts | 10 |

**Licensed Practical Nurses
Advanced Placement Option Credits...23
Successful completion of NUR 214:
 *NUR111, NUR 112, NUR 113 and NUR 211LPN Course sub should be automatic if they pass NUR 214

Graduation Requirements .... 76 Credit Hours

*HUMANITIES/FINE ARTS ELECTIVE:
Choose one from:
HUM 115
PHI 215, 240

Acceptable Substitutions for the following Required Courses:
ENG 113 or ENG 114 for ENG 112
BIO 275 for BIO 175

DIPLOMA PRACTICAL NURSING

The Practical Nursing curriculum provides knowledge and skills to integrate safety and quality into nursing care to meet the needs of the holistic individual which impact health, quality of life, and achievement of potential.

Course work includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes safe, individualized nursing care and participation in the interdisciplinary team while employing evidence-based practice, quality improvement, and informatics.

Graduates are eligible to apply to take the National Council Licensure Examination (NCLEX-PN) which is required for practice as a Licensed Practical Nurse. Employment opportunities include hospitals, rehabilitation/long term care/home health facilities, clinics, and physicians' offices.

Diploma Practical Nursing - D45660
-Day/Afternoon/Evening

First Term
| NUR | 101 | Practical Nursing I | 11 |
| BIO | 163 | Basic Anatomy & Physiology | 5 |

**OR
**BIO 168   Anatomy and Physiology I..4
MAT 110* GE Math Measurement & Literacy 3

Second Term
NUR 102   Practical Nursing II 10
PSY 150*   General Psychology……………………………
…….3
**BIO 169   Anatomy and Physiology II... 4
ENG 111* GE Writing and Inquiry 3

Third Term
NUR 103   Practical Nursing
III……………………………………9

Graduation Requirements .... 36-48 Credit Hours

Key to symbols after some courses:

* Developmental courses (ENG 002, MAT 003, and/or CHM 090) may be required based on admissions requirements, college placement, and course requisites.

GE Fulfills the general education requirements for this degree.

** Biology Options (take one of the following):

• BIO 163 Basic Anatomy & Physiology (the minimum requirement for Anatomy and Physiology, recommended for students who plan to complete only the Practical Nursing diploma)

**OR

• BIO 168 Anatomy and Physiology I & BIO 169 Anatomy and Physiology II (recommended for students who plan to pursue an Associate Degree in Nursing.

Note: Students on this plan of study will be chosen through the competitive admissions process outlined on the Wake Technical Community College Practical Nursing Diploma web page.

Other requirements include: NAI registry, ATI TEAS, and TOEFL

COMPUTED TOMOGRAPHY TECHNOLOGY

The Computed Tomography Technology curriculum prepares the individual to use specialized equipment to visualize cross-sectional anatomical structures and aid physicians in the demonstration of pathologies and disease processes**. *Individuals entering this curriculum must be registered or registry- eligible radiologic technologists, radiation therapists, or nuclear medicine technologists.***

Course work prepares the technologist to provide patient care and perform studies utilizing imaging equipment, professional communication, and quality assurance in scheduled and emergency procedures through academic and clinical studies.

Graduates may be eligible to sit for the American Registry of Radiologic Technologist Advanced-Level testing in Computed Tomography examination. They may find employment in facilities which perform these imaging procedures.

Computed Tomography Technology Certificate - C45200
-Day

Fall Semester
CAT 211   CT Procedures 4
CAT 224   CT Clinical Practicum 4

Spring Semester
CAT 210   CT Physics and Equipment 3
CAT 226   CT Clinical Practicum 6
CAT 261   CT Exam Prep...1

Graduation Requirements................................. 18 Credit Hours

*CAT 210, 211 and 261 taught totally online

*Clinical hours are scheduled during the day. Clinical are usually scheduled two days during the week. There *MAY* be some flexibility but must be coordinated through Mr. Morris prior to school start date.

DENTAL ASSISTING

The Dental Assisting curriculum prepares individuals to assist the dentist in the delivery of dental treatment and to function as integral members of the dental team while performing chairside and related office and laboratory procedures.

The Dental Assisting Program at Wake Technical Community College is accredited by the American Dental Association and therefore a graduate is classified as a DA II by the North Carolina State Board of Dental Examiners. The student is eligible to take the Dental Assisting National Board Exam in order to be credentialed as a Certified Dental Assistant (CDA). As a Dental Assistant II (DAII), defined by the Dental Laws of North Carolina, graduates can perform identified expanded functions including coronal polishing.

Course work includes instruction in general studies, biomedical sciences, dental sciences, clinical sciences, and clinical practice. A combination of lecture, laboratory or pre-clinical, and clinical experiences provide the students with knowledge in infection/hazard control, radiography, dental materials, preventive dentistry, and clinical procedures. The students receive their hands-on patient care clinical experience with rotations at the UNC-CH Adams School of Dentistry, Wake County Human Services-Dental Clinic, Wake Smiles, and private general and specialty dental practices within Wake County.

Dental Assisting Diploma - D45240
-Day

First Semester
DEN 100   Basic Orofacial Anatomy 2
DEN 101   Preclinical Procedures 7
DEN 102   Dental Materials.. 4
DEN 111*   Infection/Hazard Control 2
BIO 106   Intro to Anatomy/Physiology/Micro 3
ENG 111   Writing and Inquiry 3

Second Semester
DEN 103   Dental Sciences.. 2
DEN 104   Dental Health Education 3
DEN 105   Practice Management.. 2
DEN 106   Clinical Practice I 6

DEN	112*	Dental Radiography	3
COM	120	Intro Interpersonal Communications	3

Summer Term

DEN	107	Clinical Practice II	5
PSY	118	Interpersonal Psychology	3

*Core course with Dental Hygiene.

Graduation Requirements ....48 Credit Hours

A grade of "C" or better is required for all curriculum courses in the Dental Assisting Diploma.

DENTAL HYGIENE

The Dental Hygiene curriculum provides individuals with the knowledge and skills to assess, plan, implement, and evaluate dental hygiene care for the individual and the community.

Students will learn to prepare the operatory, take patient histories, note abnormalities, plan care, teach oral hygiene, clean teeth, take x-rays, apply preventive agents, complete necessary chart entries, and perform other procedures related to dental hygiene care.

Graduates of this program may be eligible to take national and state/regional examinations for licensure which are required to practice dental hygiene. Employment opportunities include dental offices, clinics, schools, public health agencies, industry, and professional education.

Dental Hygiene Degree - A45260
-Day

First Semester

BIO	163	Basic Anatomy and Physiology I	5
DEN	110	Orofacial Anatomy	3
DEN	111	Infection/Hazard Control	2
DEN	112	Dental Radiography	3
DEN	120	Dental Hygiene Preclinic Lecture	2
DEN	121	Dental Hygiene Preclinic Lab	2

Second Semester

BIO	175	General Microbiology	3
ENG	111	Writing and Inquiry	3
DEN	124	Periodontology	2
DEN	130	Dental Hygiene Theory I	2
DEN	131	Dental Hygiene Clinic I	3
DEN	223	Dental Pharmacology	2
DEN	224	Materials and Procedures	2

Summer Term

CHM	130	General, Organic and Biochemistry	3
COM	120	Interpersonal Communication	3
DEN	140	Dental Hygiene Theory II	1
DEN	141	Dental Hygiene Clinic II	2

Third Semester

PSY	150	General Psychology	3
DEN	123	Nutrition and Dental Health	2
DEN	125	Dental Office Emergencies	1
DEN	220	Dental Hygiene Theory III	2
DEN	221	Dental Hygiene Clinic III	4
DEN	222	General and Oral Pathology	2

Fourth Semester

DEN	230	Dental Hygiene Theory IV	1
DEN	231	Dental Hygiene Clinic IV	4

DEN	232	Community Dental Health	3
DEN	233	Professional Development	2
SOC	210	Introduction to Sociology	3
		Humanities/Fine Arts Elective	3

Graduation Requirements................................ 73 Credit Hours

A grade of "C" or better is required for all curriculum courses in the Dental Hygiene Degree.

ELECTRONEURODIAGNOSTIC TECHNOLOGY

The curriculum is designed to provide students with the knowledge and skills to obtain recordings of patients' nervous system function through the use of electrophysiological devices. Course work includes developing communication skills with patients and healthcare personnel, documenting patients' histories and clinical status, EEG, electrode application, understanding electrical waveform recognition, managing medical emergencies, and preparing descriptive reports for physicians. Graduates will qualify for the American Board of Registration of EEG/EP Technologists (ABRET) exam and, working under the supervision of a qualified physician, may be employed by hospitals or private offices of neurologists and neurosurgeons.

Electroneurodiagnostic Technology Degree - A45320

First Fall Semester

BIO	168	Anatomy and Physiology*	4
CIS	110	Introduction to Computers	2
EDT	110	Neuroscience/Pathologic Conditions	4
EDT	111	Laboratory Management	1
EDT	112	Instrumentation/Record Methods	3
MED	121	Medical Terminology I	3

First Spring Semester

BIO	169	Anatomy and Physiology II*	4
EDT	113	Clinical Correlations	2
EDT	114	Special Procedures	3
EDT	115	EDT Laboratory Practice	2
ELC	111	Introduction to Electricity	3
MED	122	Medical Terminology II	3

First Summer Term

COM	120	Intro to Interpersonal Communication	3
EDT	118	EDT Laboratory Practice II	3
MAT	110	Measurement & Literacy*	3
HUM		Elective**	3

Second Fall Semester

PSY	150	General Psychology*	3
ENG	111	Expository Writing*	3
EDT 120 IONM and EP "OR"			
EDT 121 Long Term Monitoring			7

Second Spring Semester

EDT	116	EDT Clinical Experience	12

Graduation Requirements: ....71 Credit Hours

Notes:
*Courses may be taken before entering the program.
**Humanities Elective, choose one of the following:
ART 111 Art Appreciation; ART 114 Art History Survey I; ART 115 Art History Survey II; HUM 115 Critical Thinking; MUS 110 Music

Appreciation; MUS 112 Introduction to Jazz; PHI 215
Philosophical Issues; PHI 240 Intro to Ethics
*A grade of C or better is required for all courses in the curriculum.

EMERGENCY MEDICAL SCIENCE

The Emergency Medical Science (EMS) program provides students with the knowledge, skills and abilities necessary to become a credentialed paramedic and to apply critical thinking, develop diagnostic skills, and engage in comprehensive, compassionate, and competent patient care.

Students will learn through intensive, scenario-based instruction and the use of state-of-the-art simulation equipment to master the competencies needed by EMS professionals to serve during an emergency. Students will study advanced prehospital medicine from highly qualified faculty and will complete nearly 600 hours of clinical rotations, such as anesthesiology, critical care, pediatrics, geriatrics, psychiatry, cardiology, obstetrics, neurology, burn care, neonatology, and field rotations on an ambulance. The EMS program also has a strong research focus, and mentors students in the creation and participation of scientific investigation in the field of emergency medical care.

The EMS program is scheduled two days per week and allows students to plan clinical around their own schedules. Upon graduation, students will be eligible for state and/or national credentialing exams and will be ready to enter the workforce. Employment opportunities include private and municipal EMS agencies, hospitals, clinics, industry, non-traditional practice settings, and educational institutions.

Emergency Medical Science Degree - A45340A
-Day

First Semester (First Fall)

EMS	110	EMT	9
BIO	168**	Anatomy & Physiology I	4
MAT	143*	Quantitative Literacy	3
ENG	111*	Writing and Inquiry	3

Second Semester

EMS	121	AEMT Clinical Practicum	2
PSY	150*	General Psychology	3
EMS	120	Advanced EMT	6
BIO	169*	Anatomy & Physiology II	4

Third Semester

EMS	210	Advanced Patient Assessment	2
EMS	160	Cardiology I	3
EMS	221	EMS Clinical Practicum II	2
EMS	130	Pharmacology	4

Fourth Semester

EMS	220	Cardiology II	3
EMS	231	EMS Clinical Practicum III	3
EMS	260	Trauma Emergencies	2
EMS	250	Medical Emergencies	4
EMS	270	Life Span Emergencies	4

Fifth Semester

EMS	240	Patients W/ Special Challenges	2
EMS	241	EMS Clinical Practicum IV	4
EMS	285	EMS Capstone	2
HUM		Elective	3
ENG		Second English Elective***	3

Graduation Requirements .... **75 Credit Hours**

*College Transfer Courses
**All courses must be successfully passed with a "C" average or better to remain eligible for the EMS program.
***Second English Elective can be either ENG 112 or ENG 114
Humanities/Fine Arts Elective
Choose one: HUM 115; PHI 215, PHI 240

EMERGENCY MEDICAL SCIENCE – Associate Degree Bridge

The Emergency Medical Science (EMS) Bridge program is designed for credentialed paramedics who want to obtain their EMS degree. The program is 100% online, which ensures that any paramedic can enroll, no matter their shift schedule! The bridge program provides formal education in EMS management, EMS education, advanced prehospital practice, and emerging research trends while allowing students to complete general education classes that meet the requirements for college transfer. EMS Professionals can use this degree for college transfer, to meet the requirements for promotion or to gain additional knowledge. The program is designed to be flexible to meet the needs of anyone pursuing higher education, no matter the purpose. To that end, all EMS classes are offered every semester.

This program is available to credentialed paramedics who have an active state or national paramedic credential and meet minimum enrollment standards will qualify for a minimum of 43 hours of transfer credit. The bridge program enrolls students in every semester and will allow students to complete their degree at their own pace.

All courses in the EMS Bridge program also qualify for continuing education credit.

Emergency Medical Science Bridge Degree - A45340B
-Online

First Semester (First Fall)

BIO	168	Anatomy & Physiology I	4
EMS	280	EMS Bridging Course	3
EMS	125	Instructor Methodology	3
ENG	111*	Writing and Inquiry	3
MAT	143	Quantitative Literacy	3

Second Semester

BIO	169	Anatomy & Physiology II	4
EMS	235	EMS Management	2
EMS	210	Advanced Patient Assessment	2
ENG		Second English Elective	3
HUM		Humanities Elective	3
PSY	150	General Psychology	3

Total Program Hours .... **33 Credit Hours**

Prerequisite/Advance Placement:
Applicants who successfully complete EMS 280 with a grade of "C" or better will be awarded credit for EMS 285 – EMS Capstone.

Transferrable Credit .... **43 Credit Hours**

Graduation Requirements .... **75 Credit Hours**
All courses must be successfully passed with a "C" average or better to remain eligible for the EMS program.

Second English course can be either ENG 112 or ENG 114
Humanities/Fine Arts Elective
Choose one: HUM 115; ART 111, ART 114, ART 115; MUS 110, MUS 112; PHI 215, PHI 240

HEALTH AND FITNESS SCIENCE

The Health and Fitness Science program is designed to provide students with the knowledge and skills necessary for employment in the fitness and exercise industry.

Students will be trained in exercise science and be able to administer basic fitness tests and health risk appraisals, teach specific exercise and fitness classes, and provide instruction in the proper use of exercise equipment at facilities.

Graduates will qualify for employment opportunities in commercial fitness clubs, YMCA's/YWCA's, wellness programs in business and industry, parks and recreation departments and other organizations implementing exercise and fitness programs.

HEALTH AND FITNESS SCIENCE - A45630

First Fall Semester

ACA	111	College Student Success	1
HFS	110	Exercise Science	4
HFS	111	Fitness & Exercise Testing	4
BIO	168	Anatomy and Physiology I	4
PED	117	Weight Training I	1

First Spring Semester

BIO	169	Anatomy and Physiology II	4
ENG	111	Expository Writing	3
HFS	116	Prevention & Care of Exercise Injuries	3
HFS	120	Group Exercise Instruction	3
PED	113	Aerobics I	1

>Eligible to sit for ACSM Group Exercise Instructor Certification Exam (Not offered through Wake Tech)

Summer Session

PSY	150	General Psychology	3
COM	120	Intro to Interpersonal Communication	3
OR			
COM	231	Public Speaking	3

Second Fall Semester

PED	118	Weight Training II	1
HFS	210	Personal Training	3
HFS	118	Fitness Facility Management	4
HEA	112	First Aid & CPR	2
HUM	115	Critical Thinking	3
MAT	143	Quantitative Literacy	3
OR			
MAT	171	Precalculus Algebra	4

>Eligible to sit for ACSM Personal Trainer Certification Exam (Not offered through Wake Tech)

Second Spring Semester

HFS	212	Exercise Programming	3
HFS	218	Lifestyle Chang & Wellness	4
WBL	111	Work Based Learning I *	1
BIO	155	Nutrition	3
PED	111	Physical Fitness I	1

Other Major Hours: (Choose 3 credits from pick list as needed)

BIO	110	Principles of Biology	4
PED	110	Fit and Well for Life	2
PED	122	Yoga I	1
PED	128	Golf-Beginning	1
PED	130	Tennis-Beginning.	1
PED	143	Volleyball-Beginning	1
PED	145	Basketball-Beginning	1
HEA	110	Personal Health/Wellness	3
BUS	139	Entrepreneurship I	3

Graduation Requirements ....65-66 Credit Hours

* WBL 111: The semester prior to WBL consideration, students must complete an application and meet with their faculty program advisor to obtain approval before registering for course.

Health and Fitness Science Certificate - C45630

First Semester

HFS	110	Exercise Science	4
HFS	111	Fitness & Exercise Testing	4
PED	110	Fit and Well for Life	2

Second Semester

HFS	120	Group Exercise Instruction	3
OR			
HFS	210	Personal Training	3
HFS	212	Exercise Programming	3

Graduation Requirements ....16 Credit Hours

HUMAN SERVICES TECHNOLOGY

The Human Services Technology curriculum prepares students for entry-level positions in institutions and agencies that provide social, community, and educational services. Along with core courses, students take courses that prepare them for specialization in specific human service areas.

Students will take courses from a variety of disciplines. Emphasis in core courses is placed on development of relevant knowledge, skills, and attitudes in human services. Fieldwork experience will provide opportunities for application of knowledge and skills learned in the classroom.

Graduates should qualify for positions in mental health, child care, family services, social services, rehabilitation, correction, and educational agencies. Former graduates have successfully transferred into select 4-year colleges and universities.

Students may choose to complete more than one degree/concentration. Each degree requires a separate work-based learning experience.

Human Services Technology Degree - A45380
-Day, Evening

First Fall Semester

ENG	111	Writing and Inquiry	3
HSE	110	Introduction to Human Services	3
HSE	135	Orientation Lab I	1
HSE	112	Group Process I	2
PSY	150	General Psychology	3

SAB 110   Substance Abuse Overview 3

First Spring Semester
PSY 241   Developmental Psychology 3
ENG 114   Prof Research and Reporting 3
HSE 125   Counseling 3
HSE 210   Human Services Issues 2
HSE 123   Interviewing Techniques 3

First Summer Term
PHI 240   Introduction to Ethics 3
              OR
HUM 115   Critical Thinking 3
CIS 110   Introduction to Computers
              OR
OST 137   Office Applications I 3

SOC 213   Sociology of the Family 3
              OR
SOC 210   Introduction to Sociology 3

Second Fall Semester
MAT 110   Math Measurement & Literacy 3
GRO 120   Gerontology 3
___ ___   ❖Major Elective 3
HSE 225   Crisis Intervention 3
HSE 245   Stress Management 3

Second Spring Semester
WBL 111   Work-Based Learning I* 1
WBL 115   Work-Based Learning Seminar I* 1
HSE 127   Conflict Resolution 3
SWK 113   Working with Diversity 3
HSE 220   Case Management 3
PSY 281   Abnormal Psychology 3

❖Major Electives
Select 3 hours from the following courses
HSE 145   Child Abuse and Neglect 3
HSE 251   Activities Planning 3
SWK 110   Introduction to Social Work 3

Graduation Requirements .... 67 Credit Hours

WBL 111 & WBL 115 - * The semester prior to co-op consideration, students must meet with their faculty program advisor to obtain approval before registering for classes. This WBL experience is specifically related to general human services.

HUMAN SERVICES TECHNOLOGY / MENTAL HEALTH

The Human Services Technology/Mental Health concentration prepares students for job opportunities in the mental health field. The curriculum enables students to understand culturally and emotionally handicapped, developmentally disabled, or addicted clients through a variety of models and diagnoses.

Course work includes a history of the mental health movement, current developments and future trends, and theoretical models affecting individual development and behavior in a diverse client population. Fieldwork experiences provide opportunities for application of knowledge in agency and institutional settings.

Graduates should qualify for employment in mental health treatment centers serving a diverse multicultural client population in public and private settings. Graduates will work with individuals, families, groups, organizations, and communities in providing a therapeutic arena of care.

Human Services Technology / Mental Health – A4538C
 -Day, Evening

First Fall Semester
ENG 111   Writing and Inquiry 3
HSE 112   Group Process I 2
HSE 110   Intro to Human Services 3
HSE 135   Orientation Lab I 1
PSY 150   General Psychology 3
SAB 110   Substance Abuse Overview 3

First Spring Semester
ENG 114   Prof Research & Reporting 3
HSE 123   Interviewing Techniques 3
HSE 125   Counseling 3
PSY 281   Abnormal Psychology 3
MHA 150   Mental Health Systems 3

First Summer Term
PHI 240   Introduction to Ethics 3
              OR
HUM 115   Critical Thinking 3
CIS 110   Introduction to Computers
              OR
OST 137   Office Applications I 3

SOC 213   Sociology of the Family 3
              OR
SOC 210   Introduction to Sociology 3

Second Fall Semester
MAT 110   Math Measurement & Literacy 3
MHA 155   Psychological Assessment 3
HSE 225   Crisis Intervention 3
HSE 226   Intellectual Disabilities 3
PSY 265   Behavioral Modification 3

Second Spring Semester
WBL 111   Work-Based Learning* 1
WBL 115   Work-Based Learning Seminar I* 1
SWK 113   Working with Diversity 3
PSY 241   Developmental Psych 3
HSE 210   Human Services Issues 2
HSE 220   Case Management 3
MHA 240   Advocacy 2

Graduation Requirements .... 69 Credit Hours

WBL 111 & WBL 115 - * The semester prior to co-op consideration, students must meet with their faculty program advisor to obtain approval before registering for classes. This WBL experience is specifically related to Mental Health.

Human Services Technology/Mental Health Certificate – C4538C

Major Electives
HSE 110   Intro to Human Services 3
HSE 226   Intellectual Disabilities 3
MHA 155   Psychological Assessment 3
PSY 150   General Psychology 3
PSY 265   Behavior Modification 3
              OR
HSE 225   Crisis Intervention 3

HEALTH SCIENCES

Graduation Requirements..................................... 18 Credit Hours

HUMAN SERVICES TECHNOLOGY / SUBSTANCE ABUSE

The Human Services Technology/Substance Abuse concentration prepares students to assist in drug and alcohol counseling, prevention-oriented educational activities, rehabilitation with recovering clients, managing community-based programs, counseling in residential facilities, and pursuit of four-year degrees.

Course work includes classroom and experiential activities oriented toward an overview of chemical dependency, psychological/sociological process, the twelve Core Functions, intervention techniques with individuals in groups, and follow-up activities with recovering clients.

Graduates should qualify for positions as substance abuse counselors, DUI counselors, halfway house workers, residential facility employees, and substance education specialists. With educational and clinical experiences, graduates can obtain certification by the North Carolina Substance Abuse Board.

Human Services Technology / Substance Abuse Degree - A4538E

-Day, Evening

First Fall Semester
HSE	135	Orientation Lab I	1
PSY	150	General Psychology	3
ENG	111	Writing and Inquiry	3
HSE	110	Introduction to Human Services	3
SAB	110	Substance Abuse Overview	3
HSE	112	Group Process I	2

First Spring Semester
ENG	114	Prof Research and Reporting	3
HSE	125	Counseling	3
HSE	123	Interviewing Techniques	3
PSY	241	Developmental Psychology	3
SAB	210	Substance Abuse Counseling	3

First Summer Term
PHI	240	Introduction to Ethics	3
		OR	
HUM	115	Critical Thinking	3
CIS	110	Introduction to Computers	
		OR	
OST	137	Office Applications I	3
SOC	213	Sociology of the Family	3
		OR	
SOC	210	Introduction to Sociology	3

Second Fall Semester
MAT	110	Math Measurement & literacy	3
SAB	135	Addictive Process	3
SAB	120	Intake and Assessment	3
HSE	225	Crisis Intervention	3
SAB	240	SAB Issues in Client Services	3

Second Spring Semester
SWK	113	Working with Diversity	3
WBL	111	Work-Based Learning I*	1
WBL	115	Work-Based Learning Seminar I*	1
SAB	125	SA Case Management	3
HSE	210	Human Services Issues	2
SAB	220	Group Techniques/Therapy	3
PSY	281	Abnormal Psychology	3

Graduation Requirements .... 70 Credit Hours

WBL 111 & WBL 115 - * The semester prior to co-op consideration, students must meet with their faculty program advisor to obtain approval before registering for classes. This WBL is specifically related to Substance Abuse.

Human Services Technology / Substance Abuse Counseling Certificate - C4538ECO

-Day, Evening

This Certificate is designed for individuals who already hold a bachelor or master's degree in a Human Services related field. The certificate **assists** students in **meeting all the SAB educational requirements** for Certification and/or Licensure for the North Carolina Substance Abuse Professional Practice Board (NCSAPPB).

Students who do not have an Associate's degree, Bachelor or Master's degree in a Human Service related field are not likely to obtain employment as a Substance Abuse Counselor with only the Substance Abuse Certificate.

HSE	112	Group Processes I	2
SAB	120	Intake and Assessment	3
SAB	135	Addictive Process	3
SAB	210	Substance Abuse Counseling	3
SAB	220	Group Techniques/Therapy	3
SAB	240	Substance Abuse Issues	3

Graduation Requirements............................... 17 Credit Hours

Human Services Technology / Substance Abuse Intervention Certificate - C4538EI

-Day, Evening

This Certificate is designed for individuals who already hold a bachelor or master's degree in a Human Services related field. The certificate **assists** students in **meeting all the SAB educational requirements** for Certification and/or Licensure for the North Carolina Substance Abuse Professional Practice Board (NCSAPPB).

Students who do not have an Associate's degree, Bachelor or Master's degree in a Human Service related field are not likely to obtain employment as a Substance Abuse Counselor with only the Substance Abuse Certificate.

HSE	112	Group Processes I	2
SAB	120	Intake and Assessment	3
SAB	135	Addictive Process	3
SAB	210	Substance Abuse Counseling	3
SAB	240	Substance Abuse Issues	3
WBL	111	Work-Based Learning I*	1
WBL	115	Work-Based Learning Seminar*	1

Graduation Requirements............................16 Semester Hours

WBL 111 & WBL 115 - * The semester prior to co-op consideration, students must meet with their faculty program advisor to obtain approval before registering for classes.

HEALTH SCIENCES

HUMAN SERVICES TECHNOLOGY / GERONTOLOGY

The mission of the Human Services Program is to provide a learning environment that will foster the development of competent human services workers who possess the values and ethics essential for working successfully in the human services profession. Ultimately, they will be prepared to assist individuals, families and communities in meeting their basic needs, overcoming barriers and challenges, maximizing independence, and addressing problems of living; thus enabling others to achieve a sustainable and meaningful quality of life.

The Human Services Technology/Gerontology concentration prepares students to specialize in direct service delivery work to older adults and their families. The curriculum provides both theoretical and applied models for understanding issues of aging. Course work includes physical, psychological, and social aspects of the aging process, as well as health, wellness, nutrition, diet, exercise, and well-being. Fieldwork experiences provide opportunities to work in a variety of public and private agencies. Graduates should qualify for employment in nursing and rest homes, specialized adult care services, respite services, and other programs servicing older adults and their families.

Human Services Technology / Gerontology – A4538B
-Day, Evening

First Fall Semester
ENG	111	Writing and Inquiry	3
HSE	112	Group Process I	2
HSE	110	Intro to Human Services	3
HSE	135	Orientation Lab I	1
PSY	150	General Psychology	3
GRO	120	Gerontology	3

First Spring Semester
ENG	114	Prof Research & Reporting	3
HSE	123	Interviewing Techniques	3
HSE	125	Counseling	3
SAB	110	Substance Abuse	3
GRO	230	Health, Wellness and Nutrition	4

First Summer Term
PHI	240	Introduction to Ethics	3
		OR	
HUM	115	Critical Thinking	3
CIS	110	Introduction to Computers	
		OR	
OST	137	Office Applications I	3
SOC	213	Sociology of the Family	3
		OR	
SOC	210	Introduction to Sociology	3

Second Fall Semester
MAT	110	Math Measurement & Literacy	3
PSY	281	Abnormal Psychology	3
HSE	225	Crisis Intervention	3
HSE	251	Activities Planning	3
GRO	220	PSY/SOC Aspects of Aging	3

Second Spring Semester
WBL	111	Work-Based Learning*	1
WBL	115	Work-Based Learning Seminar I*	1
SWK	113	Working with Diversity	3
PSY	241	Developmental Psych	3

HSE	210	Human Services Issues	2
GRO	250	Aging, Policies, Programs & Services	2

Graduation Requirements .... 67 Credit Hours

WBL 111 & WBL 115 - * The semester prior to co-op consideration, students must meet with their faculty program advisor to obtain approval before registering for classes. This WBL experience is specifically related to Mental Health.

Human Services Technology/Gerontology Certificate – C4538B

This certificate is designed for individuals who are enrolled in other human services programs and would like additional education on Gerontology or who are in professions where they will come in contact with older adults. For example, this certificate can provide increased knowledge for individuals in the field of nursing, health care, child care and business.

Students who are enrolled in more than one human services curriculum should speak with their advisor to discuss specific classes that are duplicated in the programs and determines available credit.

Major Electives
GRO	120	Gerontology	3
GRO	220	PSY/SOC Aspects of Aging	3
GRO	230	Health, Wellness and Nutrition	4
GRO	250	Aging, Policies, Programs & Services	2
HSE	251	Activities Planning	3
PSY	150	General Psychology	3

Graduation Requirements .... 18 Credit Hours

Notes:
WBL 111 & WBL 115
* The semester prior to co-op consideration, students must meet with their faculty program advisor to obtain approval before registering for classes.

MAGNETIC RESONANCE IMAGING TECHNOLOGY

The Magnetic Resonance Imaging (MRI) curriculum prepares students to become MRI technologists and skilled health care professionals who are educated to use magnetic energy fields to produce images of the human body. Individuals entering this program must be registered or registry-eligible radiologic technologists, nuclear medicine technologists, sonographers, or radiation therapists by the American Registry of Radiologic Technologists. Supporting discipline of Nuclear Medicine Technology may be through ARRT or NMTCB. Supporting discipline of Sonography may be through ARRT or ARDMS.

Course work includes imaging fundamentals, MRI physics, procedures, anatomy, pathology, patient care, imaging ethics and law, in a medical environment. Students should be able to demonstrate all functional areas related to the magnetic resonance imaging fields.

Graduates may be eligible to take the American Registry of Radiologic Technologists (ARRT) national examination for certification as MRI technologists.

HEALTH SCIENCES

Graduates may be employed in hospitals, outpatient clinics, physicians' offices, government agencies, and research. It is essential that the MRI technologist understands ethical standards and the legal framework for MRI. In addition, the MRI technologist must be committed to professional development and the care of others.

Magnetic Resonance Imaging Technology Diploma - D45800
-Day

Summer Term
MRI	213	MR Patient Care and Safety	2
MRI	216	MRI Instrumentation	2
MRI	250	MRI Clinical Ed I	4
ENG	111	Writing and Inquiry	3
Humanities/Fine Arts Elective			3

Fall Semester
MRI	214	MRI Procedures I	2
MRI	217	MRI Physics I	2
MRI	241	MRI Anatomy and Path I	2
MRI	260	MRI Clinical Ed II	7
IMG	130	Imaging Ethics and Law.	3

Spring Semester
MRI	215	MRI Procedures II	2
MRI	218	MRI Physics II	2
MRI	242	MRI Anatomy and Path II	2
MRI	270	MRI Clinical Ed III	8
MRI	271	MRI Capstone	1

Graduation Requirements................................ 45 Credit Hours

MAMMOGRAPHY
The Mammography curriculum provides registered radiologic technologists the didactic and clinical experience necessary to become registered mammographers.

Course work includes clinical rotations to mammography facilities, breast anatomy/physiology, patient preparation/education, mammographic procedures, interventional procedures, image analysis, mammographic instrumentation, physics, quality control, and quality assurance

Graduates will meet the Mammography Quality Standards Act initial training requirements for mammography and may be eligible to apply to take the American Registry of Radiologic Technologists (ARRT) post primary certification in Mammography.

Mammography Certificate - C45830
-Day

Semester One
MAM	101	Mam Proc & Image analysis	4
MAM	102	Mam Instrumentation & QA	3
MAM	103	Digital Mammography	1
MAM	104	Digital Breast Tomosynthesis	1

Semester Two
MAM	105	Mammography Clinical Ed	5
MAM	109	Mammography Capstone	3

Graduation Requirements................................ 17 Credit Hours

*MAM 102, 103,104, and 109 are taught totally online

All applicants must currently be registered in Radiography and in good standing. Radiography students in their final semester may apply but must have a letter of good standing from their Radiography program director before admission. To apply to the Mammography Program, contact Perry Health Sciences Admissions 919-747-0402 hsadvising@waketech.edu

Clinical hours are scheduled during the day. Clinicals are usually scheduled three days during the week. There MAY be some flexibility but must be coordinated with Ms. Johnson or Ms. Dickens for school start date.

*Students with a felony conviction may have limited certification and employment opportunities.

MEDICAL ASSISTING
The Medical Assisting curriculum prepares multi-skilled health care professionals qualified to perform administrative, clinical, and laboratory procedures.

Course work includes instruction in scheduling appointments, coding and processing insurance accounts, billing, collections, computer operations; assisting with examinations/treatments, performing routine laboratory procedures, electro-cardiography, supervised medication administration; and ethical/legal issues associated with patient care.

Wake Technical Community College's Medical Assisting Diploma program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Medical Assisting Education Review Board (MAERB)..

A graduate of a CAAHEP accredited medical assisting program may be eligible to take the American Association of Medical Assistants' Certification Examination - CMA (AAMA) to become a Certified Medical Assistant. Employment opportunities include physicians' offices, health maintenance organizations, health departments, and outpatient clinics.

Medical Assisting Diploma - D45400
-Hybrid, Face-to face and Online courses

Fall Semester
BIO	161*	Intro to Human Biology	3
MAT	110*	Math Measurement & Literacy	3
MED	110	Orientation to Medical Assisting	1
MED	121*	Medical Terminology I	3
MED	130	Administrative Office Procedures I	2
MED	138	Infection/Hazard Control	2

Spring Semester
MED	122*	Medical Terminology II	3
MED	131	Administrative Office Procedures II	2
MED	140	Examining Room Procedures I	5
MED	150	Laboratory Procedures I	5

Summer Term
MED	118	Medical Law and Ethics	2
MED	260	Medical Clinical Practicum	5
MED	264	Medical Assisting Overview	2
ENG	111*	Writing and Inquiry	3

Graduation Requirements .... 41 Credit Hours

A grade of "C" or better is required for all curriculum courses in the Medical Assisting Diploma program of study.

After completing MED 260 Medical Clinical Practicum students will have completed the Medical Assisting Diploma (D45400) requirements; and will be eligible to take the CMA (AAMA) certification exam. Please visit www.aama-ntl.org for more information.

Medical Assisting Degree - A45400

Students who have successfully completed the one-year Medical Assisting diploma can choose to continue their education by completing the Medical Assisting degree. The Medical Assisting associate degree program is designed for Medical Assistants who desire an associate degree for career advancement or transfer purposes.
-Hybrid, Face-to-face and Online courses

Fall Semester
BIO	161*	Intro to Human Biology	3
MAT	110*	Math Measurement & Literacy	3
MED	110	Orientation to Medical Assisting	1
MED	121*	Medical Terminology I	3
MED	130	Administrative Office Procedures I	2
MED	138	Infection/Hazard Control	2

Spring Semester
MED	122*	Medical Terminology II	3
MED	131	Administrative Office Procedures II	2
MED	140	Examining Room Procedures I	5
MED	150	Laboratory Procedures I	5

Summer Term
MED	118	Medical Law and Ethics	2
MED	260	Medical Clinical Practicum	5
MED	264	Medical Assisting Overview	2
ENG	111*	Writing and Inquiry	3

Total Diploma Requirements .... 41 Semester Credit Hours

Additional Courses Required for the Medical Assisting Degree – A45400

Fall Semester
MED	232	Medical Insurance Coding	2
MED	270	Symptomatology	3
MED	272	Drug Therapy	3
SPA	*	SPA 120 or SPA 111/181	3

Spring Semester
ENG/COM*	Select one from	3
	ENG 114, ENG 112, COM 231, COM 120	
PSY/SOC*	PSY 150 or SOC 210	3
OST 137*	Office Applications I	3
HUM/Fine Arts*	Select one from	3
	HUM 110, HUM 115, HUM 160, PHI 210, ART 111, or MUS 110	

Graduation Requirements .... 64 Credit Hours

A grade of "C" or better is required for all curriculum courses in the Medical Assisting Degree program of study.

 *Courses may be taken before entering the program

MEDICAL LABORATORY TECHNOLOGY

The Medical Laboratory Technology curriculum prepares individuals to perform clinical laboratory procedures in chemistry, hematology, microbiology, and immunohematology that may be used in the maintenance of health and diagnosis/treatment of disease.

Course work emphasizes mathematical and scientific concepts related to specimen collection, laboratory testing and procedures, quality assurance, and reporting/recording and interpreting findings involving tissues, blood, and body fluids.

Graduates may be eligible to take the examination given by the Board of Certification of the American Society for Clinical Pathology. Employment opportunities include laboratories in hospitals, medical offices, industry, and research facilities.

Medical Laboratory Technology Degree - A45420
-Day

First Semester
MLT	110	Introduction to MLT	3
MLT	118	Medical Lab Chemistry	3
MLT	140	Introduction to Microbiology	3
BIO	163	Basic Anatomy and Physiology	5
MLT	111	Urinalysis and Body Fluids	2
MLT	115	Laboratory Calculations	2

Second Semester
MLT	120	Hematology/Hemostasis I	4
MLT	130	Clinical Chemistry I	4
MLT	240	Special Clinical Microbiology	3
MLT	125	Immunohematology I	5

First Summer Semester
MAT	143	Quantitative Literacy	3
MLT	220	Hematology/Hemostasis II	3
MLT	254	MLT Practicum I	4

Third Semester
MLT	230	Clinical Chemistry II	3
MLT	280	Special Practice Lab	1
ENG	111	Writing and Inquiry	3
CIS 110		Introduction to	3
MLT	266	MLT Practicum II	6

Fourth Semester
*Humanities/Fine Arts Elective			3
MLT	217	Professional Issues	1
MLT	276	MLT Practicum III	6
ENG	112	Writing/Research in the Disc	3
PSY	150	General Psychology	3

Graduation Requirements .... 76 Credit Hours

A grade of "C" or better must be earned in each curriculum courses in the Medical Laboratory Technology Program.

Medical Sonography

The Medical Sonography curriculum provides knowledge and clinical skills in the application of high frequency sound waves to image internal body structures.

Course work includes physics, cross-sectional anatomy, abdominal, introductory vascular, and obstetrical/gynecological sonography. Competencies are attained in identification of normal anatomy and pathological processes, use of equipment, fetal growth and development, integration of related imaging, and patient interaction skills.

Graduates of accredited programs may be eligible to take examinations in ultrasound physics and instrumentation and specialty examinations administered by the American Registry of Diagnostic Medical Sonographers and find employment in clinics, physicians' offices, mobile services, hospitals, and educational institutions.

Medical Sonography Degree - A45440

Required Prerequisite Courses
Natural Science
BIO 163 Basic Anatomy and Physiology..........................5
Math Choose One (1)
MAT 152 Statistical Methods 4
   or
MAT 171 Pre-Calculus Algebra 4
English/Communications
ENG 111 Writing and Inquiry 3
   & Choose One (1)
ENG 112 Writing/Research in the Disc..................... 3
COM 110 Intro to Communication 3
COM 120 Intro to Interpersonal Communication 3
COM 231 Public Speaking 3
Physics
PHY 110 Conceptual Physics/Lab (Or Higher).......................... 4

-Day
Core Curriculum-Spring Entry

First Spring Semester
SON 110 Intro to Sonography................................... 3
SON 130 Abdominal Sonography I............................. 3
SON 271 Doppler Sonography Topics 2
PSY 150 General Psychology.................................... 3

Summer Term
SON 111 Sonography Physics 4
SON 120 SON Clinical Ed I 5

First Fall Semester
SON 131 Abdominal Sonography II........................... 2
SON 121 SON Clinical Ed II 5
SON 140 Gynecological Sonography 2
SON 241 Obstetrical Sonography I........................... 2

Second Spring Semester
SON 242 Obstetrical Sonography II.......................... 2
SON 250 Vascular Sonography................................. 2
SON 220 Son Clinical Ed III 8
HUM xxx Humanities Elective................................... 3

Second Fall Semester
SON 221 SON Clinical Ed IV 8
SON 289 Sonographic Topics 2
SON 225 Case Studies... 1

-Day
Core Curriculum-Fall Entry

First Fall Semester
SON 110 Intro to Sonography 3
SON 130 Abdominal Sonography I.............................3
SON 271 Doppler Sonography Topics.......................2
PSY 150 General Psychology 3

First Spring Semester
SON 111 Sonography Physics...................................4
SON 131 Abdominal Sonography II............................2
SON 120 SON Clinical Ed I.......................................5
SON 140 Gynecological Sonography 2
SON 241 Obstetrical Sonography I............................2

Summer Term
SON 121 SON Clinical Ed II......................................5

Second Fall Semester
SON 242 Obstetrical Sonography II...........................2
SON 250 Vascular Sonography 2
SON 220 Son Clinical Ed III 8
HUM xxx Humanities Elective....................................3

Second Spring Semester
SON 221 SON Clinical Ed IV 8
SON 289 Sonographic Topics....................................2
SON 225 Case Studies 1

Graduation Requirements: ....76 Credit Hours

* Prerequisite Gen Ed. Courses must be met with a minimum grade of "C" prior to beginning the core curriculum of the Medical Sonography Program.

**Demonstrate chemistry proficiency. The chemistry proficiency requirement may be satisfied by completing ONE of the following: a college-level basic chemistry course from a U.S. regionally-accredited institution with a grade of "C" or better; or one unit of a high school chemistry course with a grade of "C" or better; or CHM 090 (Chemistry Concepts) or an equivalent CHM 090 with a grade of "C" or better; or the self-taught chemistry tutorial unit in the Individualized Learning Center with a grade of 85 or higher. Completion of BIO 163, (or a transfer equivalent class) with a grade of "C" or better.

PHARMACY TECHNOLOGY

The Pharmacy Technology Program prepares individuals to become pharmacy technicians. These allied health professionals assist and support licensed pharmacists in providing prescription medications, over-the-counter drugs, medical equipment and supplies, pharmaceutical care services, and other health care products and services for patients.

Students can gain a broad knowledge of pharmacology, drug uses, actions, interactions and side effects, medication therapy, pharmaceutical calculations, anatomy and physiology, drug delivery systems, pharmacy practice, purchasing and inventory control and pharmacy law and regulations. Through simulated pharmacy laboratory activities, students can increase their skills in using pharmacy computer software, interpreting prescriptions, processing medication orders, compounding IV admixtures and parenteral nutrition, compounding pediatric medications, creating

veterinary dosage forms, managing pharmacy operations, and utilizing critical thinking to resolve patient problems.

Through the clinical experience, students can increase knowledge and skills in creating and maintaining patient profiles, effectively participating on the health care team, filing insurance claims, managing automated medication dispensing systems, operating robotic pharmacy equipment, staffing patient care clinics, providing exceptional customer service, leading quality improvement programs, supervising and managing pharmacy technicians, and reconciling medications for ER patients. The clinical practice will take place in hospital, community and specialty pharmacies. Graduates may be employed in hospitals, medical centers, private and chain pharmacies, and specialty pharmacies, including medication compounding, long term care medication therapy management, and IV infusion pharmacies. Graduates should be prepared to take the national Certification Examination administered by the Pharmacy Technician Certification Board.

Pharmacy Technology Degree - A45580A

First Fall Semester

*BIO	161	Introduction to Biology	3
*MAT	110	Mathematical Measurement & Literacy	3
PHM	110	Introduction to Pharmacy	3
PHM	111	Pharmacy Practice I	4
PHM	115	Pharmacy Calculations	3
PHM	115A	Pharmacy Calculations lab	1

First Spring Semester

PHM	120	Pharmacology I	3
PHM	133	Pharmacy Clinical	3
PHM	140	Trends in Pharmacy	2
PHM	150	Hospital Pharmacy	4
PHM	155	Community Pharmacy	3

Summer Term

*ENG	111	Writing and Inquiry	3
PHM	125	Pharmacology II	3
PHM	160	Pharm Dosage Forms	3

Second Fall Semester

*BUS	151	People Skills	3
*COM	231	Public Speaking	3
*Humanities Elective			3
PHM	118	Sterile Products	4

Second Spring Semester

PHM	135	Pharmacy Clinical	5
PHM	165	Pharmacy Prof Practice	2
*PSY	150	General Psychology	3

Graduation Requirements .... 64 Credit Hours

*Courses may be taken before entering the program or in the semester listed.
• A grade of "C" or higher is required for all Gen Ed and PHM courses.
• MAT 110 must have been within the last 10 years
• BIO 161 must have been within the last 5 years.
• Humanities elective: Pick one course: HUM 110, HUM 115, PHI 240
 See an advisor for possible course substitution for Humanities elective.
• If an applicant holds current National Pharmacy Technician Certification, credit will be given for the following
courses: PHM 110, PHM 165

Pharmacy Technology Degree Bridge - A45580B

First Fall Semester

*BIO	161	Introduction to Biology	3
*MAT	110	Mathematical Measurement & Literacy	3
PHM	110	Introduction to Pharmacy	3
PHM	111	Pharmacy Practice I	4
PHM	115	Pharmacy Calculations	3
PHM	120	Pharmacology I	3
PHM	155	Community Pharmacy	3

First Spring Semester

*ENG	111	Writing and Inquiry	3
PHM	125	Pharmacology II	3
PHM	150	Hospital Pharmacy	4
PHM	140	Trends in Pharmacy	2
PHM	118	Sterile Products	4

Summer Term

*COM	231	Public Speaking	3
*Humanities Elective			3
PHM	134	Pharmacy Clinical	4
PHM	160	Pharm Dosage Forms	3

Second Fall Semester

*BUS	151	People Skills	3
*PSY	150	General Psychology	3
PHM	135	Pharmacy Clinical	5
PHM	165	Pharmacy Prof Practice	2

Graduation Requirements…………………64 Credit Hours

*Courses may be taken before entering the program or in the semester listed.
• A grade of "C" or higher is required for all Gen Ed and PHM courses.
• MAT 110 must have been within the last 10 years
• BIO 161 must have been within the last 5 years.
• Humanities elective: Pick one course: HUM 110, HUM 115, PHI 240
 See an advisor for possible course substitution for Humanities elective.
• If an applicant holds current National Pharmacy Technician Certification, credit will be given for the following
courses: PHM 110, PHM 165

PHLEBOTOMY

The Phlebotomy curriculum prepares individuals to obtain blood and other specimens for the purpose of laboratory analysis.

Course work includes proper specimen collection and handling, communication skills, and maintaining patient data. Graduates may be eligible to take the examination given by Board of Certification of the American Society for Clinical Pathology.

Graduates may qualify for employment in hospitals, clinics, physicians' offices, and other health care settings and may be eligible for national certification as phlebotomy technicians.

The Phlebotomy program is a one semester program offered each Fall and Spring semester.

PHLEBOTOMY - C45600
-Day Only

First Semester
PBT 100 Phlebotomy Technology 6
PBT 101 Phlebotomy Practicum...3

Choose one of the following:
PSY 118 Interpersonal Psychology...3
PSY 150 General Psychology...3

Completion Requirements ....12 Credit Hours

A grade of "C" or better is required in all curriculum courses in the Phlebotomy program.

Graduation Requirements ....71 Credit Hours

* Demonstrate chemistry proficiency. The chemistry proficiency requirement may be satisfied by completing ONE of the following: a college-level basic chemistry course from a U.S. regionally-accredited institution with a grade of "C" or better; or one unit of a high school chemistry course with a grade of "C" or better; or CHM 090 (Chemistry Concepts) or an equivalent CHM 090 with a grade of "C" or better; or the self-taught chemistry tutorial unit in the Individualized Learning Center with a grade of 85 or higher. Completion of BIO 163, (or a transfer equivalent class) with a grade of "C" or better.

RADIOGRAPHY

The Radiography curriculum prepares the graduate to become a radiographer, a skilled health care professional who uses radiation to produce images of the human body. The radiographer must be committed to professional development and the care of others.

Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology.

Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists' national examination for certification and registration as medical radiographers.

Graduates may be employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry.

Radiography Degree - A45700
-Day

First Term
RAD 110 RAD Intro & Patient Care 3
RAD 111 RAD Procedures I 4
BIO 163 Basic Anatomy and Physiology...................................5
ENG 111 Writing and Inquiry 3
RAD 151 RAD Clinical Ed I...2

Second Term
RAD 112 RAD Procedures II 4
RAD 121 Image Production I 3
MAT 110 Mathematical Measurement and Literacy 3
ENG 112 Writing/Research in the Disc.......................................3
RAD 161 RAD Clinical Ed II..5

Third Term
RAD 122 Image Production II 2
RAD 141 Radiation Safety 2
RAD 171 RAD Clinical Ed III...3
RAD 181 RAD Clinical Elective 1

Fourth Term
RAD 211 RAD Procedures III 3
RAD 231 Image Production III 2

PSY 150 General Psychology...3
RAD 251 RAD Clinical Ed IV 7

Fifth Term
RAD 261 RAD Clinical Ed V 7
RAD 271 Radiography Capstone 3
HUM xxx Humanities Elective...3

INFORMATION TECHNOLOGY

Information Technology (IT) Division

Dean: Cindy Ellison
Phone: 919-866--5005
Email: cellison@waketech.edu

Wake Technical Community College awards degrees, diplomas, and certificates in a variety of fields shown below. The highest credential given in each area is listed first, in bold type.

1. Click on the "**Program Name**" to go to the program's web page
2. Click on the "**Program of Study**" to see specific course requirements for that program

Programs may be offered during the day, evening, online, or a combination. Students should refer to Self Serve for the availability of classes. Click to see a list of Wake Tech's programs that can be completed fully online.

Program Name	Program Code
Advertising and Graphic Design – *AAS Degree*	A30100
Advanced Graphic Design - *Certificate*	C30100D
Design Basics - *Certificate*	C30100E
Design Portfolio - *Certificate*	C30100F
Graphics Design **– *Certificate***	C30100A
Web and Graphic Design **– *Certificate***	C30100B
Business Analytics – *AAS Degree*	A25350
Business Analyst – *Certificate*	C25350B
Business Intelligence – *Certificate*	C25350A
Finance Analytics – *Certificate*	C25350F
Logistics Analytics – *Certificate*	C25350E
Marketing Analytics – *Certificate*	C25350C
Cloud Infrastructure – AAS Degree	A25590CI
Global Windows Security Administration **- *Certificate***	C25590WS
Linux Security Specialist – *Certificate*	C25590LS
Linux Certified IT Professional **– *Certificate***	C25590LX
Microsoft Certified IT Professional **– *Certificate***	C25590MS
Computer Programming and Development – *AAS Degree*	A25590CP
C++ Programming **– *Certificate***	C25590CC
Java Programming **– *Certificate***	C25590JV
Programming Fundamentals **- *Certificate***	C25990PF
Cybersecurity – *AAS Degree*	A25590CS
Cyber Ops & Digital Forensics - *Certificate*	C25590CF
Penetration Testing & Ethical Hacking - *Certificate*	C25590PE
Data Science and Programming Support – *AAS Degree*	A25590DS
Medical Office Administration	
Medical Office Administration – Medical Office Professional – ***AAS Degree***	A25310P
Medical Office Administration – Medical Billing and Coding – ***AAS Degree***	A25310B
Medical Office Administration – Healthcare Administration – ***AAS Degree***	A25310H
Medial Office Professional **– *Diploma***	D25310P
Medical Office Professional – *Certificate*	C25310P
Network Management – *AAS Degree*	A25590NM
Cisco Network Associate **- *Certificate***	C25590CA
Cisco Network Professional **– *Certificate***	C25590CP
Cisco Security **- *Certificate***	C25590CX
Wireless Network **- *Certificate***	C25590WN
Office Administration	
Office Administration – Office Professional – ***AAS Degree***	A25370P
Office Administration – Legal Office – ***AAS Degree***	A25370L
Office Professional – ***Diploma***	D25370P
Office Professional – ***Certificate***	C25370P
Office Administration – Office Software **– *Certificate***	C25370S
Office Administration – Legal Office **- *Certificate***	C25370L

INFORMATION TECHNOLOGY

Program Name Continued	Program Code
Simulation and Game Development	
Simulation and Game Development - Art & Modeling *– AAS Degree*	A25450A
Simulation and Game Development - Programming *– AAS Degree*	A25450P
Business for Simulation and Game Development*– Certificate*	C25450G
Fundamentals I for Simulation and Game Development*– Certificate*	C25450D
Fundamentals II for Simulation and Game Development*– Certificate*	C25450E
Level Design *– Certificate*	C25450I
Mobile Game Development*– Certificate*	C25450C
Modeling and Animation *– Certificate*	C25450A
Production *– Certificate*	C25450B
Programming for Simulation and Game Development*– Certificate*	C25450H
Quality Assurance for Simulation and Game Development*– Certificate*	C25450F
Tech Art *– Certificate*	C25450J
Technical Animation *- Certificate*	C25450K
IT-Service and Support*– AAS Degree*	A25590IS
Hardware Support and Repair *- Certificate*	C25590HW
IT Foundations *- Certificate*	C25590F
IT Help Desk Technician *- Certificate*	C25590HD
Networking Support *– Certificate*	C25590NS
IT Service Technician *- Certificate*	C25590IS
Web Designer *– AAS Degree*	A25590DM
Web Designer *- Certificate*	C25590DM
Advanced Web Designer *- Certificate*	C25590AW
Front-End Developer *– Certificate*	C25590DV
Web Development Basics *- Certificate*	C25590WB
Web Developer *– AAS Degree*	A25590WD
Web Developer *- Certificate*	C25590WD
Advanced Web Developer *- Certificate*	C25590AD

Collaborative Agreements

None at this time

INFORMATION TECHNOLOGY

ADVERTISING & GRAPHIC DESIGN

Advertising and Graphic Design Degree - A30100
-Day, Evening & Online
The Advertising and Graphic Design curriculum is designed to provide students with knowledge and skills necessary for employment in the graphic design profession that emphasizes design, advertising, print production, web design, photography, social media, multimedia and video editing using industry standard tools.

Students will be trained in the development and design for promotional materials, such as newspaper and magazine advertisements, posters, folders, letterheads, logos, brochures, booklets, preparation of art for printing, lettering and typography, photography, and electronic media. Students will also become familiar designing and maintaining simple websites using industry best practices.

Graduates should qualify for employment opportunities with graphic design studios, advertising agencies, printing companies, department stores, and a wide variety of manufacturing industries, newspapers, and organizations with in-house graphics operations.

Program Sequence

FALL SEMESTER
GRD 110 Typography I 3
GRD 121 Drawing Fundamentals I.........................2
GRD 141 Graphic Design I.....................................4
GRD 151 Computer Design Basics 3
GRD 167 Photographic Imaging I..........................3

SPRING SEMESTER
ENG 111 Writing and Inquiry..................................3
GRD 142 Graphic Design II....................................4
GRD 152 Computer Design Technology I 3
WEB 140 Web Development Tools 3
GRD 145 Design Applications I..............................1

SUMMER SEMESTER
WEB 214 Social Media...3
___ ___ HUM 110 or ART 111 3
___ ___ MAT 110, 121, 143, 152 or 171 3

FALL SEMESTER
GRD 230 Technical Illustration..............................2
GRD 241 Graphic Design III...................................4
WEB 210 Web Design...3
GRD 265 Digital Print Production 3
GRD 146 Design Applications II 1
___ ___ PSY 150, ECO-151 or 251, POL-120 or SOC 210 ...3

SPRING SEMESTER
GRD 240 User Interface / User Experience............3
GRD 280 Portfolio Design......................................4
GRD 285 Client/Media Relations...........................2
DME 140 Intro to Audio / Video Media...................3
GRD 282 Advertising Copywriting 2
___ ___ ENG 112 or COM 110 3
___ ___ WBL 111, 112, 113, 121, 122, 123 or GRD 246

Graduation Requirements .... 72 Credit Hours

* Work based learning is an elective. WBL courses completed for one program may not count toward the completion of another program. For verification, please contact your academic advisor or your departmental WBL faculty coordinator. Students must have

approval from the Program Director and pre-register with the Work-Based Learning Office. The work may be done over any number of semesters, but the total elective credits must add up to 3.

Graphics Design Certificate - C30100A
-Online Only
The Graphics and Design certificate is designed to provide students with knowledge and skills in the areas of typography and design using industry standard software.

GRD 110 Typography I 3
GRD 141 Graphic Design I 4
GRD 151 Computer Design Basics 3
GRD 152 Computer Design Tech I..........................3
GRD 142 Graphic Design II 4

Graduation Requirements.................................17 Credit Hours

Web and Graphic Design Certificate - C30100B
-Online Only
The Web and Graphic Design certificate curriculum is designed to provide students with the knowledge and skills necessary to design for print and web. Students will be trained in the use of typography, computer design, and Web development tools to develop and design for print and web delivery.

GRD 110 Typography I 3
GRD 151 Computer Design Basics 3
GRD 152 Computer Design Technology I 3
WEB 140 Web Development Tools 3
WEB 210 Web Design 3

Graduation Requirements.................................15 Credit Hours

Advanced Graphic Design Certificate - C30100D
-Online
Certificate in graphic design, advertising, and social media concepts.

GRD 282 Advertising Copywriting 2
GRD 142 Graphic Design II 4
GRD 167 Photographic Imaging I 3
GRD 241 Graphic Design III 4
WEB 214 Social Media 3

Graduation Requirements.................................16 Credit Hours

Design Basics Certificate - C30100E
-Online
Introduction to the principles of design and applying them using industry standard tools.

GRD 121 Drawing Fundamentals I..........................2
GRD 141 Graphic Design I 4
GRD 145 Design Applications I...............................1
GRD 142 Graphic Design II 4
GRD 151 Computer Design Basics.........................3

Graduation Requirements.................................14 Credit Hours

Design Portfolio Certificate - C30100F
-Day
Certificate leads to creation of an online and physical graphic design portfolio.

WEB	140	Web Development Tools	3
GRD	265	Digital Print Production	3
GRD	280	Portfolio Design	4
GRD	285	Client / Media Relations	2

Graduation Requirements .... 12 Credit Hours

BUSINESS ANALYTICS

Business Analytics Degree - A25350
-Day, Online, & Evening

The Business Analytics curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in analytical professions. Business analysts process and analyze essential information about business operations and also assimilate data for forecasting purposes.

Students will complete course work in business analytics, including general theory, best practices, data mining, data warehousing, predictive modeling, project and operations management, statistical analysis, and software packages. Related skills include business communication, critical thinking and decision making.

Graduates should qualify for employment as data technicians, data scientists, business and data analytics engineers, and business analysts in the fields of finance, banking, logistics, marketing, healthcare, manufacturing, information technology, and government organizations.

Fall Semester

BAS	120	Intro to Analytics-1st 8 Wks	3
BAS	121	Data Visualization-2nd 8 Wks	3
CTI	110	Programming, Web and DB Foundations	3
OST	137	Office Applications I	3
___	___	Mathematics Elective	3

Spring Semester

BAS	150	Intro to Analytical Programming	3
BAS	220	Applied Analytical Programming	3
BUS	110	Intro to Business	3
MAT	152	Statistical Methods I	4
___	___	Writing and Inquiry	3

Summer Semester

| ___ | ___ | English and Communications Elective | 3 |
| ___ | ___ | Humanities and Fine Arts Elective | 3 |

Fall Semester

BAS	221	Intro to Predictive Analytics	3
BAS	230	Applied Predictive Modeling	3
BAS	240	Data Structures for Analytics	3
CSC	124	Intro to Data Science Programming	3
___	___	Elective I	3

Spring Semester

BAS	250	Analytical Tools and Methods	3
BAS	270	Advanced Analytical Tools and Methods	3
BUS	137	Principles of Management	3
___	___	Social and Behavioral Sciences Elective	3

| ___ | ___ | Elective II | 3 |

Graduation Requirements .... 67 Credit Hours

Math Elective
(Choose 3 credit hours from the following courses)

MAT	121	Algebra/Trigonometry I	3
MAT	143	Quantitative Literacy	3
MAT	171	Precalculus Algebra	4
MAT	172	Precalculus Trigonometry	4
MAT	271	Calculus I	4
MAT	272	Calculus II	4

English and Communications Elective
(Choose 3 credit hours from the following courses)

ENG	112	Writing and Research in the Disciplines	3
COM	120	Intro Interpersonal Com	3
COM	231	Public Speaking	3

Humanities and Fine Arts Elective
(Choose 3 credit hours from the following courses)

HUM	110	Technology and Society	3
HUM	115	Critical Thinking	3
PHI	240	Introduction to Ethics	3

Social and Behavioral Sciences Elective
(Choose 3 credit hours from the following courses)

ECO	151	Survey of Economics	3
ECO	251	Principles of Microeconomics	3
PSY	150	General Psychology	3
SOC	210	Introduction to Sociology	3

Elective I

MKT	120	Principles of Marketing	3
ACC	120	Principles of Financial Acct	4
LOG	110	Introduction to Logistics	3

Elective II

DBA	130	Intro to NoSQL Databases	3
MAT	152	Advanced Statistical Methods	4
WBL	111	Work-Based Learning 1	1
WBL	112	Work-Based Learning 1	2
WBL	113	Work-Based Learning 1	3
WBL	121	Work Based Learning II	1
WBL	122	Work-Based Learning II	2
WBL	123	Work-Based Learning II	3

Business Intelligence Certificate - C25350A
-Day, Online, & Evening

The Business Intelligence Certificate is designed to provide students a foundation in business intelligence and business analytics principles and applications. Credits earned in the program may be transferred toward an Associate in Applied Science Degree in Business Analytics. Students will learn how to use graphical tools to communicate insights about data, use statistical programming tools to conduct descriptive analytics, process data, and generate reports that support business decision-making.

First Semester

| BAS | 120 | Intro to Analytics | 3 |
| BAS | 150 | Intro to Analytical Programming | 3 |

Second Semester

| BAS | 121 | Data Visualization | 3 |
| BAS | 220 | Applied Analytical Programming | 3 |

Graduation Requirements .... 12 Credit Hours

INFORMATION TECHNOLOGY

Business Analyst Certificate - C25350B
-Day, Online, & Evening

The Business Analyst Certificate is designed to reinforce and advance analytics skills and application. Credits earned in the program may be transferred toward an Associate in Applied Science Degree in Business Analytics. Students will build and validate predictive models that will help guide decision makers, as well as be able to analyze complex data using modern analytics tools and methods.

First Semester
BAS   221   Intro to Predictive Analytics.................................3
BAS   240   Data Structures for Analytics.............................3

Second Semester
BAS   230   Applied Predictive Modeling.............................3
BAS   250   Analytical Tools and Methods 3
BAS   270   Advanced Analytical Tools & Methods...............3

Graduation Requirements........................15 Credit Hours

Marketing Analytics Certificate - C25350C
-Day, Online, & Evening

The Marketing Analytics Certificate is designed to prepare students for job opportunities in the marketing analytics field. Credits earned in this program may be transferred toward an Associate in Applied Science Degree in Business Analytics. Students can learn business analytics practices and how they apply in the marketing industry.

First Semester
BAS   120   Intro to Analytics...................................3
BUS   110   Intro to Business 3

Second Semester
BAS   121   Data Visualization 3
MKT   120   Principles of Marketing......................3

Graduation Requirements........................12 Credit Hours

Logistics Analytics Certificate - C25350E
-Day, Online, & Evening

The Logistics Analytics Certificate is designed to prepare students for job opportunities in the logistics analytics field. Credits earned in this program may be transferred toward an Associate in Applied Science Degree in Business Analytics and/or an Associate in Applied Science in Global Logistics. Students can learn business analytics practices and how they are applicable in distribution, transportation, and manufacturing organizations.

First Semester
BAS   120   Intro to Analytics...................................3
LOG   110   Intro to Logistics 3

Second Semester
BAS   121   Data Visualization 3
LOG   215   Supply Chain Management................................3

Graduation Requirements........................12 Credit Hours

Finance Analytics Certificate - C25350F
-Day, Online, & Evening

The Finance Analytics Certificate is designed to prepare students for job opportunities in the finance analytics field. Credits earned in

this program may be transferred toward an Associate in Applied Science Degree in Business Analytics. Students can learn business analytics practices and how they are applicable in the financial sector.

First Semester
BAS   120   Intro to Analytics 3
ACC   120   Principles of Financial Acct................................4

Second Semester
BAS   121   Data Visualization...3
BUS   225   Business Finance 3

Graduation Requirements........................13 Credit Hours

CLOUD INFRASTRUCTURE

Cloud Infrastructure (A25590CI)
– Day and Evening

This degree program provides skills and credentials that can qualify graduates for a variety of positions – in organizations all over the world. Any organization that uses operating system virtualization, cloud computing, or data storage solutions need people trained in these disciplines.

The program includes courses in Cisco routing and switching, Microsoft desktop and server operating systems, in-depth training with O/S virtualization, and unique courses in datacenter storage hardware environments. Instruction in these areas can qualify students to take industry certification exams in VMWare, Cisco, Microsoft, CompTIA, and NetApp.

This program also includes a co-op component, putting students to work with local employers for on-the-job training in "live" datacenters.

PROGRAM SEQUENCE

FALL SEMESTER
CTI   110   Web, Pgm & DB Foundation 3
CTI   120   Network & Sec Foundation.......................................3
NOS   110   Operating Systems Concepts....................................3
ENG   111   Writing and Inquiry...3
___   ___   Mathematics Elective...3

SPRING SEMESTER
NOS   120   Linux/Unix Single User 3
NOS   130   Windows Single User 3
CTI   140   Virtualization Concepts...3
NET   125   Networking Basics...3
NET   126   Routing Basics...3

SUMMER SEMESTER
___   ___   Humanities and Fine Arts Elective...............................3
CSC   121   Python Programming..3

FALL SEMESTER
NOS   220   Linux/Unix Administrator I...3
NOS   230   Windows Administration I 3
CTI   240   Virtualization Administration I 3
CTS   115   Info Sys Business Concepts.......................................3
___   ___   English and Communications Elective 3

SPRING SEMESTER

CTI	241	Virtualization Admin II	3
NET	135	Data Center Networking	3
CTS	285	Systems Analysis and Design	3
___	___	Project Elective	2
___	___	Social and Behavioral Sciences Elective	3

Graduation Requirements .... 65 Credit Hours

English and Communications Electives
(Select 3.0 hours from the following courses)

ENG	112	Writing and Research in the Disciplines	3
COM	120	Intro to Interpersonal Communications	3
COM	231	Public Speaking	3

Mathematics Electives
(Select 3.0 hours from the following courses)

MAT	121	Algebra/Trigonometry I	3
MAT	143	Quantitative Literacy	3
MAT	171	Precalculus Algebra (Select for College Xfer	4
MAT	172	Precalculus Trigonometry (Select for College Xfer)	4
MAT	271	Calculus I (Select for College Xfer)	4

Humanities/Fine Arts Elective
(Select 3.0 hours from the following courses)

HUM	110	Technology and Society	3
HUM	115	Critical Thinking	3
PHI	240	Introduction to Ethics	3

Social/Behavioral Science Elective
(Select 3.0 hours from the following courses)

ECO	151	Survey of Economics	3
ECO	251	Principles of Microeconomics	3
PSY	118	Interpersonal Psychology	3
PSY	150	General Psychology	3
SOC	210	Introduction to Sociology	3

Project Electives

CTI	260	Data Center Troubleshooting	3
WBL	___	Work-Based Learning (all numbers accepted)	2

* Work based learning is an elective. WBL courses completed for one program may not count toward the completion of another program. For verification, please contact your academic advisor or your departmental WBL faculty coordinator. Students must have approval from the Program Director and pre-register with the Work-Based Learning Office. The work may be done over any number of semesters, but the total elective credits must add up to 3.

Linux Security Specialist Certificate (C25590LS)

Graduates from this certificate program may be prepared to demonstrate their knowledge, skills, and abilities in security and auditing Linux based systems. Students can learn how to install, configure, and monitor Linux systems that include Apache, and Security Enabled Linux servers and workstations. Graduates can be ready to demonstrate proficiency in the management and hardening of LAMP stack systems.

NOS	120	Linux/Unix Single User	3
SEC	160	Security Administration I	3
NOS	125	Linux/Unix Scripting	3
NOS	220	Linux/Unix Admin I	3

Graduation Requirements .... 12 Credit Hours

Linux Certified IT Professional Certificate (C25590LX)

This certificate is designed to prepare students for Linux or Red Hat certifications. Topics include network installation, Red Hat Linux file system and kernel concepts, scripts, system recovery, cron system, LILO configuration, implement configure, log and restrict various Red Hat network services, configuration issues associated with using Red Hat Linux as a router, basic firewall policies, and basics of the XWindow system.

NOS	120	Linux/Unix Single User	3
NOS	125	Linux/Unix Scripting	3
NOS	220	Linux/Unix Admin I	3
CTI	140	Virtualization Concepts	3
CTI	240	Virtualization Admin I	3

Graduation Requirements .... 15 Credit Hours

Global Windows Security Administrator Certificate (C25590WS)

Graduates from this certificate program may be prepared to demonstrate their knowledge, skills, and abilities in security Microsoft Windows clients and servers, including technologies such as PKI, IPSec, and Group Policies. Students can learn how to install, configure and secure Windows operating systems. Graduates can be ready to demonstrate proficiency in managing the hardening of Windows systems against malware and persistent adversaries.

SEC	160	Security Administration I	3
NOS	130	Windows Single User	3
NOS	230	Windows Admin I	3
CTI	140	Virtualization Concepts	3
CTI	240	Virtualization Admin I	3

Graduation Requirements .... 15 Credit Hours

Microsoft Certified IT Professional Certificate (C25590MS)

This certificate is intended for students who are interested in testing for the MCITP or MSCA industry certifications. Courses cover the installation, configuration and management of Microsoft operating systems.

NOS	130	Windows Single User	3
NOS	230	Windows Admin I	3
CTI	140	Virtualization Concepts	3
CTI	240	Virtualization Admin I	3

Graduation Requirements .... 12 Credit Hours

COMPUTER PROGRAMMING AND DEVELOPMENT

Computer Programming and Development Degree - A25590CP
-Day and Evening

This curriculum prepares learners to design and develop desktop and web applications   Graduates can be proficient in Java, MVC, REST, unit testing, server-side JavaScript, and SQL. Graduates can be able to support the software development needs of businesses in

a wide variety of industries, including healthcare, manufacturing, insurance, finance and software publishing.

Students can solve business computer problems through programming techniques and procedures. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, software developers, database specialists, software specialists, or information systems managers.

Program Sequence

FALL SEMESTER
CSC	120	Computing Fundamentals I	4
CTI	110	Web, Pgm, and DB Foundations	3
ENG	111	Writing and Inquiry	3
NOS	110	Operating Systems Concepts	3
___	___	Mathematics Elective	3

SPRING SEMESTER
CSC	121	Python Programming	3
CTI	120	Network & Sec Foundations	3
DBA	120	Database Programming I	3
WEB	115	Web Markup and Scripting	3
___	___	Programming Concentration Area	3

SUMMER SEMESTER
CTS	115	Info Sys Business Concepts	3
___	___	English and Communications Elective	3

FALL SEMESTER
CSC	154	Software Development	3
___	___	Programming Concentration Area	10

SPRING SEMESTER
CSC	227	Cloud Application Development	3
___	___	Social and Behavioral Sciences Elective	3
___	___	Humanities/Fine Art Elective	3
___	___	Project Elective	3
___	___	Major Elective	3

Graduation Requirements ....65 Credit Hours

English and Communications Electives
(Choose 3 credit Hrs)
ENG	112	Writing and Research in the Disciplines	3
ENG	114	Prof Research & Reporting	3
COM	120	Intro Interpersonal Comm	3
COM	231	Public Speaking	3

Humanities and Fine Arts Electives
(Choose 3 credit Hrs)
HUM	110	Technology and Society	3
HUM	115	Critical Thinking	3
PHI	240	Introduction to Ethics	3

Mathematics Electives
(Choose 3 credit hrs)
MAT	121	Algebra/Trigonometry I	3
MAT	143	Quantitative Literacy	3
MAT	171	Precalculus Algebra	4
MAT	172	Precalculus Trigonometry	4
MAT	271	Calculus I	4
MAT	272	Calculus II	4

Social and Behavioral Sciences Electives
(Choose 3 credit hrs)
ECO	151	Survey of Economics	3
ECO	251	Principles of Microeconomics	3
ECO	252	Principles of Macroeconomics	3
POL	120	American Government	3
PSY	118	Interpersonal Psychology	3
PSY	150	General Psychology	3
SOC	210	Introduction to Sociology	3

Concentration Areas
(Select 1 Option Grouping Below)

Option 1 – Java Programming (13 Cr Hrs, Take in order listed)
CSC	151	Java Programming	3
CSC	130	Computing Fundamentals II	4
CSC	251	Advanced Java Programming	3
CSC	256	Software Quality Assurance	3

Option 2 – C++ Programming (13 Cr Hrs, Take in order listed)
CSC	134	C++ Programming	3
CSC	130	Computing Fundamentals II	4
CSC	234	Advanced C++ Programming	3
CSC	256	Software Quality Assurance	3

Major Electives
(Choose Min of 3 Credit Hrs)
CSC	118	Swift Programming I	3
CSC	221	Advanced Python Programming	3
DBA	240	Database Analysis/Design	3

Project Electives
(Choose Min of 3 Cr Hrs)
CSC	289	Programming Capstone	3
*WBL	111	Work-Based Learning	1
*WBL	112	Work-Based Learning	2
*WBL	113	Work-Based Learning	3
*WBL	121	Work-Based Learning	1
*WBL	122	Work-Based Learning	2
*WBL	123	Work-Based Learning	3

*Work-Based Learning is an elective. WBL courses completed for one program may not count toward the completion of another program. Contact your academic advisor or WBL faculty coordinator for verification. Students must have approval from the department head and pre-register with the Computer Technologies Division office. As an alternative to CSC 289, three credit hours of Work-Based Learning can be taken. The Work-Based Learning work period may be taken as WBL 112, over two semesters as WBL-111 and WBL-112 or over one semester as WBL-113.

C++ Programming Certificate – C25590CC
-Day
The C++ Programming certificate offers courses for students interested in upgrading their programming skills by acquiring proficiency in an object-oriented programming language.

CSC	134	C++ Programming	3
CSC	154	Software Development	3
CSC	227	Cloud Application Development	3
CSC	234	Advanced C++ Programming	3

Graduation Requirements .... 12 Credit Hours

Java Programming Certificate – C25590JV
-Day
Designed for individuals interested in acquiring programming skills
necessary to design and implement Java programs

CSC	151	Java Programming	3
CSC	154	Software Development	3
CSC	227	Cloud Application Development	3
CSC	251	Advanced Java Programming	3

Graduation Requirements ....12 Credit Hours

Programming Fundamentals Certificate - C25590PF
-Day
The Fundamentals of Computer Programming Certificate will give students the
opportunity to achieve programming literacy.

CSC	120	Computer Fundamentals I	4
CSC	121	Python Programming	3
CTI	110	Web, Pgm, and DB Foundations	3
WEB	115	Web Markup and Scripting	3
DBA	120	Database Programming I	3

Graduation Requirements ....16 Credit Hours

CYBERSECURITY

Cybersecurity AAS Degree – A25590CS
-Day and Evening

The Cybersecurity degree prepares students for an IT career in
digital forensics, network security services, and ethical hacking.
Courses include routing and switching, network vulnerabilities,
secure communications, system and security administration, data
recovery, and computer investigations. Students will work in
Microsoft, Linux, and Apple desktop and server operating system
environments. Upon completion, students will be prepared for a
variety of industry certifications, including: Certified Ethical Hacker,
Certified Enterprise Defender, CCNA Security, and Security+.

Program Sequence

FALL SEMESTER

CTI	110	Web, Pgm, & Db Foundation	3
CTI	120	Network and Security Foundations	3
ENG	111	Writing and Inquiry	3
NOS	110	Operating Systems Concepts	3
SEC	110	Security Concepts	3

SPRING SEMESTER

NET	125	Introduction to Networks	3
NET	126	Routing Basics	3
NOS	120	Linux/UNIX Single User	3
NOS	130	Windows Single User	3
CSC	121	Python Programming	3

SUMMER SEMESTER

NOS	125	Linux and UNIX Scripting	3
___	___	Mathematics Elective	3

FALL SEMESTER

CCT	121	Computer crime Investigations	4

CCT	250	Network Vulnerabilities I	3
CTS	115	Info Sys Business Concepts	3
SEC	160	Security Administration I	3

SPRING SEMESTER

CCT	240	Data Recovery Techniques	3
CCT	251	Network Vulnerabilities II	3
CTS	285	Systems Analysis & Design	3
___	___	English and Comm Elective	3
___	___	Humanities and Fine Arts Elective	3

SUMMER SEMESTER

___	___	Social and Behavioral Sciences Elective	3
___	___	Project Elective	2

Graduation Requirements .... 69 Credit Hours

English and Communication Electives
(Choose 3 credit Hrs)

ENG	111	Writing and Research in the Disciplines	3
COM	120	Intro to Interpersonal Communication	3
COM	231	Public Speaking	3

Humanities and Fine Arts Electives
(Choose 3 credit Hrs)

HUM	110	Technology and Society	3
HUM	115	Critical Thinking	3
PHI	240	Introduction to Ethics	3

Mathematics Electives
(Choose 3 credit Hrs)

MAT	121	Algebra/Trigonometry I	3
MAT	143	Quantitative Literacy	3
MAT	171	Precalculus Algebra	4
MAT	172	Precalculus Trigonometry	4
MAT	271	Calculus I	4

Social and Behavioral Sciences Electives
(Choose 3 credit Hrs)

ECO	151	Survey of Economics	3
ECO	251	Principles of Microeconomics	3
PSY	118	Interpersonal Psychology	3
PSY	150	General Psychology	3
SOC	210	Introduction to Sociology	3

Project Electives
(Minimum of 2 credit Hrs)

SEC	285	Systems Security Project (Capstone)	3
WBL	___	* Work-Based Learning	2

* Work based learning is an elective. WBL courses completed for
one program may not count toward the completion of another
program. For verification, please contact your academic advisor or
your departmental WBL faculty coordinator. Students must have
approval from the Program Director and pre-register with the
Work-Based Learning Office. The work may be done over any
number of semesters, but the total elective credits must add up to
3.

Cyber Operations & Digital Forensics Certificate – C25590CF
This certificate focuses on the skills needed for entry-level work in
a Security Operations Center (SOC) maintaining security
monitoring tools and investigating suspicious activities. The digital
forensics courses supplement this with training for the legal
recovery, documentation and investigation of material found in
digital devices.

NET 125 Introduction to Networks 3
NET 126 Routing Basics 3
SEC 160 Security Administration I 3
CCT 121 Computer Crime Investigation...................................... 4
CCT 240 Data Recovery Techniques... 3

Requires the following course or industry certification prerequisites:
Course   **Industry Certification**
CTI-120   Select one set from below:
          MS MTA Network & MTA Security Fundamentals
          CompTIA Sec+ and CompTIA Net+

NOS 110   Department Challenge Exam

Graduation Requirements .... 16 Credit Hours

Penetration Testing & Ethical Hacking – C25590PE

This certificate focuses on the skills Cybersecurity professionals require to look into the vulnerabilities of their organization's systems and networks that a malicious attacker may exploit and develop solutions to prevent data breaches.

CCT 250 Network Vulnerabilities I... 3
CCT 251 Network Vulnerabilities II.. 3
CSC 121 Python Programming 3
NOS 120 Linux/UNIX Single User 3
NOS 125 Linux and UNIX Scripting 3
NOS 130 Windows Single User 3

Requires the following course:
NOS-110   Department Challenge Exam

Graduation Requirements .... 18 Credit Hours

DATA SCIENCE AND PROGRAMMING SUPPORT SERVICES

Data Science and Programming Support Degree - A25590DS
-Day and Evening

This curriculum prepares learners to design and develop desktop and web application with an emphasis on business logic and data-driven applications. Graduates can be proficient in Python, SQL, XML, database development, client/server-side JavaScript and Python. Graduates can be able to support the software development needs of businesses in a wide variety of industries, including healthcare, manufacturing, insurance, finance and software publishing.

Students can solve business computer problems through programming techniques and procedures. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, software developers, database

specialists, software specialists, or information systems managers.

Program Sequence

FALL SEMESTER
CSC 120 Computing Fundamentals I 4
CTI 110 Web, Pgm, and DB Foundations 3
ENG 111 Writing and Inquiry...3
NOS 110 Operating Systems Concepts....................................3
___ ___ Mathematics Elective..3

SPRING SEMESTER
CSC 121 Python Programming...3
CSC 130 Computer Fundamentals II 4
DBA 120 Database Programming I 3
CTI 120 Network & Sec Foundations......................................3
WEB 115 Web Markup and Scripting 3

SUMMER SEMESTER
CTS 115 Info Sys Business Concepts......................................3
___ ___ English and Communication Electives 3

FALL SEMESTER
BAS 120 Intro to Analytics (1st 8 wks)..3
BAS 121 Data Visualization (2nd 8 wks)...................................3
BAS 150 Intro to Analytical Programming 3
CSC 154 Software Development 3
CSC 221 Advanced Python 3

SPRING SEMESTER
CSC 227 Cloud Application Development 3
___ ___ Social and Behavioral Sciences Elective....................3
___ ___ HUM/Fine Arts Elective 3
___ ___ Major Elective 3
___ ___ Project Elective..3

2nd SUMMER SEMESTER
BAS 220 Applied Analytical Programming.................................3

Graduation Requirements .... 71 Credit Hours

English and Communication Electives
(Choose 3 Credit Hrs)
ENG 112 Writing and Research in the Disciplines 3
ENG 114 Prof Research and Reporting 3
COM 120 Intro Interpersonal Comm 3
COM 231 Public Speaking...3

Humanities and Fine Arts Electives
(Choose a Min of 3 Credit Hrs)
HUM 110 Technology and Society 3
HUM 115 Critical Thinking..3
PHI 240 Introduction to Ethics 3

Mathematics Electives
MAT 121 Algebra/Trigonometry I...3
MAT 143 Quantitative Literacy..3
MAT 152 Statistical Methods I 4
MAT 171 Precalculus Algebra..4
MAT 172 Precalculus Trigonometry..4
MAT 271 Calculus I..4

Social and Behavioral Sciences Electives
(Choose 3 credit Hrs)
ECO 151 Survey of Economics...3
ECO 251 Principles of Microeconomics....................................3
ECO 252 Principles of Macroeconomics...................................3
POL 120 American Government 3
PSY 118 Interpersonal Psychology 3
PSY 150 General Psychology 3

SOC 210   Introduction to Sociology...3

Major Electives
(Choose Min of 3 Cr Hrs)
CSC 118   Swift Programming I...3
DBA 240   Database Analysis/Design 3

Project Electives
(Choose Min of 3 Cr Hrs)
CSC 289   Programming Capstone 3
*WBL 111   Work-Based Learning 1
*WBL 112   Work-Based Learning 2
*WBL 113   Work-Based Learning 3
*WBL 121   Work-Based Learning 1
*WBL 122   Work-Based Learning 2
*WBL 123   Work-Based Learning 3

*Work-Based Learning is an elective. WBL courses completed for one program may not count toward the completion of another program. Contact your academic advisor or WBL faculty coordinator for verification. Students must have approval from the department head and pre-register with the Computer Technologies Division office. As an alternative to CSC-289, three credit hours of Work-based learning can be taken. The Work-Based Learning work period may be taken over two semester as WBL 112, over two semesters as WBL-111 and WBL-112 or over one semester as WBL-113.

MEDICAL OFFICE ADMINISTRATION

Medical Office Professional Degree - A25310P
-Online

The Medical Office Professional curriculum prepares individuals for employment as medical administrative office personnel (AAS degree). Students may develop skills in medical office procedures and tasks, along with medical terminology, keyboarding, editing and formatting, office software applications, office computations, records management, medical insurance and billing, medical legal and ethical issues, electronic health records, oral and written communication, critical thinking, team building, and problem solving. The degree may be earned online.

Graduates could qualify for employment opportunities in a variety of medical office positions in medical offices, hospitals, insurance companies, laboratories, medical supply companies, research facilities, and other healthcare organizations. Students may be eligible to sit for industry-recognized certification exams.

Program Sequence

FALL SEMESTER
ENG 111   Writing and Inquiry 3
OST 122   Office Computations...3
OST 137   Office Software Applications 3
OST 141   Med Office Terms I...3
OST 148   Medical Coding, Billing, and Insurance 3

SPRING SEMESTER
CTS 130   Spreadsheet...3
OST 134   Text Entry and Formatting 3
OST 142   Med Office Terms II...3
OST 243   Med Office Simulation...3
___   ___   ENG Elective...3

Eligible for Medical Office Professional Certificate (C25310P)
OST-141, OST-148, OST-134, OST-142, CTS-130, OST-243

SUMMER SEMESTER
___   ___   Social Science Elective 3
___   ___   Humanities / FA Elective 3

FALL SEMESTER
OST 136   Word Processing..3
OST 164   Office Editing 3
OST 184   Records Management 3
OST 286   Professional Development 3
___   ___   OA Elective...3

Eligible for Office Professional Certificate (C25370P): OST-122,
OST-137, OST-164, OST-184, OST-134, OST-136

SPRING SEMESTER
OST 149   Medical Legal Issues...3
OST 165   Adv Office Editing 3
OST 288   Medical Office Admin Capstone..................................3
___   ___   Math/Science Elective 3
___   ___   OA Elective...3

Eligible for Medical Office Professional Diploma (D25310P)
ENG-111, OST-137, OST_141, OST_148, OST-164, OST-134,
OST-142, OST-149, OST-243, OST-288, CTS-130, ENG Elective

Graduation Requirements .... 66 Credit Hours

Humanities and Fine Arts Elective
(Choose 3 credit hours from the following courses)
HUM 110   Technology and Society 3
HUM 115   Critical Thinking 3

ENG Electives
(Choose 3 credit hours from the following courses)
ENG 114   Professional Research and Reporting..........................3
ENG 112   Writing/Research in the Disc 3
COM 120   Intro Interpersonal Comm...3

Social and Behavioral Sciences Electives
(Choose 3 credit hours from the following courses)
PSY 150   General Psychology 3
SOC 210   Introduction to Sociology 3
PSY 118   Interpersonal Psychology 3

Math/Science Electives
(Choose 3 credit hours from the following courses)
MAT 110   Math Measurement & Literacy 3
BIO 161   Intro to Human Biology...3

Medical Office Professional Electives
(Choose 6 credit hours from the following courses)
CTS 230   Advanced Spreadsheet...3
HMT 110   Intro to Healthcare Mgt...3
HMT 211   Long-Term Care Admin..3
HMT 212   Mgt of Healthcare Org...3
OST 247   Procedure Coding...3
OST 248   Diagnostic Coding 3
WBL 111   Work-Based Learning I* 1
WBL 112   Work-Based Learning I...2
WBL 113   Work-Based Learning I...3
WBL 121   Work-Based Learning II* 1
WBL 122   Work-Based Learning II..2
WBL 131   Work-Based Learning III...1

*Work-Based Learning is an elective. WBL courses completed for one program may not count toward the completion of another program. For verification of WBL course work, please contact your

academic advisor and/or your departmental Work-Based Learning faculty coordinator. Students must have approval from the Department Head and pre-register with the Work-Based Learning Office. The Work-Based Learning work period may be taken over one semester as WBL 113, or two semesters as WBL 111 and WBL 122, or two semesters as WBL 112 and WBL 131, or three semesters as WBL 111, WBL 121, and WBL 131.

Medical Office Professional Diploma - D25310P
-Online

The Medical Office Professional Diploma is designed for the individual entering, upgrading, or retraining in the medical office field. Students may develop skills in medical terminology, keyboarding and formatting, office software applications, medical office procedures, medical insurance and billing, medical legal and ethical issues, electronic health records, oral and written communication, editing, critical thinking, team building, and problem solving. The diploma may be earned online.

Graduates could qualify for employment opportunities in medical offices, healthcare facilities, insurance billing offices, labs, and medical equipment manufacturers. Students may be eligible to take industry-recognized certification exams.

Program Sequence

FALL SEMESTER
ENG	111	Writing and Inquiry	3
OST	137	Office Applications I	3
OST	141	Med Office Terms I	3
OST	148	Medical Ins & Billing	3
OST	164	Office Editing	3

SPRING SEMESTER
OST	134	Text Entry & Formatting	3
OST	142	Med Office Terms II	3
OST	149	Medical Legal Issues	3
OST	243	Med Office Simulation	3
OST	288	Medical Office Admin Capstone	3

SUMMER SEMESTER
___	___	ENG Elective	3
CTS	130	Spreadsheet	3

Eligible for Medical Office Professional Certificate (C25310P)
OST-141, OST-148, OST-134, OST-142, CTS-130, OST-243

Graduation Requirements .... 36 Credit Hours

ENG Electives
(Choose 3 credit hours from the following courses)
ENG	114	Professional Research and Reporting	3
ENG	112	Writing/Research in the Disc	3
COM	120	Intro Interpersonal Comm	3

Medical Office Professional Certificate – C25310P
-Online

This certificate provides the medical and computer skills necessary for entry-level employment in medical settings. The certificate may be earned online.

FALL SEMESTER
OST	141	Med Office Terms I	3

OST	148	Medical Ins & Billing	3
OST	134	Text Entry & Formatting	3

SPRING SEMESTER
OST	142	Med Office Terms II	3
CTS	130	Spreadsheet	3
OST	243	Med Office Simulation	3

Graduation Requirements .... 18 Credit Hours

Medical Billing and Coding Degree - A25310B
-Online

Medical Office Administration has a concentration in Medical Billing and Coding (AAS degree). Students may develop skills in medical coding and auditing, along with medical terminology, keyboarding, editing and formatting, office software applications, office computations, medical office procedures, medical insurance and billing, medical legal and ethical issues, electronic health records, oral and written communication, critical thinking, team building; and problem solving. The degree may be earned online.

Graduates could qualify for employment opportunities in medical offices; healthcare facilities including hospitals, nursing homes, and rehabilitation centers; insurance billing offices; and laboratories. Students may be eligible to take industry-recognized certification exams.

Program Sequence

FALL SEMESTER
ENG	111	Writing and Inquiry	3
OST	122	Office Computations	3
OST	137	Office Software Applications	3
OST	141	Med Office Terms I	3
OST	148	Medical Coding, Billing, and Insurance	3

SPRING SEMESTER
CTS	130	Spreadsheet	3
OST	134	Text Entry and Formatting	3
OST	142	Med Office Terms II	3
OST	243	Med Office Simulation	3
___	___	ENG Elective	3

Eligible for Medical Office Professional Certificate (C25310P)
OST-141, OST-148, OST-134, OST-142, CTS-130, OST-243

SUMMER SEMESTER
OST	247	Procedure Coding	3
OST	248	Diagnostic Coding	3

FALL SEMESTER
OST	164	Office Editing	3
OST	286	Professional Development	3
OST	249	Med Coding Certification Prep	3
___	___	HUM/FA Elective	3
___	___	OA Elective	3

SPRING SEMESTER
OST	149	Medical Legal Issues	3
OST	288	Medical Office Admin Capstone	3
OST	260	Adv Coding Methodologies	3
___	___	Math/Science Elective	3
___	___	Social Science Elective	3

Eligible for Medical Office Professional Diploma (D25310P)
ENG-111, OST-137, OST-141, OST-148, OST-164, OST-134, OST-142, OST-149, OST-243, OST-288, CTS-130, ENG Elective

Graduation Requirements .... 66 Credit Hours

Humanities and Fine Arts Elective
(Choose 3 credit hours from the following courses)
HUM 110   Technology and Society.................................3
HUM 115   Critical Thinking...3

ENG Electives
(Choose 3 credit hours from the following courses)
ENG 114   Professional Research and Reporting 3
ENG 112   Writing/Research in the Disc....................................3
COM 120   Intro Interpersonal Comm 3

Social and Behavioral Sciences Electives
(Choose 3 credit hours from the following courses)
PSY 150   General Psychology 3
SOC 210   Introduction to Sociology............................3
PSY 118   Interpersonal Psychology............................3

Math/Science Electives
(Choose 3 credit hours from the following courses)
MAT 110   Math Measurement & Literacy 3
BIO 161   Intro to Human Biology................................3

Medical Billing and Coding Electives
(Choose 3 credit hours from the following courses)
CTS 230   Advanced Spreadsheet................................3
HMT 110   Intro to Healthcare Mgt 3
OST 145   Social Media for Office Prof 3
WBL 111   Work-Based Learning I 1
WBL 112   Work-Based Learning I 2
WBL 113   Work-Based Learning I 3
WBL 121   Work-Based Learning II 1
WBL 122   Work-Based Learning II 2
WBL 131   Work-Based Learning III 1

Healthcare Administration Degree - A25310H
-Online

Medical Office Administration has a concentration in Healthcare Administration (AAS degree). Students may develop skills in healthcare administration and human resources management, along with medical terminology, keyboarding, editing and formatting, office software applications, office computations, medical office procedures, medical insurance and billing, medical legal and ethical issues, electronic health records, oral and written communication, critical thinking, team building, and problem solving. The degree may be earned online.

Graduates could qualify for employment opportunities in medical offices; healthcare facilities including hospitals, nursing homes, and rehabilitation centers; medical supply companies; research facilities; and pharmaceutical companies. Students may be eligible to take industry-recognized certification exams.

Program Sequence

FALL SEMESTER
ENG 111   Writing and Inquiry 3
HMT 110   Intro to Healthcare Mgmt...........................3
OST 137   Office Applications I 3
OST 141   Med Office Terms I.....................................3
OST 148   Medical Ins & Billing..................................3

SPRING SEMESTER
CTS 130   Spreadsheet...3
OST 134   Text Entry and Formatting 3
OST 142   Med Office Terms II 3
OST 243   Med Office Simulation................................3

___ ___   ENG Elective 3

Eligible for Medical Office Professional Certificate (C25310P)
OST-141, OST-148, OST-134, OST-142, CTS-130, OST-243

SUMMER SEMESTER
___ ___   Social Science Elective 3
___ ___   HUM/FA Elective 3

FALL SEMESTER
ACC 120   Prin of Financial Accounting.......................4
BUS 153   Human Resource Mgmt 3
OST 164   Office Editing 3
OST 286   Professional Development 3
___ ___   OA Elective...3

SPRING SEMESTER
HMT 211   Long Term Care Admin................................3
HMT 212   Mgmt of Healthcare Org..............................3
OST 149   Medical Legal Issues..................................3
OST 288   Medical Office Admin Capstone..................3
___ ___   Math/Science Elective 3

Eligible for Medical Office Professional Diploma (D25310P)
ENG-111, OST-137, OST-141, OST-148, OST-164, OST-134, OST-142, OST-149, OST-243, OST-288, CTS-130, ENG Elective

Graduation Requirements .... 66 Credit Hours

Humanities and Fine Arts Elective
(Choose 3 credit hours from the following courses)
HUM 110   Technology and Society 3
HUM 115   Critical Thinking 3

ENG Electives
(Choose 3 credit hours from the following courses)
ENG 114   Professional Research and Reporting........................3
ENG 112   Writing/Research in the Disc 3
COM 120   Intro Interpersonal Comm..........................3

Math/Science Electives
(Choose one – 3 credit hours)
MAT 110   Math Measurement & Literacy 3
BIO 161   Intro to Human Biology..............................3

Social Sciences Electives
(Choose 3 credit hours from the following courses)
PSY 150   General Psychology 3
SOC 210   Introduction to Sociology 3
PSY 118   Interpersonal Psychology 3

Healthcare Administration Electives
(Choose 3 credit hours from the following courses)
CTS 230   Advanced Spreadsheet...............................3
OST 247   Procedure Coding 3
OST 248   Diagnostic Coding 3
WBL 111   Work-Based Learning I...............................1
WBL 112   Work-Based Learning I...............................2
WBL 113   Work-Based Learning I...............................3
WBL 121   Work-Based Learning II..............................1
WBL 122   Work-Based Learning II..............................2
WBL 131   Work-Based Learning III.............................1

INFORMATION TECHNOLOGY

NETWORK MANAGEMENT

Network Management Degree - A25590NM
- Day and Evening

The Network Management curriculum prepares individuals for employment supporting local- and wide-area networks. Students may learn how to use technologies to provide for data, voice, image, and video communications in business, industry, and education.

Course work includes design, installation, configuration, and management of local- and wide-area network hardware and software. Emphasis is placed on developing proficiency in the use of network management software and the use of hardware such as switches and routers.

Graduates may find employment in entry-level jobs as local area network managers, network operators, network analysts, and network technicians. Graduates may also be qualified to take certification examinations for various network products, depending on their local program.

Program Sequence

FALL SEMESTER
CTI	110	Web, Programming and Database Foundations	3
CTI	120	Network and Security Foundations	3
NOS	110	Operating System Concepts	3
___	___	Math Elective	3

SPRING SEMESTER
CSC	121	Python Programming	3
CTS	115	Info Sys Business Concepts	3
NET	125	Introduction to Networks	3
NET	126	Routing Basics	3
ENG	111	Writing and Inquiry	3

SUMMER SEMESTER
NET	225	Routing and Switching I	3
NET	115	Telecom for IT Professionals	3
___	___	English Elective	3

FALL SEMESTER
NET	270	Building Scalable Networks	3
NOS	130	Windows Single User	3
NOS	230	Windows Admin I	3
___	___	Humanities and Fine Arts Elective	3
___	___	Social and Behavioral Sciences Elective	3

SPRING SEMESTER
CTS	120	Hardware/Software Support	3
NET	175	Wireless Technology	3
NOS	120	Linux/UNIX Single User	3
NET	289	Networking Project	3
___	___	Major Elective I	2

Graduation Requirements .... 65 Credit Hours

General Electives
English Electives
(Choose 3 credit hrs)
ENG	112	Writing/Research in the Disc	3
ENG	114	Professional Research and Reporting	3

Mathematics Electives
(Choose 3 Credit Hrs)
MAT	121	Algebra/Trigonometry I	3
MAT	143	Quantitative Literacy	3
MAT	152	Statistical Methods I	4
MAT	171	Precalculus Algebra	4

Humanities/Fine Arts Elective
(Choose 3 Credit Hrs)
HUM	110	Technology and Society	3
HUM	115	Critical Thinking	3
PHI	240	Introduction to Ethics	3

Social/Behavioral Science Elective
(Choose 3 Credit Hrs)
ECO	251	Prin. Of Microeconomics	3
ECO	151	Survey of Economics	3
POL	120	American Government	3
PSY	118	Interpersonal Psychology	3
PSY	150	General Psychology	3
SOC	210	Introduction to Sociology	3

Required Major Electives
(Choose a min of 2 Credit Hrs)
NET	135	Data Center Networking	3
NET	240	Network Design	3
NET	272	Multi-Layer Networks	3
NET	273	Internetworking Support	3
WBL		Work-Based Learning	2

* Work based learning is an elective. WBL courses completed for one program may not count toward the completion of another program. For verification, please contact your academic advisor or your departmental WBL faculty coordinator. Students must have approval from the Program Director and pre-register with the Work-Based Learning Office. The work may be done over any semester, but the total elective credits must add up to 3.

CISCO Network Associate Certificate – C25590CA

This certificate is designed to prepare students for the CISCO Certified Network Associate (CCNA) examination. Topics include network topologies and design, router configuration and protocols, switching theory, virtual LANS and threaded case studies.

Upon completion of the four-course sequence, students may have the expertise they need to pass the test required to achieve CCNA status. Completion of NET 110 or CTI-120 or its equivalent is required to begin this program.

CTI	120	Network and Security	3
NET	125	Networking Basics	3
NET	126	Routing Basics	3
NET	225	Routing and Switching I	3
		Major Elective	3

Graduation Requirements .... 15 Credit Hours

Major Electives
(Choose a Min of 3 Credit Hrs)
NET	115	Telecom for IT Professionals	3
NET	135	Data Center networking	3
NET	175	Wireless Technology	3
NET	240	Network Design	3
		Work Based Learning (All numbers Accepted)	3

INFORMATION TECHNOLOGY

CISCO Network Professional Certificate - C25590CP

The CISCO Certified Network Professional (CCNP) certificate provides the student with advanced skills in LAN/WAN networking technologies with an emphasis on CISCO methodology. These courses will provide an in-depth study of theory, as well as practical hands-on lab activities to prepare the student for the CCNP certification objectives. Topics include routing protocols, switching technology, remote access setup and maintenance, building multi-layer networks, and networking troubleshooting.

NET	270	Building Scalable Networks	3
NET	272	Multi-Layer Networks	3
NET	273	Internetworking Support	3
___	___	Major Elective (min 3 Credit Hrs)	3

Graduation Requirements .... 12 Credit Hours

Major Electives
(Choose a Min of 3 Credit Hrs)

NET	115	Telecom for IT Professionals	3
NET	135	Data Center Networking	3
NET	175	Wireless Technology	3
NET	240	Network Design	3
WBL	___	Work Based Learning (All Numbers Accepted)	3

* Work based education is an elective. Students must have approval from the Program Director and preregister with the Work-Based Learning Office. The work may be done over any number of semesters, but the total elective credits must add up to 8 for electives 1, 2 and 3.

Cisco Security Certificate (C25590CX)

This program is intended for individuals who are interested in getting certified in network security. Courses may lead to industry credentials in networking and network security.

SEC	110	Security Concepts	3
SEC	150	Secure Communications	3
NET	225	Routing and Switching I	3
NET	226	Routing and Switching II	3

Graduation Requirements .... 12 Credit Hours

Wireless Network Certificate (C25590WN)

This certificate is designed to give students a solid foundation in cellular and wireless network technologies. These courses will provide an in-depth study of theory, as well as practical hands-on lab activities to prepare the student for the CCNA, CWSA and CWNA certification objectives. The CWNA and CWSA certifications will be administered as the final exam for each course.

NET	115	Telecom for IT Professionals	3
NET	125	Networking Basics	3
NET	126	Routing Basics	3
NET	225	Routing and Switching	3
NET	175	Wireless Technology	3

Graduation Requirements .... 15 Credit Hours

OFFICE ADMINISTRATION

Office Professional Degree - A25370P
-Online

The Office Professional curriculum (AAS degree) prepares individuals for employment as administrative office personnel. Students can develop skills in administrative office procedures and tasks, along with office software applications, records management, keyboarding, editing and advanced formatting, office computations, oral and written communication, critical thinking, team building, and problem solving. The degree may be earned online.

Graduates could qualify for employment opportunities in a variety of office positions in business, government, and industry. Students may be eligible to take industry-recognized certification exams.

Program Sequence

FALL SEMESTER

ENG	111	Writing and Inquiry	3
OST	122	Office Computations	3
OST	137	Office Software Applications	3
OST	184	Records Management	3
OST	164	Text Editing Applications	3

SPRING SEMESTER

___	___	English Elective	3
___	___	Math/Science Elective	3
CTS	130	Spreadsheet	3
OST	136	Word Processing	3
OST	134	Text Entry & Formatting	3

SUMMER SEMESTER

___	___	Social Science Elective	3
___	___	HUM / FA Elective	3

FALL SEMESTER

OST	138	Advanced Software Applications	3
OST	181	Introduction to Office Systems	3
OST	236	Adv. Word / Information Processing	3
OST	135	Adv. Text Entry and Formatting	3
OST	286	Professional Development	3

SPRING SEMESTER

CTS	230	Advanced Spreadsheet	3
OST	165	Adv Office Editing	3
OST	289	Office Admin Capstone	3
___	___	OA Elective	3

Eligible for Office Software Certificate (C25370S): CTS-130, OST-136, OST-137, OST-236, CTS-230

Graduation Requirements .... 66 Credit Hours

Humanities and Fine Arts Electives
(Choose 3 credit hours from the following courses)

HUM	110	Technology and Society	3
HUM	115	Critical Thinking	3

English Electives
(Choose 3 credit hours from the following courses)

ENG	112	Writing/Research in the Disc	3
ENG	114	Professional Research and Reporting	3
COM	120	Intro Interpersonal Comm	3

Math/Science Electives
(Choose 3 credit hours from the following courses)
MAT 110 Math Measurement & Literacy 3
BIO 161 Intro to Human Biology...3

Social Sciences Electives
(Choose 3 credit hours from the following courses)
PSY 150 General Psychology...3
SOC 210 Introduction to Sociology...3
PSY 118 Interpersonal Psychology..3

OA Electives
(Choose 3 credit hours from the following courses)
ACC 120 Prin of Financial Accounting.....................................4
OST 145 Social Media for Office Prof 3
OST 153 Office Finance Solutions 3
OST 155 Legal Terminology...3
WBL 111 Work–Based Learning I* 1
WBL 112 Work-Based Learning I 2
WBL 113 Work-Based Learning I 3
WBL 121 Work-Based Learning II* 1
WBL 122 Work-Based Learning II 2
WBL 131 Work-Based Learning I 1

* Work-Based Learning is an elective. WBL courses completed for one program may not count toward the completion of another program. For verification of WBL course work, please contact your academic advisor and/or your departmental Work-Based Learning faculty coordinator. Students must have approval from the Department Head and pre-register with the Work-Based Learning Office. The Work-Based Learning work period may be taken over one semester as WBL 113, or two semesters as WBL 111 and WBL 122, or two semesters as WBL 112 and WBL 131, or three semesters as WBL 111, WBL 121, and WBL 131.

Office Professional Certificate – C25370P
-Online

This certificate provides the technical and administrative support skills necessary for entry-level employment in a variety of offices. The certificate is available online.

FALL SEMESTER
OST 122 Office Computations...3
OST 137 Office Applications I 3
OST 164 Office Editing...3
OST 184 Records Management...3

SPRING SEMESTER
OST 134 Text Entry & Formatting 3
OST 136 Word Processing...3

Graduation Requirements................................... 18 Credit Hours

Office Professional Diploma - D25370P
-Online

The Office Administration Diploma is designed for the individual entering, upgrading, or retraining in the office field. Students can develop skills in records management, office computations, software applications, office procedures, keyboarding, editing and advanced formatting, critical thinking, and problem solving. The diploma may be earned online.

Graduates could qualify for entry-level employment opportunities in a variety of office positions in business, government, and industry. Students may be eligible to take industry-recognized

certification exams.

Program Sequence

FALL SEMESTER
ENG 111 Writing and Inquiry..3
OST 122 Office Computations..3
OST 134 Text Entry and Formatting..3
OST 181 Office Procedures..3
OST 184 Records Management...3

SPRING SEMESTER
OST 135 Adv Text Entry & Formatting 3
OST 136 Word Processing 3
OST 137 Office Applications I..3
OST 164 Office Editing..3
OST 286 Professional Development...3

SUMMER SEMESTER
CTS 130 Spreadsheet 3
___ ___ ENG Elective 3

English Electives
(Choose 3 credit hours from the following courses)
ENG 112 Writing/Research in the Disc 3
ENG 114 Professional Research and Reporting.........................3
COM 120 Intro Interpersonal Comm...3

Graduation Requirements .... 36 Credit Hours

Legal Office Degree - A25370L
-Online

Office Administration has a concentration in Legal Office (AAS degree). Students can develop skills in legal office procedures and tasks, along with legal terminology, business law, office software applications, records management, office computations, keyboarding, editing and advanced formatting, oral and written communication, critical thinking, team building, and problem solving. The degree may be earned online.

Graduates could qualify for employment opportunities in government agencies, the court system, law offices, real estate offices, financial institutions, and large to small offices and businesses. Students may be eligible to take industry-recognized certification exams.

Program Sequence

FALL SEMESTER
ENG 111 Writing and Inquiry..3
OST 134 Text Entry & Formatting..3
OST 136 Word Processing 3
OST 137 Office Applications I..3
OST 155 Legal Terminology 3

SPRING SEMESTER
CTS 130 Spreadsheet 3
OST 135 Adv Text Entry & Formatting 3
OST 156 Legal Office Procedures..3
___ ___ Math/Science Elective 3
___ ___ English Elective 3

Eligible for Legal Office Certificate (C25370L): OST-134, OST-136, OST-155, OST-135, OST-156

SUMMER SEMESTER
___ ___ Social Science Elective...3
___ ___ Humanities/FA Elective..3

FALL SEMESTER

OST	122	Office Computations	3
OST	138	Office Applications II	3
OST	164	Office Editing	3
OST	184	Records Management	3
OST	236	Adv Word Processing	3

Eligible for Office Professional Certificate (C25370P): OST-122, OST-137, OST-164, OST-184, OST-134, OST-136

SPRING SEMESTER

BUS	115	Business Law I	3
OST	165	Adv Office Editing	3
OST	286	Professional Development	3
OST	289	Office Admin Capstone	3
___	___	OA Elective	3

Graduation Requirements .... 66 Credit Hours

Humanities and Fine Arts Electives
(Choose 3 credit hours from the following courses)

HUM	110	Technology and Society	3
HUM	115	Critical Thinking	3

English Electives
(Choose 3 credit hours from the following courses)

ENG	112	Writing/Research in the Disc	3
ENG	114	Professional Research and Reporting	3
COM	120	Intro Interpersonal Comm	3

Math/Science Electives
(Choose 3 credit hours from the following courses)

MAT	110	Math Measurement & Literacy	3
BIO	161	Intro to Human Biology	3

Social Sciences Electives
(Choose 3 credit hours from the following courses)

PSY	150	General Psychology	3
SOC	210	Introduction to Sociology	3
PSY	118	Interpersonal Psychology	3

OA Electives
(Choose 3 credit hours from the following courses)

CTS	230	Advanced Spreadsheet	3
OST	153	Office Finance Solutions	3
OST	145	Social Media for Office Prof	3
WBL	111	Work –Based Learning I	1
WBL	112	Work-Based Learning I	2
WBL	113	Work-Based Learning I	3
WBL	121	Work-Based Learning II	1
WBL	122	Work-Based Learning II	2
WBL	131	Work-Based Learning I	1

*Work-Based Learning is an elective. WBL courses completed for one program may not count toward the completion of another program. For verification of WBL course work, please contact your academic advisor and/or your departmental Work-Based Learning faculty coordinator. Students must have approval from the Department Head and pre-register with the Work-Based Learning Office. The Work-Based Learning work period may be taken over one semester as WBL 113, or two semesters as WBL 111 and WBL 122, or two semesters as WBL 112 and WBL 121, or three semesters as WBL 111, WBL 121, and WBL 131.

Legal Office Certificate – C25370L
-Online

This certificate provides a study of the office skills necessary for employment in a legal setting. The certificate may be earned online.

FALL SEMESTER

OST	134	Text Entry & Formatting	3
OST	136	Word Processing	3
OST	155	Legal Terminology	3

SPRING SEMESTER

OST	135	Adv Text Entry & Format	3
OST	156	Legal Office Procedures	3

Graduation Requirements .... 15 Credit Hours

Office Software Certificate – C25370S
-Online

This certificate provides an in-depth study of commonly used office software applications to prepare students for employment and to pass certification exams in word processing, spreadsheet, and presentation software. The certificate may be earned online.

FALL SEMESTER

CTS	130	Spreadsheet	3
OST	136	Word Processing	3
OST	137	Office Applications I	3

SPRING SEMESTER

OST	236	Advanced Word Processing	3
CTS	230	Advanced Spreadsheet	3

Graduation Requirements .... 15 Credit Hours

SIMULATION & GAME DEVELOPMENT

Art and Modeling Degree – A25450A and Programming Degree - A25450P

The Simulation and Game Development curriculum provides a broad background in simulation and game development with practical applications in creative arts, visual arts, audio/video technology, creative writing, modeling, design, programming and management.

Students receive hands-on training in design, 3D modeling, animation, level design, software engineering, and programming for the purpose of creating simulations and games.

Graduates could qualify for employment as designers, artists, animators, programmers, quality assurance testers and analysts, engineers and administrators in the entertainment industry, the health care industry, engineering, forensics, education, and government agencies.

Simulation and Game Development- Art & Modeling Degree - A25450A
-Day and Evening

Program Sequence

FALL SEMESTER

ACA	111	College Student Success	1
ENG	111	Writing and Inquiry	3
SGD	111	Introduction to SGD	3
SGD	113	SGD Programming	3

SGD	116	Graphic Design Tools.. 3
___	___	Social Science Elective 3

SPRING SEMESTER

___	___	Math Elective 3
SGD	112	SGD Design... 3
SGD	114	3D Modeling.. 3
SGD	117	Art for Games 3
SGD	163	SG Documentation... 3

SUMMER SEMESTER

COM	231	Public Speaking 3
___	___	Major Elective 2

FALL SEMESTER

SGD	162	SGD 3D Animation... 3
SGD	174	SG Level Design 3
SGD	212	SGD Design II 3
SGD	214	3D Modeling II 3
___	___	Major Elective 3

SPRING SEMESTER

___	___	Major Elective 2
SGD	134	SG Quality Assurance... 3
SGD	158	SGD Business Management 3
SGD	166	SG Physiology/Kinesis 3
___	___	SGD 165 or SGD 172 3

SUMMER SEMESTER

SGD	289	SGD Project... 3
___	___	Humanities and Fine Arts Elective........................ 3

Graduation Requirements................................ 71 Credit Hours

Math Elective
(Select 3 credit hours from the following courses)

MAT	121	Algebra/Trigonometry I.. 3
MAT	143	Quantitative Literacy 3
MAT	152	Statistical Methods 1 4
MAT	171	Pre-calculus Algebra 4

Humanities/Fine Arts Elective
(Select 3 credit hours from the following courses)

ART	111	Art Appreciation 3
ENG	125	Creative Writing I 3
HUM	110	Technology and Society... 3
HUM	130	Myth in Human Culture 3
HUM	160	Introduction to Film 3
REL	110	World Religions... 3

Social/Behavioral Science Elective
(Select 3 credit hours from the following courses)

ECO	151	Survey of Economics... 3
HIS	111	World Civilizations I 3
PSY	150	General Psychology 3
SOC	210	Introduction to Sociology 3

Major Required Electives
(Select a minimum of 7 credit hours from the following courses)

SGD	135	Serious Games 3
SGD	159	SGD Production Management.................................. 3
SGD	167	SG Ethics.. 3
SGD	168	Mobile SG Programming I 3
SGD	180	SGD HTML Programming I 3
SGD	210	3D Data Capture 3
SGD	237	Rigging 3D Models... 3
SGD	239	SGD Tech Art.. 3
SGD	242	SGD Photogrammetry 3
SGD	262	SGD 3D Animation II 3
SGD	268	Mobile SG Programming II 3
SGD	274	SG Level Design II 3

SGD	288	SGD Portfolio Design... 2
WBL	111	Work-Based Learning I 1
WBL	112	Work-Based Learning I 2

*WBL courses completed for one program may not count toward the completion of another program. For verification of WBL course work, please contact your academic advisor and/or your departmental Work-Based Learning faculty coordinator. The Work-Based Learning period may be taken over two semesters as WBL-112 and WBL-121 or over three semesters as WBL-111, WBL-121, and WBL-131.

Simulation and Game Development- Programming Degree - A25450P
-Day and Evening

Program Sequence

FALL SEMESTER

ACA	111	College Student Success...................................... 1
ENG	111	Writing and Inquiry.. 3
SGD	111	Introduction to SGD 3
SGD	116	Graphic Design Tools 3
SGD	113	SGD Programming 3
___	___	Social Science Elective... 3

SPRING SEMESTER

MAT	171	Pre-calculus Algebra.. 4
SGD	112	SGD Design... 3
SGD	114	3D Modeling 3
SGD	163	SG Documentation 3
SGD	213	SGD Programming II 3

SUMMER SEMESTER

COM	231	Public Speaking.. 3
___	___	Major Elective... 2

FALL SEMESTER

SGD	168	Mobile SG Programming I..................................... 3
SGD	174	SG Level Design... 3
SGD	212	SGD Design II.. 3
SGD	285	SG Software Engineering 3
___	___	Major Elective... 3

SPRING SEMESTER

PHY	151	College Physics I 4
SGD	134	SG Quality Assurance... 3
SGD	158	SGD Business Management................................... 3
SGD	180	SGD HTML Programing I 3
___	___	Major Elective... 2

SUMMER TERM

SGD	289	SGD Project... 3
___	___	Humanities and Fine Arts Elective 3

Graduation Requirements................................ 73 Credit Hours

Humanities/Fine Arts Elective
(Select 3 credit hours from the following courses)

ART	111	Art Appreciation 3
ENG	125	Creative Writing I 3
HUM	110	Technology and Society... 3
HUM	130	Myth in Human Culture 3
HUM	160	Introduction to Film 3
REL	110	World Religions 3

Social/Behavioral Science Elective

(Select 3 credit hours from the following courses)

ECO	151	Survey of Economics	3
HIS	111	World Civilizations I	3
PSY	150	General Psychology	3
SOC	210	Introduction to Sociology	3

Major Electives (Choose a minimum of 7 credit hours from the following)

SGD	135	Serious Games	3
SGD	159	SGD Production Management	3
SGD	162	SG 3D Animation	3
SGD	167	SG Ethics	3
SGD	172	Virtual SG Environments	3
SGD	210	3D Data Capture	3
SGD	237	Rigging 3D Models	3
SGD	239	SGD Tech Art	3
SGD	242	SGD Photogrammetry	3
SGD	262	SGD 3D Animation II	3
SGD	268	Mobile SG Programming II	3
SGD	274	SG Level Design II	3
SGD	288	SGD Portfolio Design	2
WBL	111	Work Based Learning I	1
WBL	112	Work Based Learning I	2

*WBL courses completed for one program may not count toward the completion of another program. For verification of WBL course work, please contact your academic advisor and/or your departmental Work-Based Learning faculty coordinator. The Work-Based Learning period may be taken over two semesters as WBL-112 and WBL-121 or over three semesters as WBL-111, WBL-121, and WBL-131.

Modeling and Animation Certificate - C25450A

This certificate focuses on the skills needed for an entry-level artist within the simulation or video game industry. Training includes 3d modeling, animation and character development.

SGD	116	Graphic Design Tools	3
SGD	114	3D Modeling	3
SGD	162	SG 3D Animation	3
___	___	SGD 165 or SGD 172	3
SGD	214	3D Modeling II	3

Graduation Requirements .... 15 Credit Hours

Production Certificate - C25450B

This certificate focuses on skills needed for entry-level positions in the production side of game development or simulation. Course material includes training for management of a production team, business, development, design and documentation.

SGD	111	Introduction to SGD	3
SGD	112	SGD Design	3
SGD	163	SG Documentation	3
SGD	212	SGD Design II	3
SGD	158	SGD Business Management	3
SGD	159	SGD Production Management	3

Graduation Requirements .... 18 Credit Hours

Mobile Game Development Certificate - C25450C

The mobile game development certificate prepares students with skills needed to build games or simulations for mobile devices.

This certificate focuses primarily on Apple devices and secondarily the Android market.

SGD	112	SGD Design	3
SGD	113	SGD Programming	3
SGD	114	3D Modeling	3
SGD	116	Graphic Design Tools	3
SGD	168	Mobile SG Programming I	3
SGD	268	Mobile SG Programming II	3

Graduation Requirements .... 18 Credit Hours

Fundamentals I for Simulation and Game Development Certificate - C25450D

Fundamentals I is the first in a series of four step certificates toward the simulation and game development degree. This certificate introduces design, texturing, traditional art and programming basics as well as what to expect with a career in simulation or video game development.

SGD	111	Introduction to SGD	3
SGD	112	SGD Design	3
SGD	113	SGD Programming	3
SGD	116	Graphic Design Tools	3

Graduation Requirements .... 12 Credit Hours

Fundamentals II for Simulation and Game Development Certificate - C25450E

Fundamentals II is the second in a series of four step certificates toward the simulation and game development degree. This certificate covers topics in 3D modeling, documentation, advanced design principals and introduces programming languages used in the industry.

SGD	114	3D Modeling	3
SGD	163	SG Documentation	3
SGD	212	SGD Design II	3
___	___	SGD 117 or SGD 213	3

Graduation Requirements .... 12 Credit Hours

Quality Assurance for Simulation and Game Development Certificate - C25450F

Quality Assurance is the third in a series of four step certificates toward the simulation and game development degree. This certificate focuses on skills required for a position as a quality assurance tester in the simulation or video game industry.

SGD	134	SG Quality Assurance	3
SGD	174	SG Level Design	3
___	___	SGD 180 or SGD 214	3
___	___	SGD 168 or SGD 162	3

Graduation Requirements .... 12 Credit Hours

Business for Simulation and Game Development Certificate - C25450G

Business for SGD is the final in a series of four step certificates toward the simulation and game development degree. This certificate introduces students to the business development side of the industry, the audio/video career field and tackles advanced topics in programming and art.

SGD	158	SGD Business Management	3
___	___	Elective I	3
___	___	Major Elective	3
___	___	Major Elective	3

Graduation Requirements.............................. 12 Credit Hours

Elective I
(Choose a Min of 3 Credit Hrs)

SGD	285	SG Software Engineering	3
SGD	165	SG Character Development	3
SGD	172	Virtual SG Environments	3

Major Electives
(Choose a Min of 5 Credit Hrs)

SGD	135	Serious Games	3
SGD	159	SGD Production Management	3
SGD	167	SG Ethics	3
SGD	168	Mobile SG Programming I	3
SGD	172	Virtual SG Environments	3
SGD	210	3D Data Capture	3
SGD	237	Rigging 3D Models	3
SGD	239	SGD Tech Art	3
SGD	242	SGD Photogrammetry	3
SGD	262	SGD 3D Animation II	3
SGD	268	Mobile SG Programming II	3
SGD	274	SG Level Design II	3

Programming for Simulation and Game Development Certificate - C25450H

This certificate prepares students for an entry-level programming position within the simulation or video game industry.

SGD	113	SGD Programming	3
SGD	213	SGD Programming II	3
SGD	180	SGD HTML Programming I	3
SGD	168	Mobile SG Programming I	3
SGD	285	SG Software Engineering	3

Graduation Requirements.............................. 15 Credit Hours

Level Design Certificate – C25450I

This certificate focuses on training students to design and implement levels within a video game or simulation.

SGD	112	SGD Design	3
SGD	114	3D Modeling	3
SGD	172	Virtual SG Environments	3
SGD	174	SG Level Design	3
SGD	274	SG Level Design II	3

Graduation Requirements.............................. 15 Credit Hours

Tech Art Certificate – C25450J

This certificate focuses on training students in the creation and integration of 3d art assets and tools into the simulation & game development pipeline.

SGD	113	SGD Programming	3
SGD	114	3D Modeling	3
SGD	210	3D Data Capture	3
SGD	239	SGD Tech Art	3
SGD	242	SGD Photogrammetry	3

Graduation Requirements.............................. 15 Credit Hours

Technical Animation Certificate – C25450K

This certificate prepares students to create assets using 3D data capture and advanced animation techniques for integration into the simulation and game development pipeline.

SGD	114	3D Modeling	3
SGD	162	SGD Animation	3
SGD	210	3D Data Capture	3
SGD	237	Rigging 3D Models	3
SGD	262	SGD 3D Animation II	3

Graduation Requirements.............................. 15 Credit Hours

IT-Service & Support Degree

Service & Support Degree – A25590IS
-Day and Evening

The Information Technology Service & Support curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible program, designed to meet community information system's needs.

Course work includes computer systems terminology and operations, logic, operating systems, database, data communications/networking, and related business topics. Studies can provide experience for students to implement, support, and customize industry-standard information systems.

Graduates could qualify for a wide variety of computer-related, entry-level positions that provide opportunities for advancement with increasing experience and ongoing training. Duties may include systems maintenance and troubleshooting, support and training, and Security related help desk and support responsibilities.

PROGRAM SEQUENCE

FALL SEMESTER

ENG	111	Writing and Inquiry	3
CIS	110	Introduction to Computers	3
CTI	110	Web, Programming and Database Foundations	3
CTI	120	Network and Security Foundations	3
NOS	110	Operating Systems Concepts	3

SPRING SEMESTER

CTS	120	Hardware/Software Support	3
CTS	155	Tech Support Functions	3
NOS	130	Windows Single User	3
NOS	230	Windows Admin I	3
___	___	Math Elective	3

SUMMER SEMESTER

___	___	Social and Behavioral Sciences Elective	3
___	___	Humanities and Fine Arts Elective	3

FALL SEMESTER

CTS	115	Info Sys Business Concepts	3
CTS	255	Advanced Technical Support Functions	3
CTS	220	Advanced Hardware/Software Support	3

| CTS | 285 | Systems Analysis and Design | 3 |
| NOS | 120 | Linux / UNIX Single User | 3 |

SPRING SEMESTER

CTS	288	Professional Practices in IT	3
CTS	272	Desktop Support: Applications	3
SEC	110	Security Concepts	3
___	___	Project Elective	2
___	___	English Elective	3

Graduation Requirements .... 65 Credit Hours

GENERAL EDUCATION ELECTIVES

English Electives
(Choose 3 credit hrs)

ENG	112	Writing and Research in the Disciplines	3
COM	120	Intro to Interpersonal Communication	3
COM	231	Public Speaking	3

Humanities and Fine Arts Electives
(Choose 3 credit hrs)

HUM	115	Critical Thinking	3
PHI	240	Introduction to Ethics	3
HUM	110	Technology and Society	3

Social and Behavioral Sciences Electives
(Choose 3 credit hrs)

PSY	118	Interpersonal Psychology	3
PSY	150	General Psychology	3
SOC	210	Introduction to Sociology	3
POL	120	American Government	3
ECO	151	Survey of Economics	3
ECO	251	Principles of Microeconomics	3

Math Electives
(Choose 3 credit hrs)

MAT	143	Quantitative Literacy	3
MAT	121	Algebra/Trigonometry I	3
MAT	171	Precalculus Algebra	4
MAT	172	Precalculus Trigonometry	4
MAT	271	Calculus I	4

Project Electives
(Choose a minimum of 2 credit hrs)

| CTS | 289 | System Support Project | 3 |
| WBL | ___ | Work Based Learning* (all numbers accepted) | 3 |

* Work based learning is an elective. WBL courses completed for one program may not count toward the completion of another program. For verification, please contact your academic advisor or your departmental WBL faculty coordinator. Students must have approval from the Program Director and pre-register with the Work-Based Learning Office. The work may be done over any number of semesters, but the total elective credits must add up to 3.

IT Foundations Certificate - C25590F
-Day, Evening, and Online

This certificate is designed to give individuals an all-around orientation to computer technologies. It is a recommended starting place for students who know they like computer technology, but are not sure what specific field of computers might be right to follow for their career. The courses introduce students to security, operating systems, programming, databases and other career options that involve computer technology. The courses also can prepare students for a variety of industry certifications.

| CTI | 110 | Web, Pgm & Database Foundations | 3 |

CTI	120	Network and Security Foundations	3
CTS	115	Info Sys Business Concepts	3
NOS	110	Operating Systems Concepts	3

Graduation Requirements .... 12 Credit Hours

IT Help Desk Technician Certificate - C25590HD
-Day and Evening

This certificate may provide students with the knowledge and practical skills necessary to support users of computing technologies. The course work can help students develop the ability to work in helpdesk and technical support positions.

CTS	155	Tech Support Functions	3
CTS	272	Desktop Support: Apps	3
CTS	285	Systems Analysis and Design	3
NOS	120	Linux/UNIX Single User	3
NOS	130	Windows Single User	3

Graduation Requirements .... 15 Credit Hours

Cybersecurity Support Certificate – C25590CS
-Day and Evening

This certificate may provide students with the knowledge and practical skills necessary to support cyber security technologies. The course work can help students develop the ability to work in a security operations center support position.

CTS	155	Tech Support Functions	3
SEC	110	Security Concepts	3
SEC	160	Security Administration I	3
SEC	210	Intrusion Detection	3

Graduation Requirements .... 12 Credit Hours

Hardware Support and Repair Certificate – C25590HW
-Day and Evening

This certificate is designed for individuals interested in acquiring advanced technical skills and knowledge to maintain and repair personal computers. Students may gain skills in buying parts, upgrading, building, and configuring personal computers. Major hands-on topics include documentation, troubleshooting techniques, PC architectures, disk drives and peripheral cards, memory management, and communications devices.

This certificate is designed to prepare the student for A+ certification. A program prerequisite if CTI-120 is required.

CTS	120	Hardware/Software Support	3
CTS	155	Technical Support Functions	3
CTS	220	Advanced Hardware/Software Support	3
NOS	110	Operating Systems Concepts	3

Graduation Requirements .... 12 Credit Hours

INFORMATION TECHNOLOGY

IT Service Technician Certificate – C25590IS
- Day and Evening

This certificate will teach students the entry-level industry knowledge and customer handling skills to transition into an entry-level job in the IT Support industry. Students will learn hardware, networking, and security skills that align with CompTIA's A+, Network+, and Security+ certification exams. They will learn both the ITIL 4.0 framework and the soft skills to work with a variety of customers in multiple contexts.

NOS	110	Operating System Concepts	3
CTI	120	Network & Security Foundations	3
CTS	120	Hardware/Software Support	3
CTS	155	Tech Support Functions	3
CTS	220	Advanced Hardware/Software Support	3
SEC	110	Security Concepts	3

Graduation Requirements .... 18 Credit Hours

Networking Support Certificate - C25590NS
 – Day and Evening

This certificate may provide students with the knowledge and practical skills necessary to support users of networking technologies. The course work can help students develop the ability to work in a networking support position.

CTS	155	Tech Support Functions	3
NET	125	Introduction to Networks	3
NET	126	Routing Basics	3
NET	225	Routing and Switching I	3

Graduation Requirements .... 12 Credit Hours

WEB DESIGNER

Web Designer Degree – A25590DM
-Online

The Web Technologies curriculum prepares graduates for careers in the information technology field using computers to disseminate and collect information via the web.

Course work in this program covers web design, web scripting and markup, databases, web programming, e-commerce, web content management systems as well as mobile applications development and UI/UX. Studies can provide opportunity for students to learn using industry standard software and technologies.

Graduates could qualify for career opportunities as designers, programmers, or developers in the areas of web development, web design, web services, mobile application development and other related areas.

Prepares graduates to design, develop and maintain professional, high-quality websites, create digital media and integrate web technologies to support an organization's needs.

Program Sequence

FALL SEMESTER

CTI	110	Web, Pgm, and DB Foundation	3
DME	115	Graphic Design Tools	3
GRD	141	Graphic Design I	4
WEB	110	Internet / Web Fundamentals	3
WEB	140	Web Development Tools	3

SPRING SEMESTER

WEB	210	Web Design	3
CTS	115	Information Sy Business Concepts	3
DME	140	Intro to Audio / Video Media	3
WEB	115	Web Markup and Scripting	3
___	___	Math Elective	3

SUMMER SEMESTER

ENG	111	Writing and Inquiry	3
WEB	214	Social Media	3
WEB	215	Adv Web Markup and Scripting	3

FALL SEMESTER

WEB	125	Mobile Web Design	3
GRD	240	User Interface / User Experience	3
WEB	182	PHP Programming	3
___	___	Social and Behavioral Sciences Elective	3
___	___	Humanities and Fine Arts Elective	3

SPRING SEMESTER

WEB	287	Web E-Portfolio	2
CTI	120	Network & Sec Foundation	3
WEB	213	Internet Mkt & Analysis	3
___	___	English & Communication Elective	3
___	___	Major Elective	1

Graduation Requirements .... 67 Credit Hours

General Electives
English and Communication Electives
(Choose 3 credit Hrs)

ENG	112	Writing and Research in the Disciplines	3
COM	231	Public Speaking	3

Humanities and Fine Arts Electives
(Choose 3 credit Hrs)

HUM	110	Technology and Society	3
HUM	115	Critical Thinking	3
PHI	240	Introduction to Ethics	3

Mathematics Electives
(Choose 3 credit Hrs)

MAT	110	Math Measurement & Literacy	3
MAT	121	Algebra/Trigonometry I	3
MAT	143	Quantitative Literacy	3
MAT	152	Statistical Methods I	4
MAT	171	Precalculus Trigonometry	4
MAT	172	Precalculus Trigonometry	4
MAT	271	Calculus I	4

Social and Behavioral Sciences Electives
(Choose 3 credit Hrs)

ECO	251	Principles of Microeconomics	3
POL	120	American Government	3
PSY	150	General Psychology	3
SOC	210	Introduction to Sociology	3

 Major Electives
(Choose 1 credit Hrs)

DME	215	Advanced Graphic Design Tools	3
WBL	111	Work Based Learning I	1
WBL	112	Work Based Learning I	2
WBL	113	Work Based Learning I	3
WBL	121	Work Based Learning II	1
WBL	122	Work Based Learning II	2
WBL	123	Work Based Learning II	3

INFORMATION TECHNOLOGY

*Work-Based Learning is an elective. WBL courses completed for one program may not count toward the completion of another program. Contact your academic advisor or WBL faculty coordinator for verification. Students must have approval from the department head and pre-register with the Computer Technologies Division office. The Work-Based Learning work period may be taken as WBL 112, over two semesters as WBL-111 and WBL-112 or over one semester as WBL-113.

Web Designer Certificate - C25590DM
- Online

Using industry standard technologies to design and develop basic full and mobile web sites.

DME 115	Graphic Design Tools	3
WEB 110	Internet/Web Fundamentals	3
WEB 125	Mobile Web Design	3
WEB 140	Web Development Tools	3
WEB 210	Web Design	3

Graduation Requirements .... 15 Credit Hours

Advanced Web Designer Certificate – C25590AW
– Online

This program builds upon the Web Developer certificate with more advanced web programming and eCommerce development skills.

DME 140	Intro to Audio/Video Media	3
DME 215	Advanced Graphic Design Tools	3
WEB 214	Social Media	3
WEB 287	Web E-Portfolio	2
GRD 240	User Interface/User Experience	3

Graduation Requirements .... 14 Credit Hours

Front-End Developer Certificate - C25590DV
–Online

This certificate teaches basic front-end development concepts.

WEB 125	Mobile Web Design	3
WEB 140	Web Development Tools	3
WEB 210	Web Design	3
WEB 287	Web E-Portfolio	2
GRD 240	User Interface/User Experience	3

Graduation Requirements .... 14 Credit Hours

Web Development Basics Certificate - C25590WB
–Online

This certificate teaches basic web technology concepts for beginning web designers and developers.

CTI 110	Web, Pgm, and DB Foundations	3
WEB 110	Internet/Web Fundamentals	3
WEB 115	Web Markup and Scripting	3
WEB 140	Web Development Tools	3
WEB 210	Web Design	3

Graduation Requirements .... 15 Credit Hours

WEB DEVELOPER

Web Developer Degree – A25590WD
-Online

The Web Technologies curriculum prepares graduates for careers in the information technology field using computers to disseminate and collect information via the web.

Course work in this program covers web design, web scripting and markup, databases, web programming, e-commerce, web content management systems as well as mobile applications development and UI/UX. Studies can provide opportunity for students to learn using industry standard software and technologies.

Graduates could qualify for career opportunities as designers, programmers, or developers in the areas of web development, web design, web services, mobile application development and other related areas.

Program Sequence

FALL SEMESTER

WEB 110	Internet/Web Fundamentals	3
WEB 140	Web Development Tools	3
CIS 115	Intro to Prog & Logic	3
CTI 110	Web, Pgm and DB Foundation	3
CTI 120	Networking & Security Foundation	3

SPRING SEMESTER

CTS 115	Information Sy Business Concepts	3
GRD 240	User Interface/User Experience	3
WEB 210	Web Design	3
WEB 115	Web Markup and Scripting	3
WEB 125	Mobile Web Design	3

SUMMER SEMESTER

ENG 111	Writing and Inquiry	3
WEB 215	Advanced Markup and Scripting	3
DBA 120	Database Programming I	3

FALL SEMESTER

WEB 182	PHP Programming	3
WEB 180	Active Server Pages	3
WEB 250	Database Driven Websites	3
___ ___	Math Elective	3
___ ___	Social and Behavioral Sciences Electives	3

SPRING SEMESTER

WEB 225	Content Management Systems	3
WEB 287	Web E-Portfolio	2
WEB 213	Internet Mkt & Analytics	3
___ ___	Major Elective	1

SUMMER SEMESTER

___ ___	English and Communication Elective	3
___ ___	Humanities and Fine Arts Elective	3

Graduation Requirements .... 69 Credit Hours

General Electives
English and Communication Electives
(Choose 3 credit hrs)

ENG 112	Writing and Research in the Disciplines	3
COM 231	Public Speaking	3

Humanities and Fine Arts Electives
(Choose 3 credit hrs)

HUM 110	Technology and Society	3
HUM 115	Critical Thinking	3

PHI 240   Introduction to Ethics....................................... 3

Mathematics Electives
(Choose 3 credit hrs)
MAT 110   Math Measurement & Literacy 3
MAT 121   Algebra/Trigonometry I..................................... 3
MAT 143   Quantitative Literacy 3
MAT 152   Statistical Methods I 4
MAT 171   Precalculus Algebra 4
MAT 172   Precalculus Trigonometry 4
MAT 271   Calculus I 4

Social and Behavioral Sciences Elective
(Choose 3 credit hrs)
ECO 251   Principles of Microeconomics............................... 3
POL 120   American Government 3
PSY 150   General Psychology 3
SOC 210   Introduction to Sociology 3

Major Elective
(Choose 1 credit hr)
WEB 260   E-Commerce Infrastructure................................. 3
WBL 111   Work Based Learning I..................................... 1
WBL 112   Work Based Learning I..................................... 2
WBL 113   Work Based Learning I..................................... 3
WBL 121   Work Based Learning II.................................... 1
WBL 122   Work Based Learning II.................................... 2
WBL 123   Work Based Learning II.................................... 3

Web Developer Certificate - C25590WD
- Online

This certificate may prepare students to develop web sites using industry standard scripting and programming. Students can learn HTML, CSS, PHP, JavaScript, ASP.Net and CMS skills.

WEB 110   Internet/Web Fundamentals................................ 3
WEB 115   Web Markup and Scripting................................. 3
WEB 180   Active Server Pages...................................... 3
WEB 182   PHP Programming 3
WEB 215   Adv Markup and Scripting................................ 3

Graduation Requirements .... 15 Credit Hours

Advanced Web Developer Certificate - C25590AD
–Online

This certificate teaches advanced Web Developer concepts.

DBA 120   Database Programming I 3
WEB 213   Internet Marketing and Analysis......................... 3
WEB 225   Content Management Systems.............................. 3
WEB 250   Database Driven Websites................................ 3
WEB 260   E-Commerce Infrastructure............................... 3

Graduation Requirements .... 15 Credit Hours

Transportation Technologies Division

Dean David Favre

Phone: 919-866-5258

Email: dlfavre@waketech.edu

Website: https://www.waketech.edu/about-wake-tech/divisions/transportation

Wake Technical Community College awards degrees, diplomas, and certificates in a variety of fields shown below. The highest credential given in each area is listed first, in bold type.

1. Click on the "**Program Name**" to go to the program's web page
2. Click on the "**Program of Study**" to see specific course requirements for that program

Programs may be offered during the day, evening, online, or a combination. Students should refer to Self Serve for the availability of classes. Click to see a list of Wake Tech's programs that can be completed fully online.

Program Name	Program Code
Agricultural Systems Technology – *AAS Degree*	A60410
Agricultural Systems Technology – *Diploma*	D60410
Automotive Systems Technology – *AAS Degree*	A60160
Automotive Brakes and Suspension – *Certificate*	C60160C
Automotive Introduction – *Certificate*	C60160D
Automotive Powertrains – *Certificate*	C60160B
Introduction to Light Duty Diesel – *Certificate*	C60160A
Collision Repair and Refinishing Technology – *AAS Degree*	A60130
Collision Repair and Refinishing Technology – *Diploma*	D60130
Fundamentals – *Certificate*	C60130A
Fundamentals II – *Certificate*	C60130B
Construction Equipment Systems Technology – *AAS Degree*	A60450
Construction Equipment Systems Technology – *Diploma*	D60450
Hydraulics, Engines, and Transmission – *Certificate*	C60450BB
Fuel Injection, Electrics, and Electronics – *Certificate*	C60450BC
Diesel and Heavy Equipment Technology – *AAS Degree*	A60460
Diesel and Heavy Equipment Technology – *Diploma*	D60460
Fuel Injection, Electrical, and Electronics Forklift – *Certificate*	C60460BC
Hydraulics, Engines, and Transmission Forklift – *Certificate*	C60460BB

*Collaborative Agreements
None at this time

AGRICULTURAL SYSTEMS TECHNOLOGY

Agricultural Systems Technology Degree - A60410

Agricultural Systems Technology is designed to provide individuals with the knowledge and skills needed to repair agricultural equipment.

The coursework includes diesel engines, power trains, hydraulics, electrical systems, and fuel systems. Other topics include time management, inventory, and parts control.

Graduates of the curriculum should qualify for entry-level employment opportunities in a dealership as technicians qualified to be contributing members of the work team.

Program Sequence

First Semester
ELN 110 Survey of Electronics.................................3
ENG 110 Freshman Composition 3
HUM 121 The Nature of America 3
HYD 112 Hydraulics – Medium and Heavy Duty 2
TRN 120 Basic Transportation Electricity 5
TRN 120A Basic Transportation Electricity Lab 1
TRN 140 Transportation Climate Control 2

Second Semester
HET 110 Diesel Engines 6
HET 134 Diesel Fuel and Power System 3
MAT 110 Math Measurement and Literacy...........................3
PME 112 Consumer Products................................2

Third Semester
PME 121 Component Controls 2
TRN 110 Introduction to Transportation Technology................2
TRN 170 PC Skills for Transportation....................2
WBL 112 Work-Based Learning I 2

Fourth Semester
COM 120 Intro to Interpersonal Communication 3
HET 114 Power Trains 5
HYD 134 Hydraulic/Hydrostatic Construction 4
PME 111 Harvest and Spraying Equipment...........................4
PSY 118 Interpersonal Psychology 3

Fifth Semester
ELN 112 Diesel Electronics System.......................4
PME 122 Agricultural Telematics 3
PME 211 Adv Equipment Repair 4

Graduation Requirements .... 71 Credit Hours

Agricultural Systems Technology Diploma - D60410

The Agricultural Systems Technology Diploma prepares individuals to maintain and repair specialized farm, ranch, and agribusiness power equipment and vehicles including terrestrial and airborne crop-spraying equipment; tractors and hauling equipment; planting and harvesting equipment; cutting equipment; power sources and systems for silos; irrigation and pumping equipment; dairy, feeding, and shearing operations; and processing systems.

Program Sequence

First Semester
ENG 110 Freshman Composition...........................3
TRN 120 Basic Transportation Electricity..............................5
TRN 120A Basic Transportation Electricity Lab........................1
TRN 140 Transportation Climate Control................................2

Second Semester
HET 110 Diesel Engines..6
HET 134 Diesel Fuel and Power System...............................3
PME 112 Consumer Products................................2

Third Semester
PME 121 Component Controls...............................2
TRN 110 Introduction to Transportation Technology 2
TRN 170 PC Skills for Transportation 2

Fourth Semester
HET 114 Power Trains...5
HYD 134 Hydraulic/Hydrostatic Construction........................4
PME 111 Harvest and Spraying Equipment...........................4
PSY 118 Interpersonal Psychology 3

Fifth Semester
ELN 112 Diesel Electronics System 4

Graduation Requirements ....48 Credit Hours

AUTOMOTIVE SYSTEMS TECHNOLOGY

Automotive Systems Technology Degree - A60160

The Automotive Systems Technology curriculum prepares individuals for employment as automotive service technicians. It provides an introduction to automotive careers and increases student awareness of the challenges associated with this fast and ever-changing field.

Classroom and lab experiences integrate technical and academic coursework. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains.

Upon completion of this curriculum, students should be prepared to take the ASE exam and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

Program Sequence

First Semester
AUT 114 Safety and Emissions 2
AUT 116 Engine Repair...3
MAT 110 Math Measurement and Literacy............................3
TRN 110 Introduction to Transport Technology........................2
TRN 170 PC Skills for Transportation 2
        Major Elective.......................................2

Second Semester

AUT 231	Manual Transm/Transaxles/Drive Trains	3
ENG 110	Freshman Composition	3
HUM 121	The Nature of America	3
TRN 120	Basic Transportation Electricity	5
	Major Elective	2

Third Semester

AUT 123	Powertrain Diagnosis & Service	2
AUT 213	Automotive Servicing 2	2
TRN 140	Transportation Climate Control	2
TRN 140A	Transportation Climate Control Lab	2

Fourth Semester

AUT 141	Suspension & Steering Systems	3
AUT 151	Brake Systems	3
AUT 181	Engine Performance 1	3
PSY 118	Interpersonal Psychology	3
	Major Elective	2

Fifth Semester

AUT 183	Engine Performance II	4
AUT 221	Auto Transmissions/Transaxles	3
AUT 281	Advanced Engine Performance	3
COM 120	Intro to Interpersonal Communication	3
	Major Elective	2

Major Electives

(Select 8 hours from the following courses):

ATT 115	Green Trans Safety and Service	2
ATT 125	Hybrid-Electric Transportation	4
ATT 140	Emerging Transportation Technology	3
AUT 116A	Engine Repair Lab	1
AUT 141A	Suspension & Steering Lab	1
AUT 151A	Brake Systems Lab	1
AUT 181A	Engine Performance 1 Lab	1
AUT 221A	Auto Transmissions/Transaxles Lab	1
HET 134	Diesel Fuel and Power System	3
TRN 120A	Basic Transportation Electricity Lab	1
TRN 140A	Transportation Climate Control Lab	2
WBL 112	Work-Based Learning I	2
WBL 122	Work-Based Learning II	2
WBL 212	Work-Based Learning IV	2
WBL 222	Work-Based Learning V	2

Graduation Requirements................................. 67 Credit Hours

Introduction to Light Duty Diesel Certificate – C60160A

This certificate provides students with the knowledge and skills needed to troubleshoot and repair fuel injection, electrical, and electronic systems, in light-duty diesel-operated vehicles. Topics include theory of operations, electrical and electronic systems, test equipment, component functions, troubleshooting techniques, and repair procedures associated with light duty diesel engines. Upon completion, students should be able to diagnose and service various diesel fuel systems and related components.

Program Sequence

AUT 181	Engine Performance 1	3
AUT 181A	Engine Performance 1 Lab	1
HET 134	Diesel Fuel and Power System	3
TRN 120	Basic Transportation Electricity	5
TRN 120A	Basic Transportation Electricity Lab	1

Graduation Requirements................................. 13 Credit Hours

Automotive Powertrains Certificate – C60160B

This certificate covers the diagnosis, repair and service of the vehicle powertrain and related systems. Topics include fundamental operating principles of engines and transmissions. The use of proper service procedures for diagnosis, service procedures, and removal and replacement of major components. Upon completion, students should be able to perform basic services, repairs, and diagnosis of the powertrain and related systems.

Program Sequence

AUT 123	Powertrain Diagnosis & Service	2
AUT 213	Automotive Servicing 2	2
AUT 221	Auto Transmissions/Transaxles	3
AUT 221A	Auto Transmissions/Transaxles Lab	1
AUT 231	Manual Transm/Transaxles/Drive Trains	3
TRN 110	Introduction to Transport Technology	2

Graduation Requirements................................. 13 Credit Hours

Automotive Brakes and Suspension Certificate – C60160C

This certificate is designed to prepare students for entry level employment in the area of automotive brakes, suspension, and steering. Topics include steering systems, suspension systems, wheel alignment, tire service, brake systems, ABS, and other related topics.

Program Sequence

AUT 141	Suspension & Steering Systems	3
AUT 141A	Suspension & Steering Lab	1
AUT 151	Brake Systems	3
AUT 151A	Brake Systems Lab	1
TRN 110	Introduction to Transport Technology	2
TRN 170	PC Skills for Transportation	2

Graduation Requirements................................. 12 Credit Hours

Automotive Introduction Certificate – C60160D

This certificate is designed to prepare the student for an entry-level position as an automotive technician. This course covers basic electrical and electronic systems, braking systems, diagnosis, repair and service of vehicle powertrain and related systems. Upon successful completion, students will receive NC State inspection licensure and be prepared as an entry-level automotive service technician.

Program Sequence

AUT 114	Safety and Emissions	2
AUT 116	Engine Repair	3
AUT 231	Manual Transm/Transaxles/Drive Trains	3
TRN 120	Basic Transportation Electricity	5

TRN 170 PC Skills for Transportation.......................................2

Graduation Requirements…………………..…15 Credit Hours

COLLISION REPAIR AND REFINISHING TECHNOLOGY

Collision Repair and Refinishing Technology Degree – A60130

The Collision Repair and Refinishing Technology program prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders, and external features. Includes instruction in structure analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques, and damage analysis and estimating.

Program Sequence

First Semester
AUB 131 Structural Damage I 4
ENG 110 Freshman Composition.................................. 3
TRN 110 Introduction to Transport Technology 2
TRN 140 Transportation Climate Control 2
TRN 140A Transportation Climate Control Lab 2

Second Semester
AUB 121 Non-Structural Damage I 3
AUB 132 Structural Damage II 4
MAT 110 Math Measurement and Literacy 3
TRN 120 Basic Transportation Electricity.................................. 5

Third Semester
PSY 118 Interpersonal Psychology... 3
TRN 180 Basic Welding For Transportation.............................. 3
TRN 180A Basic Welding for Transportation Lab 1

Fourth Semester
AUB 111 Painting & Refinishing I 4
AUB 122 Non-Structural Damage II 4
AUB 136 Plastics & Adhesives... 3
COM 110 Introduction to Communication 3

Fifth Semester
AUB 112 Painting & Refinishing II 4
AUB 114 Special Finishes... 2
AUB 162 Autobody Estimating 2
HUM 110 Technology and Society.. 3

Sixth Semester
ACA 220 Professional Transition... 1
AUB 150 Automotive Detailing 2
Major Elective.. 2

Major Electives
(Select 2 hours from the following courses):
TRN 130 Intro to Sustainable Transportation 3
TRN 170 PC Skills for Transportation 2
WBL 111 Work-Based Learning I 1
WBL 112 Work-Based Learning I 2
WBL 121 Work-Based Learning II 1
WLD 131 GTAW (TIG) Plate... 4

Graduation Requirements .... 65 Credit Hours

Collision Repair and Refinishing Technology Diploma – D60130

Program Sequence

First Semester
AUB 111 Painting & Refinishing I 4
AUB 131 Structural Damage I...4
TRN 110 Introduction to Transport Technology.........................2
TRN 140 Transportation Climate Control...................................2
TRN 140A Transportation Climate Control Lab............................2

Second Semester
AUB 112 Painting & Refinishing II 4
AUB 114 Special Finishes 2
AUB 121 Non-Structural Damage I 3
AUB 132 Structural Damage II..4
TRN 120 Basic Transportation Electricity 5

Third Semester
AUB 150 Automotive Detailing..2
ENG 110 Freshman Composition 3
PSY 118 Interpersonal Psychology 3

Graduation Requirements .... 40 Credit Hours

Collision Repair and Refinishing Technology: Fundamentals – C60130A

The Collision Repair and Refinishing Technology program is designed to provide the knowledge and skills to complete structural and non-structural damage repairs on automotive equipment.

Program Sequence

AUB 111 Painting & Refinishing I 4
AUB 131 Structural Damage I 4
TRN 110 Introduction to Transport Technology.........................2
TRN 120 Basic Transportation Electricity 5
TRN 140 Transportation Climate Control...................................2

Graduation Requirements .... 17 Credit Hours

Collision Repair and Refinishing Technology: Fundamentals II – C60130B

Program Sequence

AUB 111 Painting & Refinishing I 4
AUB 112 Painting & Refinishing II 4
AUB 121 Non-Structural Damage I 3

Graduation Requirements .... 15 Credit Hours

TRANSPORTATION TECHNOLOGIES

CONSTRUCTION EQUIPMENT SYSTEMS TECHNOLOGY

Construction Equipment Systems Technology Degree - A60450

Construction Equipment Systems curriculum is designed to provide individuals with the knowledge and skills needed to troubleshoot and repair construction equipment systems. Construction equipment includes dozers, scrapers, loaders, and forklifts.

The core coursework includes the theory of operations, troubleshooting techniques, and repair procedures for engines and electrical and hydraulics systems. The concentration courses will include transmissions, brakes, undercarriage, and equipment repair. Other related courses will be required.

Graduates of the curriculum should qualify for entry-level employment opportunities at businesses that repair construction equipment. Entry and advancement levels depend on the amount of training completed, knowledge and ability levels, work performance, and ethics.

Program Sequence

First Semester
ELN	110	Survey of Electronics	3
ENG	110	Freshman Composition	3
PME	221	Construction Equipment Servicing	2
TRN	120	Basic Transportation Electricity	5
TRN	120A	Basic Transportation Electricity Lab	1
TRN	140	Transportation Climate Control	2

Second Semester
HET	110	Diesel Engines	6
HET	134	Mechanical Fuel Injection	3
HYD	112	Hydraulics – Medium and Heavy Duty	2
MAT	110	Math Measurement & Literacy	3
PME	118	Undercarriage Components	2

Third Semester
TRN	110	Introduction to Transport Technology	2
TRN	170	PC Skills for Transportation	2
WBL	112	Work-Based Learning I	2

Fourth Semester
COM	120	Intro to Interpersonal Communication	3
HET	114	Power Trains	5
HYD	134	Hydraulic/Hydrostatic Construction	4
PME	117	Equipment Braking Systems	3
PSY	118	Interpersonal Psychology	3

Fifth Semester
ELN	112	Diesel Electronics System	4
HET	125	Preventative Maintenance	2
HUM	121	The Nature of America	3
PME	211	Advanced Equipment Repair	4

Graduation Requirements .... 69 Credit Hours

Construction Equipment Systems Technology Diploma - D60450

The Construction Equipment Systems Technology Diploma program prepares individuals to apply technical knowledge and skills in the field maintenance and repair of construction equipment, and the general maintenance and overhaul of such equipment. It includes instruction in inspection, maintenance, and repair of tracks, wheels, brakes, operating controls, pneumatic and hydraulic systems, electrical circuitry, and engines.

Program Sequence

First Semester
ENG	110	Freshman Composition	3
PME	221	Construction Equipment Servicing	2
TRN	120	Basic Transportation Electricity	5
TRN	120A	Basic Transportation Electricity Lab	1

Second Semester
HET	110	Diesel Engines	6
PME	118	Undercarriage Components	2

Third Semester
TRN	110	Introduction to Transport Technology	2
TRN	170	PC Skills for Transportation	2

Fourth Semester
HET	114	Power Trains	5
HYD	134	Hydraulic/Hydrostatic Construction	3
PME	117	Equipment Braking Systems	3
PSY	118	Interpersonal Psychology	3

Graduation Requirements .... 37 Credit Hours

Hydraulics, Engines, and Transmissions Certificate- C60450BB

This certificate is designed to provide individuals with the knowledge and skills needed to troubleshoot and repair hydraulics, engines, and transmissions in construction equipment.

The core course work includes the theory of operations, troubleshooting techniques, and repair procedures for engines and hydraulics systems. The concentration courses will also include transmissions.

Graduates of the curriculum should qualify for entry-level employment opportunities at businesses, which repair construction equipment. Entry and advancement levels depend on the amount of training completed, knowledge and ability levels, work performance, and ethics.

Program Sequence

First Semester
HET	110	Diesel Engines	6
HYD	112	Hydraulics – Medium and Heavy Duty	2

Second Semester
HET	114	Power Trains	5

Graduation Requirements .... 13 Credit Hours

Fuel Injection, Electrics, & Electronics Certificate – C60450BC

This certificate curriculum is designed to provide individuals with the knowledge and skills needed to troubleshoot and repair fuel injection, electrical, and electronic systems in construction equipment. Construction equipment includes dozers, scrapers, loaders, and forklifts.

The core course work includes the theory of operations, troubleshooting techniques, and repair procedures for electrical and electronic systems. The concentration courses will also include fuel injection systems.

Graduates of the curriculum should qualify for entry-level employment opportunities at businesses, which repair construction equipment. Entry and advancement levels depend on the amount of training completed, knowledge and ability levels, work performance, and ethics.

Program Sequence

First Semester
TRN 120   Basic Transportation Electricity 5

Second Semester
HET 134   Mechanical Fuel Injection 3

Third Semester
ELN 112   Diesel Electronics System 4

Graduation Requirements .... 12 Credit Hours

DIESEL AND HEAVY EQUIPMENT TECHNOLOGY

Diesel and Heavy Equipment Technology Degree - A60460

The Diesel and Heavy Equipment Technology curriculum is designed to provide individuals with the knowledge and skills needed to troubleshoot and repair medium- and heavy-duty vehicles.

The core course work includes the theory of operations, troubleshooting techniques, and repair procedures for engines, electrical, and hydraulic systems. Other courses cover transmissions, brakes, and steering/suspension. Additional related courses will be required.

Graduates of the curriculum should qualify for entry-level employment opportunities at businesses that repair medium- and heavy-duty vehicles. Entry and advancement levels depend on the amount of training completed, knowledge and ability levels, work performance, and ethics.

Program Sequence

First Semester
ELN 110   Survey of Electronics 3
ENG 110   Freshman Composition 3
TRN 120   Basic Transportation Electricity 5
TRN 120A   Basic Transportation Electricity Lab 1
TRN 140   Transportation Climate Control 2

Second Semester
HET 110   Diesel Engines 6
HET 134   Diesel Fuel and Power System 3
HYD 112   Hydraulics-Medium and Heavy Duty 2
MAT 110   Math Measurement and Literacy 3

Third Semester
HET 233   Suspension and Steering 4
TRN 110   Introduction to Transportation Technology 2
TRN 170   PC Skills for Transportation 2
WBL 112   Work-Based Learning I 2

Fourth Semester
COM 120   Intro to Interpersonal Communication 3
HET 114   Power Trains 5
HET 231   Medium/Heavy Duty Brake Systems 2
HET 232   Medium/Heavy Duty Brake Systems Lab 1
HYD 134   Hydraulics/Hydrostatic Construction 4
PSY 118   Interpersonal Psychology 3

Fifth Semester
ELN 112   Diesel Electronics System 4
HET 125   Preventive Maintenance 2
HUM 121   The Nature of America 3
PME 211   Advanced Equipment Repair 4

Graduation Requirements ....69 Credit Hours

Diesel and Heavy Equipment Technology Diploma - D60460

Graduates of the curriculum should qualify for entry-level employment opportunities at businesses that repair medium- and heavy-duty vehicles. Entry and advancement levels depend on the amount of training completed, knowledge and ability levels, work performance, and ethics.

Program Sequence

First Semester
ENG 110   Freshman Composition 3
TRN 120   Basic Transportation Electricity 5
TRN 120A   Basic Transportation Electricity Lab 1
TRN 140   Transportation Climate Control 2

Second Semester
HET 110   Diesel Engines 6
HET 134   Diesel Fuel and Power System 3
HYD 112   Hydraulics-Medium and Heavy Duty 2

Third Semester
TRN 110   Introduction to Transportation Technology 2
TRN 170   PC Skills for Transportation 2

Fourth Semester
HET 114   Power Trains 5
HET 231   Medium/Heavy Duty Brake Systems 2
HET 232   Medium/Heavy Duty Brake Systems Lab 1
HYD 134   Hydraulics/Hydrostatic Construction 4
PSY 118   Interpersonal Psychology 3

Fifth Semester
ELN 112   Diesel Electronics System 4
HET 125   Preventive Maintenance 2

Graduation Requirements ....47 Credit Hours

Hydraulics, Engines, and Transmission
Forklift Certificate - C60460BB

This certificate is designed to provide individuals with the knowledge and skills needed to troubleshoot and repair hydraulics, engines, and transmissions in construction equipment. The core course work includes the theory of operations, troubleshooting techniques, and repair procedures for engines and hydraulics systems.

The concentration courses will also include transmissions. Graduates of the curriculum should qualify for entry-level employment opportunities at businesses, which repair construction equipment.

Entry and advancement levels depend on the amount of training completed, knowledge and ability levels, work performance, and ethics.

Program Sequence

First Semester
HET 110 Diesel Engines 6
HYD 112 Hydraulics-Medium and Heavy Duty 2

Second Semester
HET 114 Power Trains 5

Graduation Requirements .... 13 Credit Hours

Fuel Injection, Electrical, and Electronics
Forklift Certificate - C60460BC

This certificate curriculum is designed to provide individuals with the knowledge and skills needed to troubleshoot and repair fuel injection, electrical, and electronic systems in construction equipment. Construction equipment includes dozers, scrapers, loaders, and forklifts.

The core course work includes the theory of operations, troubleshooting techniques, and repair procedures for electrical and electronic systems. The concentration courses will also include fuel injection systems. Graduates of the curriculum should qualify for entry-level employment opportunities at businesses, which repair construction equipment.

Entry and advancement levels depend on the amount of training completed, knowledge and ability levels, work performance, and ethics.

Program Sequence

First Semester
TRN 120 Basic Transportation Electricity 5

Second Semester
HET 134 Diesel Fuel and Power System 3

Third Semester
ELN 112 Diesel Electronics System 4

Graduation Requirements .... 12 Credit Hours

COURSE PREFIX IDENTIFICATION

ACA	Academic Related	**EFL**	English as a Foreign Language	**PBT**	Phlebotomy	
ACC	Accounting	**EGR**	Engineering	**PCI**	Process Control	
AHR	Air Conditioning, Heating, & Refrigeration	**ELC**	Electricity		Instrumentation	
		ELN	Electronics	**PED**	Physical Education	
ALT	Renewable Energy Technologies	**EMS**	Emergency Medical Care	**PHI**	Philosophy	
		ENG	English	**PHM**	Pharmacy	
ANT	Anthropology	**ENV**	Environmental Science	**PHY**	Physics	
ARC	Architecture	**EPT**	Emergency Preparedness	**PLU**	Plumbing	
ART	Art	**FIP**	Fire Protection	**PME**	Power Mechanics	
AST	Astronomy	**FRE**	French	**PMT**	Project Management Technology	
ATR	Automation and Robotics	**GEL**	Geology			
ATT	Automotive Transportation Technologies	**GIS**	Geographic Information Systems	**POL**	Political Science	
				PSY	Psychology	
AUB	Automotive Body Repair	**GRD**	Graphic Design	**PTC**	Pharmaceutical Technology	
AUT	Automotive	**GRO**	Gerontology	**RAD**	Radiography	
BAF	Banking and Finance	**HBI**	Healthcare Business Informatic	**REF**	Refrigeration	
BAS	Business Analytics			**REL**	Religion	
BAT	Building Automation Systems	**HEA**	Health	**SAB**	Substance Abuse	
BIO	Biology	**HET**	Heavy Equipment Maintenance	**SEC**	Information Systems Security	
BPA	Baking and Pastry Arts			**SGD**	Simulation and Game Development	
BPM	Bioprocessing Manufacturing Technology	**HFS**	Health and Fitness Sciences			
		HIS	History	**SOC**	Sociology	
BPR	Blueprint Reading	**HMT**	Healthcare Management	**SON**	Sonography	
BTC	Biotechnology	**HOR**	Horticulture	**SPA**	Spanish	
BUS	Business	**HRM**	Hospitality Management	**SRV**	Surveying	
CAR	Carpentry	**HSE**	Human Services	**SST**	Sustainability Technology	
CAT	Computed Tomography	**HUM**	Humanities	**SWK**	Social Work	
CCT	Cyber Crime Technology	**HYD**	Hydraulics and Pneumatics	**TDP**	Three Dimensional Printing	
CEG	Civil Engineering and Geomatic	**IMG**	Imaging	**TRN**	Transportation Technology	
		INT	International Business	**UAS**	Unmanned Aircraft Systems	
CHM	Chemistry	**ISC**	Industrial Science	**WBL**	Work-Based Learning	
CIS	Information Systems	**LAR**	Landscape Architecture	**WEB**	Web Technologies	
CIV	Civil Engineering Technology	**LOG**	Logistics Management	**WLD**	Welding	
CJC	Criminal Justice	**MMA**	Mammography			
CMT	Construction Management	**MAS**	Masonry			
COM	Communication	**MAT**	Mathematics			
COS	Cosmetology	**MCO**	Mission Critical Operations			
CSC	Computer Science	**MEC**	Mechanical			
CST	Construction	**MED**	Medical Assisting			
CTI	Computer Tech Integration	**MHA**	Mental Health			
CTS	Computer Information Technology	**MKT**	Marketing and Retailing			
		MLT	Medical Laboratory Technology			
CUL	Culinary					
DBA	Database Management Technology	**MNT**	Maintenance			
		MRI	Magnetic Resonance Imaging			
DEN	Dental	**MTH**	Therapeutic Massage			
DES	Design: Creative	**MUS**	Music			
DFT	Drafting	**NAS**	Nursing Assistant			
DME	Digital Medial Technology	**NET**	Networking Technology			
DRA	Drama/Theatre	**NOS**	Networking Operating Systems			
ECO	Economics	**NUR**	Nursing			
EDT	Electroneurodiagnostic Technology	**OMT**	Operations Management			
		OST	Office Systems Technology			
EDU	Education	**PAD**	Public Administration			

CURRICULUM COURSE DESCRIPTIONS

All courses are identified by the following example:

Course Prefix-Course Number	Course Title	Class Hours	Lab Hours	Clinical Hours	Credit Hours
AST-152	General Astronomy II	3	0	0	3

Requisites: AST-151 Take Currently or Take Previously

Take Currently means the course (S) shown must be taken at the **same time** as the course selected
Take Previously means the course (S) shown must have been taken **prior** to the course selected
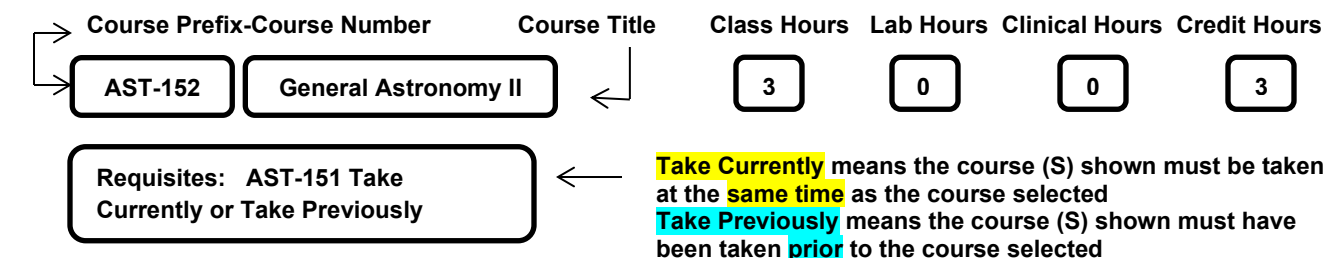
Course Description

This course is a continuation of AST 151 with primary emphasis beyond the solar system. Topics include the sun, stars, galaxies, and the larger universe, including cosmology. Upon completion, students should be able to demonstrate a working knowledge of astronomy. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

ACADEMIC RELATED (ACA PREFIX)

ACA-090   Student Success Strategies   3 0 0 3
Requisites:
This course is intended to provide students with skills and strategies to promote success in college, career, and life. Topics include the College's physical, academic, and social environment, promotes personal development, and cultivates learning strategies essential for student success. Upon completion, students should be able to manage their learning experiences to meet educational and life goals.

ACA-111   College Student Success   1 0 0 1
Requisites:
This course introduces the college's physical, academic, and social environment and promotes the personal development essential for success. Topics include campus facilities and resources; policies, procedures, and programs; study skills; and life management issues such as health, self-esteem, motivation, goal-setting, diversity, and communication. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives.

ACA-115   Success & Study Skills   0 2 0 1
Requisites:
This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

ACA-122   College Transfer Success   0 2 0 1
Requisites:
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college policies and culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions.

ACA-220   Professional Transition   1 0 0 1
Requisites:
This course provides preparation for meeting the demands of employment or education beyond the community college experience. Emphasis is placed on strategic planning, gathering information on workplaces or colleges, and developing human interaction skills for professional, academic, and/or community life. Upon completion, students should be able to successfully make the transition to appropriate workplaces or senior institutions.

ACCOUNTING (ACC PREFIX)

ACC-120   **Principles of Financial Accounting**   3 2 0 4
Requisites:
This course introduces business decision-making using accounting information systems. Emphasis is placed on analyzing, summarizing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making and address ethical considerations.

ACC-121   **Principles of Managerial Accounting**   3 2 0 4
Requisites: Take ACC-120(S20278); Take previously. Required.
This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts including product-costing systems.

ACC-129   **Individual Income Taxes**   2 2 0 3
Requisites:
This course introduces the relevant laws governing individual income taxation. Topics include tax law, electronic research and methodologies, and the use of technology for preparation of individual income tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various individual tax forms.

ACC-130   **Business Income Taxes**   2 2 0 3
Requisites: Take ACC-129(S20283); Take previously. Required.
This course introduces the relevant laws governing business and fiduciary income taxes. Topics include tax law relating to business organizations, electronic research and methodologies, and the use of technology for the preparation of business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various business tax forms.

ACC-132   **NC Business Taxes**   1 3 0 2
Requisites:
This course introduces the relevant laws governing North Carolina taxes as they apply to business. Topics include sales taxes, income taxes for business entities, payroll taxes, unemployment taxes, and other taxes pertaining to the State of North Carolina. Upon completion, students should be able to maintain a company's records to comply with the laws governing North Carolina business taxes.

ACC-140   **Payroll Accounting**   1 3 0 2
Requisites: Take ACC-115(S12924) or ACC-120(S10290); Take previously. Required.
This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries using appropriate technology.

ACC-149   **Introduction to Accounting Spreadsheets**   1 3 0 2
Requisites: Take ACC-115(S12924) or ACC-120(S10290); Take previously. Required.
This course provides a working knowledge of computer spreadsheets and their use in accounting. Topics include pre-programmed problems, model-building problems, beginning-level macros, graphics, and what-if analysis enhancements of template problems. Upon completion, students should be able to use a computer spreadsheet to complete many of the tasks required in accounting.

ACC-150   **Accounting Software Appl**   1 3 0 2
Requisites: Take ACC-115(S12924) or ACC-120(S10290); Take previously. Required.
This course introduces microcomputer applications related to accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to accurately solve accounting problems.

ACC-151   **Accounting Spreadsheet Applications**   1 3 0 2
Requisites: Take ACC-149(S16200); Take previously. Required.
This course is designed to facilitate the use of spreadsheet technology as applied to accounting principles. Emphasis is placed on using spreadsheet software as a problem-solving and decision-making tool. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

ACC-152   **Advanced Software Applications**   1 3 0 2
Requisites: Take ACC-150(S20275); Take previously. Required.
This course provides continued exposure to commercial accounting software and the opportunity to refine accounting software skills. Emphasis is placed on advanced applications of software packages. Upon completion, students should be able to use commercial software to complete complex accounting tasks.

ACC-175   **Hotel and Restaurant Accounting**   3 2 0 4
Requisites: Take MAT-110(S23926); Take previously. Required.
This course covers generally accepted accounting principles and the uniform system of accounts for small hotels and motels of the American Hotel and Motel Association. Emphasis is placed on the accounting cycle, analysis of financial statements, and payroll procedures including treatment of tips. Upon completion, students should be able to demonstrate competence in the accounting principles and procedures used in hotels and restaurants.

ACC-180   **Practices in Bookkeeping**   3 0 0 3
Requisites: Take ACC-120(S20278); Take previously. Required.
This course provides advanced instruction in bookkeeping and record-keeping functions. Emphasis is placed on mastering adjusting entries, correction of errors, depreciation, payroll, and inventory. Upon completion, students should be able to conduct all key bookkeeping functions for small businesses.

ACC-210   **Enterprise Risk Management**   3 0 0 3
Requisites: Take ACC-120(S20278); Take previously. Required.
This course introduces enterprise risk management as it applies to accounting and finance. Topics include risk recognition, assessment, risk analysis, internal controls, and risk management plans. Upon completion, students should be able to demonstrate the daily managerial and organizational requirements of enterprise risk management in written and oral format.

ACC-215   **Ethics in Accounting**   3 0 0 3
Requisites: Take ACC-121(S20282); Take previously. Required.
This course introduces students to professional codes of conduct and ethics adopted by professional associations and state licensing boards for accountants, auditors, and fraud examiners. Topics include research and discussion of selected historical and contemporary ethical cases and issues as they relate to accounting and business. Upon completion, students should be able to apply codes, interpret facts and circumstances, as they relate to accounting firms and business activities.

ACC-220   **Intermediate Accounting I**   3 2 0 4
Requisites: Take ACC-120(S20278); Take previously. Required.
This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and extensive analysis of balance sheet components. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards.

ACC-221   **Intermediate Accounting II**   3 2 0 4
Requisites: Take ACC-220; Take previously. Required.
This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analyses, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

ACC-225   **Cost Accounting**   3 0 0 3
Requisites: Take ACC-121(S10328); Take previously. Required.
This course introduces the nature and purposes of cost accounting as an information system for planning and control. Topics include direct materials, direct labor, factory overhead, process, job order, and standard cost systems. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

ACC-226   Advanced Managerial Accounting   3 0 0 3
Requisites: Take ACC-121(S10328); Take previously. Required.
This course is designed to develop an appreciation for the uses of cost information in the administration and control of business organizations. Emphasis is placed on how accounting data can be interpreted and used by management in planning and controlling business activities. Upon completion, students should be able to analyze and interpret cost information and present this information in a form that is usable by management.

ACC-227   Practices in Accounting   3 0 0 3
Requisites: Take ACC-220(S10646); Take previously. Required.
This course provides an advanced in-depth study of selected topics in accounting using case studies and individual and group problem solving. Topics include cash flow, financial statement analysis, individual and group problem solving, practical approaches to dealing with clients, ethics, and critical thinking. Upon completion, students should be able to demonstrate competent analytical skills and effective communication of their analysis in written and/or oral presentations.

ACC-240   Gov & Not-For-Profit Acct   3 0 0 3
Requisites: Take ACC-121(S20282); Take previously. Required.
This course introduces principles and procedures applicable to governmental and not-for-profit organizations. Emphasis is placed on various budgetary accounting procedures and fund accounting. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

ACC-249   Forensic Accounting & Cybersecurity   3 0 0 3
Requisites: Take ACC-120(S20278); Take previously. Required. Take ACC-267; Take previously. Required.
This course introduces students to theoretical and practical applications of investigative and analytical skills for the purpose of resolving cybersecurity and financial crimes in a manner that meets standards required by a court of law. Emphasis is placed on investigative procedures used to detect, prevent and control fraud, defalcation and misrepresentation. Upon completion, students should be able to execute cybersecurity investigative procedures to assist businesses in detecting, investigating, documenting, and preventing fraud including the collection of evidence and preparation of documents for court proceedings.

ACC-267   Fraud Examination   3 0 0 3
Requisites: Take ACC-120(S20278); Take previously. Required.
This course is an introduction to the investigation techniques used to discover fraudulent activities. Emphasis is placed on the techniques for the detection, deterrence and prevention of the major types of occupational and management frauds. Upon completion, students should be able to examine relevant fraud cases and apply critical thinking and technology skills used in fraud examination.

ACC-268   Information Systems & Internal Controls   3 0 0 3
Requisites: Take ACC-121(S20282); Take previously. Required.
This course covers the design and operation of accounting information systems, with emphasis placed upon transaction cycles and the necessary controls for reliable data. Topics include accounting procedures; authorizing, documentation, and monitoring; flowcharting, data flow diagrams, and scheduling; and some auditing concepts. Upon completion, students should be able to demonstrate an analytical problem-solving ability to communicate effectively their analysis in written and oral presentations.

ACC-269   Information Systems & Internal Controls   3 0 0 3
Requisites: Take ACC-220; Take previously. Required.
This course introduces selected topics pertaining to the objectives, theory and practices in engagements providing auditing and other assurance services. Topics include planning, conducting and reporting, with emphasis on the related professional ethics and standards. Upon completion, students should be able to demonstrate an understanding of the types of professional services, the related professional standards, and engagement methodology.

ACC-270   International Accounting   3 0 0 3
Requisites: Take ACC-120(S20278); Take previously. Required.
This course includes identifying, recording, and interpreting financial information for accounting systems used in different countries. Topics include currency exchange rates, methods of setting and selecting transfer prices, practices used to account for rates of inflation, and major types of taxes. Upon completion, students should be able to describe accounting systems and their impacts on different currencies and demonstrate a basic knowledge of international accounting.

CURRICULUM COURSE DESCRIPTIONS

AIR CONDITIONING, HEATING AND REFRIGERATION (AHR PREFIX)

AHR-110   Introduction to Refrigeration   2 6 0 5
Requisites:
This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

AHR-111   HVACR Electricity   2 2 0 3
Requisites:
This course introduces electricity as it applies to HVACR equipment. Emphasis is placed on power sources, interaction of electrical components, wiring of simple circuits, and the use of electrical test equipment. Upon completion, students should be able to demonstrate good wiring practices and the ability to read simple wiring diagrams.

AHR-112   Heating Technology   2 4 0 4
Requisites:
This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

AHR-113   Comfort Cooling   2 4 0 4
Requisites:
This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychrometrics, manufacturer specifications, and test instruments to determine proper system operation.

AHR-113C   Comfort Cooling   2 0 0 2
Requisites:
This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychrometrics, manufacturer specifications, and test instruments to determine proper system operation.

AHR-113L   Comfort Cooling   0 4 0 2
Requisites:
This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychrometrics, manufacturer specifications, and test instruments to determine proper system operation.

AHR-115   Refrigeration Systems   1 3 0 2
Requisites: Take AHR-110(S14098); Take previously. Required.
This course introduces refrigeration systems and applications. Topics include defrost methods, safety and operational control, refrigerant piping, refrigerant recovery and charging, and leak testing. Upon completion, students should be able to assist in installing and testing refrigeration systems and perform simple repairs.

AHR-120   HVACR Maintenance   1 3 0 2
Requisites:
This course introduces the basic principles of industrial air conditioning and heating systems. Emphasis is placed on preventive maintenance procedures for heating and cooling equipment and related components. Upon completion, students should be able to perform routine preventive maintenance tasks, maintain records, and assist in routine equipment repairs.

CURRICULUM COURSE DESCRIPTIONS

AHR-125 **HVACR Electronics**   2 2 0 3
Requisites: Take AHR-111(S23420) ELC-111 or ELC-112(S21587); Take previously. Required.
This course introduces the common electronic control components in HVACR systems. Emphasis is placed on identifying electronic components and their functions in HVACR systems and motor-driven control circuits. Upon completion, students should be able to identify components, describe control circuitry and functions, and use test instruments to measure electronic circuit values and identify malfunctions.

AHR-133 **HVAC Servicing**   2 6 0 4
Requisites: Take AHR-112(S23421) or AHR-113(S23422); Take either previously or concurrently. Required.
The course covers the maintenance and servicing of HVAC equipment. Topics include testing, adjusting, maintaining, and troubleshooting HVAC equipment and record keeping. Upon completion, students should be able to adjust, maintain, and service HVAC equipment.

AHR-140 **All-Weather Systems**   1 3 0 2
Requisites: Take AHR-112(S14102) or AHR-113(S14131); Take previously. Required.
This course covers the principles of combination heating and cooling systems including gas-electric, all-electric, and oil-electric systems. Topics include PTAC's and package and split-system units. Upon completion, students should be able to understand systems performance and perform routine maintenance procedures.

AHR-151 **HVAC Duct Systems I**   1 3 0 2
Requisites:
This course introduces the techniques used to lay out and fabricate duct work commonly found in HVAC systems. Emphasis is placed on the skills required to fabricate duct work. Upon completion, students should be able to lay out and fabricate simple duct work.

AHR-160 **Refrigerant Certification**   1 0 0 1
Requisites:
This course covers the requirements for the EPA certification examinations. Topics include small appliances, high pressure systems, and low pressure systems. Upon completion, students should be able to demonstrate knowledge of refrigerants and be prepared for the EPA certification examinations.

AHR-180 **HVACR Customer Relations**   1 0 0 1
Requisites:
This course introduces common business and customer relation practices that may be encountered in HVACR. Topics include business practices, appearance of self and vehicle, ways of handling customer complaints, invoices, telephone communications, and warranties. Upon completion, students should be able to present themselves to customers in a professional manner, understand how the business operates, complete invoices, and handle complaints.

AHR-211 **Residential System Design**   2 2 0 3
Requisites:
This course introduces the principles and concepts of conventional residential heating and cooling system design. Topics include heating and cooling load estimating, basic psychrometrics, equipment selection, duct system selection, and system design. Upon completion, students should be able to design a basic residential heating and cooling system.

AHR-212 **Advanced Comfort Systems**   2 6 0 4
Requisites: Take AHR-114(S14084); Take previously. Required.
This course covers water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pump systems including variable speed drives and controls. Emphasis is placed on the application, installation, and servicing of water-source systems and the mechanical and electronic control components of advanced comfort systems. Upon completion, students should be able to test, analyze, and troubleshoot water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pumps.

AHR-213 **HVACR Building Code**   1 2 0 2
Requisites:
This course covers the North Carolina codes that are applicable to the design and installation of HVACR systems. Topics include current North Carolina codes as applied to HVACR design, service, and installation. Upon completion, students should be able to demonstrate the correct usage of North Carolina codes that apply to specific areas of the HVACR trade.

CURRICULUM COURSE DESCRIPTIONS

AHR-114   **Heat Pump Technology**   2 4 0 4
Requisites: Take AHR-110 or AHR-113; Take previously. Required.
This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures.

AHR-215   **Commercial HVAC Controls**   1 3 0 2
Requisites: Take AHR-111(S23420) ELC-111 or ELC-112(S23481); Take previously. Required.
This course introduces HVAC control systems used in commercial applications. Topics include electric/electronic control systems, pneumatic control systems, DDC temperature sensors, humidity sensors, pressure sensors, wiring, controllers, actuators, and controlled devices. Upon completion, students should be able to verify or correct the performance of common control systems with regard to sequence of operation and safety.

AHR-225   **Commercial System Design**   2 3 0 3
Requisites: Take AHR-211(S10410); Take previously. Required.
This course covers the principles of designing heating and cooling systems for commercial buildings. Emphasis is placed on commercial heat loss/gain calculations, applied psychometrics, air-flow calculations, air distribution system design, and equipment selection. Upon completion, students should be able to calculate heat loss/gain, design and size air and water distribution systems, and select equipment.

AHR-235   **Refrigeration Design**   2 2 0 3
Requisites: Take AHR-110(S14098); Take previously. Required.
This course covers the principles of commercial refrigeration system operation and design. Topics include walk-in coolers, walk-in freezers, system components, load calculations, equipment selection, defrost systems, refrigerant line sizing, and electric controls. Upon completion, students should be able to design, adjust, and perform routine service procedures on a commercial refrigeration system.

AHR-240   **Hydronic Heating**   1 3 0 2
Requisites: Take AHR-112(S14102); Take previously. Required.
This course covers the accepted procedures for proper design, installation, and balance of hydronic heating systems for residential or commercial buildings. Topics include heating equipment; pump, terminal unit, and accessory selection; piping system selection and design; and pipe sizing and troubleshooting. Upon completion, students should be able to assist with the proper design, installation, and balance of typical hydronic systems.

AHR-245   **Chiller Systems**   1 3 0 2
Requisites: Take AHR-110; Take previously. Required.
This course introduces the fundamentals of liquid chilling equipment. Topics include characteristics of water, principles of water chilling, the chiller, the refrigerant, water and piping circuits, freeze prevention, purging, and equipment flexibility. Upon completion, students should be able to describe the components, controls, and overall operation of liquid chilling equipment and perform basic maintenance tasks.

AHR-250   **Heating, Ventilating, and Air Conditioning Diagnostics**   0 4 0 2
Requisites: Take AHR-133; Take previously. Required.
This course is a comprehensive study of air conditioning, heating, and refrigeration system diagnostics and corrective measures. Topics include advanced system analysis, measurement of operating efficiency, and inspection and correction of all major system components. Upon completion, students should be able to restore a residential or commercial AHR system so that it operates at or near manufacturers' specifications. This course also includes variable air volume box set-up, test and balance air and water systems.

AHR-263   **Energy Management**   1 3 0 2
Requisites: Take AHR-125(S13194) or AHR-215(S10409); Take previously. Required.
This course covers building automation computer programming as currently used in energy management. Topics include night setback, duty cycling, synchronization, schedule optimization, and anticipatory temperature control. Upon completion, students should be able to write programs utilizing the above topics and connect computer systems to HVAC systems.

CURRICULUM COURSE DESCRIPTIONS

RENEWABLE ENERGY TECHNOLOGIES (ALT PREFIX)

ALT-120   **Renewable Energy Technologies**   2 2 0 3
Requisites: Take ELC-112(S23481); Take previously. Required. Take ELC-117(S23521); Take previously.
Required.
This course provides an introduction to multiple technologies that allow for the production and conservation of energy from renewable sources. Topics include hydro-electric, wind power, passive and active solar energy, tidal energy, appropriate building techniques, and energy conservation methods. Upon completion, students should be able to demonstrate an understanding of renewable energy production and its impact on humans and their environment.

ANTHROPOLOGY (ANT PREFIX)

ANT-210   **General Anthropology**   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-098(S23643); Take
ENG-002; Take previously. Required.
This course introduces the physical, archaeological, linguistic, and ethnological fields of anthropology. Topics include human origins, genetic variations, archaeology, linguistics, primatology, and contemporary cultures. Upon completion, students should be able to demonstrate an understanding of the four major fields of anthropology.

ANT-220   **Cultural Anthropology**   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-098(S23643); Take
ENG-002; Take previously. Required.
This course introduces the nature of human culture. Emphasis is placed on cultural theory, methods of fieldwork, and cross-cultural comparisons in the areas of ethnology, language, and the cultural past. Upon completion, students should be able to demonstrate an understanding of basic cultural processes and how cultural data are collected and analyzed.

ANT-230   **Physical Anthropology**   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-098(S23643); Take
ENG-002; Take previously. Required.
This course introduces the scientific study of human evolution and adaptation. Emphasis is placed on evolutionary theory, population genetics, biocultural adaptation and human variation, as well as non-human primate evolution, morphology, and behavior. Upon completion, students should be able to demonstrate an understanding of the biological and cultural processes which have resulted in the formation of the human species.

ANT-240   **Archaeology**   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-098(S23643); Take
ENG-002; Take previously. Required.
This course introduces the scientific study of the unwritten record of the human past. Emphasis is placed on the process of human cultural evolution as revealed through archaeological methods of excavation and interpretation. Upon completion, students should be able to demonstrate an understanding of how archaeologists reconstruct the past and describe the variety of past human cultures.

CURRICULUM COURSE DESCRIPTIONS

ARCHITECTURE (ARC PREFIX)

ARC-111   **Introduction to Architectural Technology**   1 6 0 3
Requisites:
This course introduces basic architectural drafting techniques, lettering, use of architectural and engineer scales, and sketching. Topics include orthographic, axonometric, and oblique drawing techniques using architectural plans, elevations, sections, and details; reprographic techniques; and other related topics. Upon completion, students should be able to prepare and print scaled drawings within minimum architectural standards.

ARC-112   **Construction Materials & Methods**   3 2 0 4
Requisites: Take ARC-111; Take either previously or concurrently. Recommended.
This course introduces construction materials and methodologies. Topics include construction terminology, traditional and alternative materials and their properties, manufacturing processes, construction techniques, and other related topics. Upon completion, students should be able to detail construction assemblies and identify construction materials and properties.

ARC-113   **Residential Architectural Technology**   1 6 0 3
Requisites: Take ARC-111; Take previously. Required. Take ARC-112(S11752); Take either previously or concurrently. Required.
This course covers intermediate residential working drawings. Topics include residential plans, elevations, sections, details, schedules, and other related topics. Upon completion, students should be able to prepare a set of residential working drawings that are within accepted architectural standards.

ARC-114   **Architectural CAD**   1 3 0 2
Requisites: Take ARC-114A; Take either previously or concurrently. Recommended.
This course introduces basic architectural CAD techniques. Topics include basic commands and system hardware and software. Upon completion, students should be able to prepare and plot architectural drawings to scale within accepted architectural standards. This course is introduction to CAD using AutoCAD software. Course has a required co-requisite for ARC-111 or LAR-111.

ARC-114A   **Architectural CAD Lab**   0 3 0 1
Requisites: Take ARC-114(S10248); Take either previously or concurrently. Required.
This course provides a laboratory setting to enhance architectural CAD skills. Emphasis is placed on further development of commands and system operation. Upon completion, students should be able to prepare and plot scaled architectural drawings.

ARC-131   **Building Codes**   2 2 0 3
Requisites: Take ARC-112(S23271) or CAR-111(S16248); Take previously. Required.
This course covers the methods of researching building codes for specific projects. Topics include residential and commercial building codes. Upon completion, students should be able to determine the code constraints governing construction projects.

ARC-132   **Specifications & Contracts**   2 0 0 2
Requisites: Take ARC-112(S11752); Take previously. Required.
This course covers the development of written specifications and the implications of different contractual arrangements. Topics include specification development, contracts, bidding material research, and agency responsibilities. Upon completion, students should be able to write a specification section and demonstrate the ability to interpret contractual responsibilities.

ARC-141   **Elementary Structures for Architecture**   4 0 0 4
Requisites: Take 1 group; Option: Take ARC-111 MAT-121; Option: Take ARC-111 MAT-171; Take previously. Required.
This course covers concepts of elementary structures in architecture. Topics include structural form, statics, strength of materials, structural behavior, and the relationship between structures and architectural form. Upon completion, students should be able to size simple structural elements.

ARC-211   **Light Construction Technology**   1 6 0 3
Requisites: Take ARC-111; Take previously. Required. Take ARC-112(S11752); Take either previously or concurrently. Required. Take ARC-113 ARC-114(S10248) ARC-212(S10754); Take previously. Required.
This course covers working drawings for light construction. Topics include plans, elevations, sections, and details; schedules; and other related topics. Upon completion, students should be able to prepare a set of working drawings which are within accepted architectural standards.

ARC-212   **Commercial Constr Tech**   1 6 0 3
Requisites: Take ARC-111; Take previously. Required. Take ARC-112(S11752); Take either previously or concurrently. Required.
This course introduces regional construction techniques for commercial plans, elevations, sections, and details. Topics include production of a set of commercial contract documents and other related topics. Upon completion, students should be able to prepare a set of working drawings in accordance with building codes.

ARC-213   **Design Project**   2 6 0 4
Requisites: Take ARC-111 ARC-112(S11752) ARC-114(S10248); Take previously. Required. Take ARC-111 ARC-112(S11752) ARC-113 ARC-114(S10248) ARC-211; Take previously. Required. Take ARC-264(S12557); Take either previously or concurrently. Recommended.
This course provides the opportunity to design and prepare a set of contract documents within an architectural setting. Topics include schematic design, design development, construction documents, and other related topics. Upon completion, students should be able to prepare a set of commercial contract documents.

ARC-220   **Advanced Architectural CAD**   1 3 0 2
Requisites: Take ARC-114(S10248); Take previously. Required.
This course provides file management, productivity, and CAD customization skills. Emphasis is placed on developing advanced proficiency techniques. Upon completion, students should be able to create prototype drawings and symbol libraries, compose sheets with multiple details, and use advanced drawing and editing commands. This course is advanced CAD using AutoCAD software.

ARC-225   **Architectural Building Information Modeling I**   1 3 0 2
Requisites: Take ARC-114(S10248) ARC-114A; Take previously. Required. Take ARC-225A; Take concurrently. Required.
This course is an introduction to the fundamentals of Building Information Modeling (BIM) as a construction documentation system. Topics include basic parametric modeling, creating new types and families of components, and using 3D models to create design drawings. Upon competition, students should be able to use BIM software to create, edit, and print rudimentary architectural 3D computer models.

ARC-225A   **Architectural Building Information Modeling I Lab**   0 3 0 1
Requisites: Take ARC-225; Take either previously or concurrently. Required. Take ARC-114(S10248) ARC-114A; Take previously. Required.
This course provides a laboratory setting to enhance architectural BIM skills. Emphasis is placed on further development of basic parametric modeling, creating new types and families of components. Upon competition, students should be able to use BIM software to create, edit, and print rudimentary architectural 3D computer models.

ARC-226   **Architectural Building Information Modeling II**   1 3 0 2
Requisites: Take ARC-225; Take previously. Required. Take ARC-212(S10754) ARC-225; Take previously. Required.
This course covers advanced concepts of Building Information Modeling (BIM) including complex drawing generation and inter-disciplinary collaboration. Topics include advanced parametric modeling and model analysis, inter-disciplinary coordination, design web format models, material take-off, schedules, and rendering. Upon completion, students should be able to apply BIM software to create full 3D project models and convert them to scaled working or presentation drawings.

ARC-226A   **Architectural Building Information Modeling II Lab**   0 3 0 1
Requisites: Take ARC-225; Take previously. Required. Take ARC-226; Take either previously or concurrently. Required. Take ARC-212 ARC-225; Take previously. Required. Take ARC-226; Take concurrently. Required.
This course provides a laboratory setting to enhance advanced architectural BIM skills. Emphasis is placed on further development of advanced parametric modeling and model analysis, inter-disciplinary coordination, design web format models, material take-off, schedules, and rendering. Upon completion, students should be able to apply BIM software to create full 3D project models and convert them to scaled working or presentation drawings.

ARC-230   **Environmental Systems**   3 3 0 4
Requisites: Take 1 group; Take ARC-111 MAT-121(S23927); Take ARC-111 MAT-171(S23934); Take previously. Required.
This course introduces plumbing, mechanical (HVAC), and electrical systems for the architectural environment. Topics include basic plumbing, mechanical, and electrical systems for residential and/or commercial buildings with an introduction to selected code requirements. Upon completion, students should be able to develop schematic drawings for plumbing, mechanical, and electrical systems and perform related calculations.

ARC-231   Architectural Presentations   2 4 0 4
Requisites: Take ARC-111; Take previously. Required. Take ARC-112(S23271); Take previously. Required.
Take ARC-225 ARC-225A ARC-264(S22026); Take either previously or concurrently. Required.
This course introduces architectural presentation techniques. Topics include perspective drawing, shadow projection, texturization, rendered plans, elevations, and other related topics. Upon completion, students should be able to present ideas graphically and do rendered presentation drawings.

ARC-235   Architectural Portfolio   2 3 0 3
Requisites: Take 1 group; Take ARC-113; Take LAR-113(S23293); Take DES-230(S10589); Take previously.
Required.
This course covers the methodology for the creation of an architectural portfolio. Topics include preparation of marketing materials and a presentation strategy using conventional and/or digital design media. Upon completion, students should be able to produce an architectural portfolio of selected projects.

ARC-240   Site Planning   2 2 0 3
Requisites: Take ARC-111 or LAR-111(S10088); Take previously. Required. Take ARC-111 or LAR-111(S23291); Take previously. Required.
This course introduces the principles of site planning, grading plans, and earthwork calculations. Topics include site analysis, site work, site utilities, cut and fill, soil erosion control, and other related topics. Upon completion, students should be able to prepare site development plans and details and perform cut and fill calculations.

ARC-250   Survey of Architecture   3 0 0 3
Requisites:
This course introduces the historical trends in architectural form. Topics include historical and current trends in architecture. Upon completion, students should be able to demonstrate an understanding of significant historical and current architectural styles.

ARC-261   Solar Technology   1 2 0 2
Requisites: Take ARC-111; Take previously. Required.
This course introduces passive and active solar design theory and application. Topics include passive solar design, active solar theory, heat loss analysis, and other related topics. Upon completion, students should be able to design a passive solar system.

ARC-264   Digital Architecture   1 3 0 2
Requisites: Take ARC-112(S23271) or DES-112; Take either previously or concurrently. Required. Take ARC-114(S10248) ARC-114A; Take previously. Required.
This course covers multiple digital architectural techniques. Topics include spreadsheets and word processing procedures, on-line resources, modems, e-mail, image capture, multimedia, and other related topics. Upon completion, students should be able to transmit/receive electronic data, create multimedia presentations, and produce a desktop publishing document.

ART (ART PREFIX)

ART-114   **Art History Survey I**   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take DRE-098(S23643); Take ENG-111(S13673); Take ENG-002; Take previously. Required.
This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development.

ART-115   **Art History Survey II**   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take DRE-098(S23643); Take ENG-111(S13673); Take ENG-002; Take previously. Required.
This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development.

ART-116   **Survey of American Art**   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course covers the development of American art forms from colonial times to the present. Emphasis is placed on architecture, painting, sculpture, graphics, and the decorative arts. Upon completion, students should be able to demonstrate understanding of the history of the American creative experience.

ART-117   **Non-Western Art History**   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take DRE-098(S23643); Take ENG-111(S13673); Take ENG-002; Take previously. Required.
This course introduces non-Western cultural perspectives. Emphasis is placed on, but not limited to, African, Oriental, and Oceanic art forms throughout history. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of non-Western social and cultural development.

ART-121   **Two-Dimensional Design**   0 6 0 3
Requisites:
This course introduces the elements and principles of design as applied to two-dimensional art. Emphasis is placed on the structural elements, the principles of visual organization, and the theories of color mixing and interaction. Upon completion, students should be able to understand and use critical and analytical approaches as they apply to two-dimensional visual art.

ART-122   **Three-Dimensional Design**   0 6 0 3
Requisites:
This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply three-dimensional design concepts.

ART-131   **Drawing I**   0 6 0 3
Requisites:
This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes.

ART-135   **Figure Drawing I**   0 6 0 3
Requisites: Take ART-131; Take previously. Required.
This course introduces rendering the human figure with various drawing materials. Emphasis is placed on the use of the visual elements, anatomy, and proportion in the representation of the draped and undraped figure. Upon completion, students should be able to demonstrate competence in drawing the human figure.

ART-171   **Digital Design I**   0 6 0 3
Requisites:
This course is designed to introduce students to the elements and principles of design through the use of digital software. Emphasis is placed on developing composition and design skills using vector, raster, and time-based media. Upon completion, students should be able to identify and use tools in digital software, understand and utilize digital and artistic vocabulary, and employ the principles and elements of design to create artwork using digital means.

ART-214   **Portfolio and Resume**   0 2 0 1
Requisites: Take 1 group; Take ENG-070(S16349) RED-070(S10648); Take DRE-096(S23641); Take ENG-002; Take previously. Required. Take 1 group; Take ART-121(S23014) ART-122(S23015); Take ART-121(S23014) ART-131; Take ART-122(S23015) ART-121(S23014); Take ART-122(S23015) ART-131; Take ART-131 ART-121(S23014); Take ART-131 ART-122(S23015); Take previously. Required.
This course covers resume writing, interview skills, and the preparation and presentation of an art portfolio. Emphasis is placed on the preparation of a portfolio of original artwork, the preparation of a photographic portfolio, approaches to resume writing, and interview techniques. Upon completion, students should be able to photograph and present a digital portfolio and write an effective resume.

ART-231   **Printmaking I**   0 6 0 3
Requisites:
This course introduces printmaking: its history, development techniques, and processes. Emphasis is placed on basic applications with investigation into image source and development. Upon completion, students should be able to produce printed images utilizing a variety of methods.

ART-232   **Printmaking II**   0 6 0 3
Requisites: Take ART-231; Take previously. Required.
This course includes additional methods and printmaking processes. Emphasis is placed on the printed image as related to method, source, and concept. Upon completion, students should be able to produce expressive images utilizing both traditional and innovative methods.

ART-240   **Painting I**   0 6 0 3
Requisites:
This course introduces the language of painting and the use of various painting materials. Emphasis is placed on the understanding and use of various painting techniques, media, and color principles. Upon completion, students should be able to demonstrate competence in the use of creative processes directed toward the development of expressive form.

ART-241   **Painting II**   0 6 0 3
Requisites: Take ART-240; Take previously. Required.
This course provides a continuing investigation of the materials, processes, and techniques of painting. Emphasis is placed on the exploration of expressive content using a variety of creative processes. Upon completion, students should be able to demonstrate competence in the expanded use of form and variety.

ART-275   **Introduction to Graphic Design**   0 6 0 3
Requisites: Take 1 group; Take ENG-080 RED-080; Take DRE-097(S23642); Take ENG-002; Take previously. Required.
This course introduces students to the field of graphic design. Emphasis is placed on the basic concepts of visual communication, the design process and the ability to evaluate and discuss design issues in a critical manner. Upon completion, students should be able to use contemporary design software and visual language techniques as they apply to creative visual problem-solving involving typography, image manipulation, symbolic representation and page management while being responsive to the relationship between client, designer and audience.

ART-281   **Sculpture I**   0 6 0 3
Requisites:
This course provides an exploration of the creative and technical methods of sculpture with focus on the traditional processes. Emphasis is placed on developing basic skills as they pertain to three-dimensional expression in various media. Upon completion, students should be able to show competence in variety of sculptural approaches.

CURRICULUM COURSE DESCRIPTIONS

ASTRONOMY (AST PREFIX)

AST-151   **General Astronomy I**   3 0 0 3
Requisites: Take AST-151A; Take concurrently. Required. Take 1 group; Take MAT-003; Take DMA-010 DMA-020 DMA-030 DMA-040(S23170) DMA-050(S23171); Take MAT-143(S25430); Minimum grade C; Take MAT-171(S25432); Minimum grade C; Take previously. Required.
This course introduces the science of modern astronomy with a concentration on the solar system. Emphasis is placed on the history and physics of astronomy and an introduction to the solar system, including the planets, comets, and meteors. Upon completion, students should be able to demonstrate a general understanding of the solar system.

AST-151A   **General Astronomy I Lab**   0 2 0 1
Requisites: Take AST-151; Take either previously or concurrently. Required. Take AST-151; Take concurrently. Required. Take 1 group; Take MAT-003; Take DMA-010 DMA-020 DMA-030 DMA-040(S23170) DMA-050(S23171); Take MAT-143(S25430); Minimum grade C; Take MAT-171(S25432); Minimum grade C; Take previously. Required.
The course is a laboratory to accompany AST 151. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 151 and which provide practical experience. Upon completion, students should be able to demonstrate a general understanding of the solar system.

AST-152   **General Astronomy II**   3 0 0 3
Requisites: Take AST-151; Take previously. Required. Take AST-151 AST-151A; Minimum grade C; Take previously. Required. Take AST-152A; Take concurrently. Required.
This course is a continuation of AST 151 with primary emphasis beyond the solar system. Topics include the sun, stars, galaxies, and the larger universe, including cosmology. Upon completion, students should be able to demonstrate a working knowledge of astronomy.

AST-152A   **General Astronomy II Lab**   0 2 0 1
Requisites: Take AST-151; Take previously. Required. Take AST-151 AST-151A; Minimum grade C; Take previously. Required. Take AST-152; Take either previously or concurrently. Required.
The course is a laboratory to accompany AST 152. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 152 and which provide practical experience. Upon completion, students should be able to demonstrate a working knowledge of astronomy.

AUTOMATION AND ROBOTICS (ATR PREFIX)

ATR-115   **Introduction to Mechatronics**   3 3 0 4
Requisites: Take MEC-130(S16429); Take previously. Required.
This course introduces the synergistic application of mechanical, electrical, electronic, and computer engineering technologies that are used for the purpose of control and maintenance of high-tech devices and equipment. Topics include automation, advanced manufacturing, sensors, actuators, process control, circuits, robotics, electromechanical equipment, hydraulics, pneumatics, electrical drives, motors, and programmable logic controllers. Upon completion, students should be able to demonstrate an understanding of the function of the components of a mechatronic system, their controlling interactions, and the overall operation of the mechatronic control system.

ATR-214   **Advanced PLCs**   3 3 0 4
Requisites: Take ELC-128 or ELN-260; Take previously. Required
This course introduces the study of high-level programming languages and advanced I/O modules. Topics include advanced programming languages; system networking; computer interfacing; analog and other intelligent I/O modules; and system troubleshooting. Upon completion, students should be able to write and troubleshoot systems using high-level languages and complex I/O modules.

ATR-215   **Sensors and Transducers**   2 3 0 3
Requisites:
This course provides the theory and application of sensors typically found in an automated manufacturing system. Topics include physical properties, operating range, and other characteristics of numerous sensors and transducers used to detect temperature, pressure, position, and other desired physical parameters. Upon completion, students should be able to properly interface a sensor to a PLC, PC, or process control system.

CURRICULUM COURSE DESCRIPTIONS

AUTOMOTIVE TRANSPORTATION TECHNOLOGIES (ATT PREFIX)

ATT-115   **Green Trans Safety and Service**   1 2 0 2
Requisites:
This course covers workplace safety, hazardous material and environmental regulation relevant to electric, hybrid and alternative fueled vehicles. Topics include safety of high voltage vehicle systems, gaseous fuel systems and alternative liquid fuels. Upon completion, students should be able to demonstrate safe work practices, utilize appropriate shop tools and explain government regulations associated with alternative transportation.

ATT-125   **Hybrid-Electric Transportation**   2 4 0 4
Requisites: Take TRN-120; Take previously. Required.
This course covers the theory and operation of hybrid-electric drive vehicles. Topics include maintenance, diagnostics, repair and safety procedures for electrically propelled and hybrid vehicles. Upon completion, students should be able to perform diagnostics, maintenance and repair hybrid-electric drive vehicles.

ATT-140   **Emerging Transportation Technology**   2 3 0 3
Requisites:
This course covers emerging technologies in the automotive industry and diagnostic procedures associated with those technologies. Topics include exploring new technologies, diagnostic tools, methods and repairs. Upon completion, students should be able to demonstrate practical skills applicable to emerging automotive technologies.

AUTOMOTIVE BODY REPAIR (AUB PREFIX)

AUB-111   **Painting & Refinishing I**   2 6 0 4
Requisites:
This course introduces the proper procedures for using automotive refinishing equipment and materials in surface preparation and application. Topics include federal, state, and local regulations, personal safety, refinishing equipment and materials, surface preparation, masking, application techniques, and other related topics. Upon completion, students should be able to identify and use proper equipment and materials in refinishing following accepted industry standards.

AUB-112   **Painting & Refinishing II**   2 6 0 4
Requisites: Take AUB-111; Take previously. Required.
This course covers advanced painting techniques and technologies with an emphasis on identifying problems encountered by the refinishing technician. Topics include materials application, color matching, correction of refinishing problems, and other related topics. Upon completion, students should be able to perform spot, panel, and overall refinishing repairs and identify and correct refinish problems.

AUB-114   **Special Finishes**   1 2 0 2
Requisites: Take AUB-111; Take previously. Required.
This course introduces multistage finishes, custom painting, and protective coatings. Topics include base coats, advanced intermediate coats, clear coats, and other related topics. Upon completion, students should be able to identify and apply specialized finishes based on accepted industry standards.

AUB-122   **Non-Structural Damage II**   2 6 0 4
Requisites:
This course covers safety, tools, and advanced body repair. Topics include shop safety, damage analysis, tools and equipment, advanced repair techniques, materials selection, materials usage, movable glass, and other related topics. Upon completion, students should be able to identify and repair or replace direct and indirect damage to accepted standards including movable glass and hardware.

AUB-131   **Structural Damage I**   2 4 0 4
Requisites:
This course introduces safety, equipment, structural damage analysis, and damage repairs. Topics include shop safety, design and construction, structural analysis and measurement, equipment, structural glass, repair techniques, and other related topics. Upon completion, students should be able to analyze and perform repairs to a vehicle which has received light/moderate structural damage.

CURRICULUM COURSE DESCRIPTIONS

AUB-132   **Structural Damage II**   2 6 0 4
Requisites: Take AUB-131; Take previously. Required.
This course provides an in-depth study of structural damage analysis and repairs to vehicles that have received moderate to heavy structural damage. Topics include shop safety, structural analysis and measurement, equipment, structural glass, advanced repair techniques, structural component replacement and alignment, and other related topics. Upon completion, students should be able to analyze and perform repairs according to industry standards.

AUB-136   **Plastics & Adhesives**   1 4 0 3
Requisites:
This course covers safety, plastic and adhesive identification, and the various repair methods of automotive plastic components. Topics include safety, identification, preparation, material selection, and the various repair procedures including refinishing. Upon completion, students should be able to identify, remove, repair, and/or replace automotive plastic components in accordance with industry standards.

AUB-150   **Automotive Detailing**   1 3 0 2
Requisites:
This course covers the methods and procedures used in automotive detailing facilities. Topics include safety, engine, interior and trunk compartment detailing, buffing/polishing exterior surfaces, and cleaning and reconditioning exterior trim, fabrics, and surfaces. Upon completion, students should be able to improve the overall appearance of a vehicle.

AUB-162   **Autobody Estimating**   1 2 0 2
Requisites:
This course provides a comprehensive study of auto body estimating. Topics include collision damage analysis, industry regulations, flat-rate and estimated time, and collision estimating manuals. Upon completion, students should be able to prepare and interpret a damage report.

AUTOMOTIVE (AUT PREFIX)

AUT-114   **Safety and Emissions**   1 2 0 2
Requisites:
This course covers the laws, procedures, and specifications needed to perform a North Carolina State Safety and Emissions inspection. Topics include brake, steering and suspension, lighting, horn, windshield wiper, tire, mirrors, and emission control devices inspection. Upon completion, students should be able to perform complete and thorough North Carolina State Safety and Emissions inspections.

AUT-116A   **Engine Repair Lab**   0 3 0 1
Requisites: Take AUT-116(S21687); Take either previously or concurrently. Required.
This course is an optional lab to be used as an alternative to co-op placement in meeting the ASE standards for total hours. Topics include diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

AUT-123   **Powertrain Diagnosis & Service**   1 3 0 2
Requisites:
This course covers the diagnosis, repair and service of the vehicle powertrain and related systems. Topics include fundamental operating principles of engines and transmissions and use of proper service procedures for diagnosis, service and removal and replacement of major components. Upon completion, students should be able to perform basic service and diagnosis of the powertrain and related systems, and to perform in vehicle repairs and remove and replace components.

AUT-141   **Suspension & Steering Systems**   2 3 0 3
Requisites:
This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

AUT-141A   Suspension & Steering Lab   0 3 0 1
Requisites: Take AUT-141(S21690); Take either previously or concurrently. Required.
This course is an optional lab to be used as an alternative to co-op placement in meeting the ASE standards for total hours. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

AUT-151   Brake Systems   2 3 0 3
Requisites:
This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

AUT-151A   Brakes Systems Lab   0 3 0 1
Requisites: Take AUT-151(S21692); Take either previously or concurrently. Required.
This course is an optional lab to be used as an alternative to co-op placement in meeting the ASE standards for total hours. Topics include drum and disc brakes involving hydraulic, vacuum-boost, hydra-boost, electrically powered boost, and anti-lock, parking brake systems and emerging brake systems technologies. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

AUT-181   Engine Performance 1   2 3 0 3
Requisites:
This course covers the introduction, theory of operation, and basic diagnostic procedures required to restore engine performance to vehicles equipped with complex engine control systems. Topics include an overview of engine operation, ignition components and systems, fuel delivery, injection components and systems and emission control devices. Upon completion, students should be able to describe operation and diagnose/repair basic ignition, fuel and emission related driveability problems using appropriate test equipment/service information.

AUT-183   Engine Performance 2   2 6 0 4
Requisites: Take AUT-181(S21701); Take previously. Required.
This course covers study of the electronic engine control systems, the diagnostic process used to locate engine performance concerns, and procedures used to restore normal operation. Topics will include currently used fuels and fuel systems, exhaust gas analysis, emission control components and systems, OBD II (on-board diagnostics) and inter-related electrical/electronic systems. Upon completion, students should be able to diagnose and repair complex engine performance concerns using appropriate test equipment and service information.

AUT-213   Automotive Servicing 2   1 3 0 2
Requisites:
This course is a lab used as an alternative to co-op placement. Emphasis is placed on shop operations, troubleshooting, testing, adjusting, repairing, and replacing components using appropriate test equipment and service information. Upon completion, students should be able to perform a variety of automotive repairs using proper service procedures and to operate appropriate equipment.

AUT-221   Automatic Transmissions/Transaxles   2 3 0 3
Requisites:
This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory, diagnose and repair automatic drive trains.

AUT-221A   Automatic Transmissions/Transaxles Lab   0 3 0 1
Requisites: Take AUT-221(S21707); Take either previously or concurrently. Required.
This course is an optional lab to be used as an alternative to co-op placement in meeting the ASE standards for total hours. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to diagnose and repair automatic drive trains.

CURRICULUM COURSE DESCRIPTIONS

AUT-231   **Manual Transmissions/Transaxles/Drive Trains**   2 3 0 3
Requisites:
This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches, driveshafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train servicing and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory, diagnose and repair manual drive trains.

AUT-281   **Advanced Engine Performance**   2 2 0 3
Requisites:
This course utilizes service information and specialized test equipment to diagnose and repair power train control systems. Topics include computerized ignition, fuel and emission systems, related diagnostic tools and equipment, data communication networks, and service information. Upon completion, students should be able to perform diagnosis and repair.

BANKING AND FINANCE (BAF PREFIX)

BAF-143   **Financial Planning**   3 0 0 3
Requisites:
This course covers the perspectives, principles, and practices of financial planning. Topics include investment, retirement, tax, and estate planning. Upon completion, students should be able to understand the process that looks at a customer's financial picture and recommend strategies to achieve the customer's objectives.

BUSINESS ANALYTICS (BAS PREFIX)

BAS-120   **Introduction to Analytics**   2 3 0 3
Requisites: Take 1 group; Take DRE-097(S23642) DRE-098(S23643) DMA-010 DMA-020 DMA-030 DMA-040(S23170) DMA-050(S23171); Take ENG-002 MAT-003; Take previously. Required.
This course introduces basic concepts and applications of analytics. Topics include an overview of the analytical process and the role of the analyst, applied descriptive statistics, and exploratory data analysis. Upon completion, students should be able to demonstrate a basic understanding of analytics for decision-making in business.

BAS-121   **Data Visualization**   2 3 0 3
Requisites: Take BAS-120(S24318); Take previously. Required.
This course introduces key concepts in data visualization and reporting. Topics include concepts and methods used in graphical representation of data, exploration and reporting of data, and basic linear regression methods. Upon completion, students should be able to effectively use graphical tools to communicate insights about data.

BAS-150   **Introduction to Analytical Programming**   2 3 0 3
Requisites: Take 1 group; Take DRE-097(S23642) DRE-098(S23643) DMA-010 DMA-020 DMA-030 DMA-040(S23170) DMA-050(S23171); Take ENG-002 MAT-003; Take previously. Required.
This course introduces statistical software for analytics. Topics include utilization of analytical and statistical software packages for data management, data visualization, and exploratory data analysis. Upon completion, students should be able to use statistical programming tools to conduct descriptive analytics.

BAS-220   **Applied Analytical Programming**   2 3 0 3
Requisites: Take BAS-150(S24320); Take previously. Required.
This course covers applications of statistical software for data management and reporting. Topics include data management, data preprocessing, and modeling including linear and logistic regression analysis using programming tools. Upon completion, students should be able to process data and generate reports that support business decision-making.

BAS-221   **Introduction to Predictive Analytics**   2 3 0 3
Requisites: Take BAS-121(S24319) BAS-220(S24321); Take previously. Required.
This course introduces foundations of predictive analytics. Topics include basic predictive modeling methods for both classification and regression tasks. Upon completion, students should be able to build and validate predictive models.

CURRICULUM COURSE DESCRIPTIONS

BAS-230   **Applied Predictive Modeling**   2 3 0 3
Requisites: Take BAS-221(S24322); Take previously. Required.
This course covers advanced applications of predictive models. Topics include the advanced use of classification and regression models in real-world scenarios. Upon completion, students should be able to utilize their knowledge and skills in predictive analytics to independently guide decision makers.

BAS-240   **Data Structures for Analytics**   2 3 0 3
Requisites: Take BAS-121(S24319) BAS-220(S24321); Take previously. Required.
This course is designed to enhance student proficiency in data management skills for analytics applications. Topics include techniques and methods for identification, extraction, and preparation of data for processing with analytical software. Upon completion, students should be able to demonstrate the skills necessary to effectively organize and combine different data sources for analytic applications.

BAS-250   **Analytical Tools and Methods**   2 3 0 3
Requisites: BAS-230 (S24323); Take previously. Required. BAS-240 (S24330); Take previously. Required.
This course covers advanced statistical and analytic tools for use in decision-making. Topics include an overview of data mining, unsupervised machine learning techniques, analysis of semi-structured and unstructured data, and text analytics. Upon completion, students should be able to analyze complex data with modern analytical tools and methods.

BAS-270   **Advanced Analytical Tools and Methods**   2 3 0 3
Requisites: Take BAS-221(S24322) BAS-240; Take previously. Required. Take BAS-250(S24331); Take previously. Required.
This course covers the planning and execution of an analytics project that integrates the analytical knowledge and skills acquired through prior coursework. Students will define and carry out an analytics project from inception to final reporting. Upon completion, students should be able to demonstrate their ability to apply analytic methods and best practices in a simulated business setting.

BUILDING AUTOMATION SYSTEMS (BAT PREFIX)

BAT-111   **Building Automation Systems**   1 3 0 2
Requisites:
This course introduces the issues involved with building automation systems (BAS). Topics include digital direct control (DDC), field devices, human machine interface (HMI), BAS design and specification, energy conservation control strategies, and system maintenance. Upon completion, students should identify and describe the major components in a BAS, explain the basic functions of DDC systems and HMI basics, reference codes and standards applicable to BAS, and justify control components for project work.

BAT-117   **Principles of Heat and Fluids in Building Automation Technology** 3 0 0 3
Requisites:
This course introduces the principles of thermodynamics and fluid dynamics relative to building energy systems. Topics include thermodynamics, fluid dynamics, psychrometrics, principles of refrigeration, and building thermal loads. Upon completion, students should be able to apply thermal and fluid power laws and principles relative to building energy applications.

BAT-212   **Building Automation Technology Logic and Programming**   2 3 0 3
Requisites:
This course covers the concepts of logic and programming as applied to building automation system technology. Topics include logic expressions, number systems, programming basics, program constructs, data types, programming languages, and programming principles. Upon completion, students should be able to modify and debug building automation system software at the introductory level.

BAT-221   **Building Automation Systems Networking**   2 3 0 3
Requisites: Take BAT-111; Take previously. Required.
This course covers the fundamentals of common building automation system (BAS) networks. Topics include the fundamentals, standards, protocols, topologies, and benefits of various BAS networks. Upon completion, students should be able to install network hardware and software and diagnose common BAS network problems.

BAT-231   **Building Automation Systems Integration**   3 3 0 4
Requisites: Take BAT-111; Take previously. Required.
This course introduces control system integration practices, open protocols, and integration platforms. Topics include

TCP/IP, BACnet, Modbus, Lonorks, Tridium Niagara, fieldbus devices, and wireless devices. Upon completion, students should be able to assist in the installation and configuration of different standards-based technologies used in building automation systems.

BAT-251   Building Automation Controls   2 3 0 3
Requisites:
This course covers building automation control programming as currently used for systems monitoring and management. Topics include resource optimization, energy management, scheduling, design, installation and maintenance of automatic environmental controls. Upon completion, students should be able to write programs to monitor and manage building automation systems and select, install, and maintain controls for environmental systems.

BIOLOGY (BIO PREFIX)

BIO-110   Principles of Biology   3 3 0 4
Requisites: Take 1 group; Take MAT-003 ENG-002; Take MAT-003 ENG-111(S24022); Take MAT-003 DRE-098(S23643); Take DMA-010 DMA-020 DMA-030 DMA-040(S23170) DMA-050(S23171) DRE-098(S23643); Take DMA-010 DMA-020 DMA-030 DMA-040(S23170) DMA-050(S23171) ENG-111(S24022); Take DMA-010 DMA-020 DMA-030 DMA-040(S23170) DMA-050(S23171) ENG-002; Take MAT-121(S24993) ENG-002; Take MAT-121(S24993) ENG-111(S24022); Take MAT-121(S24993) DRE-098(S23643); Take MAT-143(S24995) ENG-111(S24022); Take MAT-143(S24995) ENG-002; Take MAT-143(S24995) DRE-098(S23643); Take MAT-152(S24996) ENG-111(S24022); Take MAT-152(S24996) ENG-002; Take MAT-152(S24996) DRE-098(S23643); Take MAT-171(S24997) ENG-111(S24022); Take MAT-171(S24997) ENG-002; Take MAT-171(S24997) DRE-098(S23643); Take previously. Required.
This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life. Laboratory exercises are designed to illustrate the basic principles presented in lecture.

BIO-111   General Biology I   3 3 0 4
Requisites: Take 1 group; Take MAT-003 ENG-002; Take MAT-003 ENG-111(S24022); Take MAT-003 DRE-098(S23643); Take DMA-010 DMA-020 DMA-030 DMA-040(S23170) DMA-050(S23171) DRE-098(S23643); Take DMA-010 DMA-020 DMA-030 DMA-040(S23170) DMA-050(S23171) ENG-111(S24022); Take DMA-010 DMA-020 DMA-030 DMA-040(S23170) DMA-050(S23171) ENG-002; Take MAT-121(S24993) ENG-002; Take MAT-121(S24993) ENG-111(S24022); Take MAT-121(S24993) DRE-098(S23643); Take MAT-143(S24995) ENG-111(S24022); Take MAT-143(S24995) ENG-002; Take MAT-143(S24995) DRE-098(S23643); Take MAT-152(S24996) ENG-111(S24022); Take MAT-152(S24996) ENG-002; Take MAT-152(S24996) DRE-098(S23643); Take MAT-171(S24997) ENG-111(S24022); Take MAT-171(S24997) ENG-002; Take MAT-171(S24997) DRE-098(S23643); Take previously. Required.
This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, molecular and cellular biology, metabolism and energy transformation, genetics, evolution, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. This course is the first in a two-semester series intended for science majors.

BIO-112   General Biology II   3 3 0 4
Requisites: Take BIO-111(S24020); Take previously. Required. Take BIO-111(S24020); Minimum grade C; Take previously. Required.
This course is a continuation of BIO 111. Emphasis is placed on organisms, evolution, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. This course is the second in a two-semester series intended for science majors.

BIO-140   Environmental Biology   3 0 0 3
Requisites:
This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues. Individual actions as part of the solution to regional environmental problems is stressed.

BIO-140A   **Environmental Biology Lab**   0 3 0 1
Requisites: Take BIO-140; Take either previously or concurrently. Required.
This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues. Environmentally responsible behavior at the individual level is investigated.

BIO-155   **Nutrition**   3 0 0 3
Requisites: Take 1 group; Take CHM-090; Take CHM-092; Take CHM-130; Take CHM-131; Take CHM-151; Take BIO-110(S24019); Take BIO-111(S24020); Take previously. Required.
This course covers the biochemistry of foods and nutrients with consideration of the physiological effects of specialized diets for specific biological needs. Topics include cultural, religious, and economic factors that influence a person's acceptance of food, as well as nutrient requirements of the various life stages. Upon completion, students should be able to identify the functions and sources of nutrients, the mechanisms of digestion, and the nutritional requirements of all age groups.

BIO-161   **Introduction to Human Biology**   3 0 0 3
Requisites:
This course provides a basic survey of human biology. Emphasis is placed on the basic structure and function of body systems and the medical terminology used to describe normal and pathological states. Upon completion, students should be able to demonstrate an understanding of normal anatomy and physiology and the appropriate use of medical terminology.

BIO-168   **Anatomy and Physiology I**   3 3 0 4
Requisites: Take 1 group; Take CHM-090 ENG-002; Take BIO-110(S24019) ENG-002; Take BIO-111(S24020) ENG-002; Take CHM-090 ENG-111(S25433); Take BIO-110(S24019) ENG-111(S25433); Take BIO-111(S24020) ENG-111(S25433); Take CHM-090 DRE-098(S23643); Take BIO-110(S24019) DRE-098(S23643); Take BIO-111(S24020) DRE-098(S23643); Take CHM-130 ENG-002; Take CHM-131 ENG-002; Take CHM-151 ENG-002; Take CHM-130 ENG-111(S25433); Take CHM-131 ENG-111(S25433); Take CHM-151 ENG-111(S25433); Take CHM-130 DRE-098(S23643); Take CHM-131 DRE-098(S23643); Take CHM-151 DRE-098(S23643); Take previously. Required.
This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. Laboratory exercises will include investigation of structural and functional aspects of the indicated organ systems.

BIO-169   **Anatomy and Physiology II**   3 3 0 4
Requisites: Take BIO-168(S11555); Take previously. Required. Take BIO-168(S11555); Minimum grade C; Take previously. Required.
This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. Laboratory exercises will include investigation of structural and functional aspects of the indicated organ systems.

BIO-175   **General Microbiology**   2 2 0 3
Requisites: Take BIO-110(S13284) BIO-111(S13307) BIO-163 BIO-165 or BIO-168(S11555); Take previously. Required. Take 1 group; Take BIO-110(S24019); Minimum grade C; Take BIO-111(S24020); Minimum grade C; Take BIO-163; Minimum grade C; Take BIO-165; Minimum grade C; Take BIO-168(S11555); Minimum grade C; Take previously. Required.
This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques.

BIO-250   **Genetics**   3 3 0 4
Requisites: Take BIO-112(S13261); Take previously. Required. Take BIO-112(S24021); Minimum grade C; Take previously. Required.
This course covers principles of prokaryotic and eukaryotic cell genetics. Emphasis is placed on the molecular basis of heredity, chromosome structure, patterns of Mendelian and non-Mendelian inheritance, evolution, and

biotechnological applications. Upon completion, students should be able to recognize and describe genetic phenomena and demonstrate knowledge of important genetic principles.

BIO-275   Microbiology   3 3 0 4
Requisites: Take 1 group; Take BIO-110(S24019); Take BIO-111(S13307); Take BIO-163; Take BIO-165; Take BIO-168(S11555); Take previously. Required. Take 1 group; Take BIO-110(S24019); Minimum grade C; Take BIO-111(S24020); Minimum grade C; Take BIO-163; Minimum grade C; Take BIO-165; Minimum grade C; Take BIO-168(S11555); Minimum grade C; Take previously. Required.
This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms.

BAKING AND PASTRY (BPA PREFIX)

BPA-120   Petit Fours and Pastries   1 4 0 3
Requisites: Take CUL-110(S11030) CUL-160(S13015); Take previously. Required. Take CUL-110(S22835) CUL-160(S22847); Take either previously or concurrently. Required.
This course introduces the basic principles of the preparation and plating of a variety of petit fours and individual dessert pastries. Emphasis is placed on traditional and contemporary petit fours and pastries utilizing updated production methods. Upon completion, students should be able to produce individual pastries and petit fours for buffet and special event settings.

BPA-130   European Cakes and Tortes   1 4 0 3
Requisites: Take CUL-110(S11030) CUL-160(S13015); Take previously. Required. Take CUL-110(S22835) CUL-160(S22847) CUL-260(S22857); Take previously. Required.
This course introduces the production of a wide variety of classical and modern cakes suitable for restaurants, retail shops and large-scale production. Emphasis is placed on classic cakes using the methods of mixing, filling, glazing and icing. Upon completion, students should be able to prepare, assemble, and decorate gelatin-based and layered tortes and cakes such as Bavarian, Dobos, and Sacher.

BPA-210   Cake Design and Decorating   1 4 0 3
Requisites: Take CUL-110(S11030) CUL-160(S13015); Take previously. Required. Take CUL-110(S22835) CUL-160(S22847); Take previously. Required.
This course covers advanced concepts in the design and decoration of wedding cakes and other specialty cakes. Topics include baking, filling, and assembling cakes; cake design; finishing techniques utilizing gum paste, fondant, and royal icing; and advanced piping skills. Upon completion, students should be able to design, create, finish and evaluate the quality of wedding and specialty cakes.

BPA-220   Confection Artistry   1 6 0 4
Requisites: Take CUL-110(S11030) CUL-160(S13015); Take previously. Required. Take CUL-110(S22835) CUL-160(S22847); Take previously. Required.
This course introduces the principles and techniques of decorative sugar work and confectionary candy. Topics include nougat, marzipan modeling, pastillage and cocoa painting, confection candy and a variety of sugar techniques including blown, spun, poured and pulled. Upon completion, students should be able to prepare edible centerpieces and confections to enhance dessert buffets and plate presentations.

BPA-230   Chocolate Artistry   1 4 0 3
Requisites: Take CUL-110(S11030) CUL-160(S13015); Take previously. Required. Take CUL-110(S22835) CUL-160(S22847); Take previously. Required. Take BPA-230A; Take either previously or concurrently. Required.
This course provides a study in the art and craft of chocolate. Topics include chocolate tempering, piping, and molding; decorative work associated with cakes and centerpieces; and the candy production techniques of filling, enrobing and dipping. Upon completion, students should be able to properly evaluate tempered chocolate and produce a variety of chocolate candies and decorative elements for garnishing desserts.

BPA-230A   **Chocolate Artistry Lab**   0 2 0 1
Requisites: Take CUL-110(S11030) CUL-160(S13015); Take previously. Required. Take BPA-230(S20766); Take either previously or concurrently. Required. Take BPA-230(S22831) CUL-110(S22835) CUL-160(S22847); Take either previously or concurrently. Required.
This course provides a laboratory experience for enhancing student skills in the art and craft of chocolate. Emphasis is placed on chocolate tempering, piping, and molding; decorative work associated with cakes and centerpieces; and candy production techniques of filling, enrobing and dipping. Upon completion, students should be able to demonstrate a basic proficiency in the preparation of decorative chocolate centerpieces, garnishes and candies.

BPA-240   **Plated Desserts**   1 4 0 3
Requisites: Take CUL-110(S11030) CUL-160(S13015); Take previously. Required. Take CUL-110(S22835) CUL-160(S22847) CUL-260(S22857); Take previously. Required.
This course provides a study in the elements and principles of design as they relate to plated desserts. Topics include plate composition, portioning, flavor pairings, textures, temperatures, eye appeal, balance, color harmony and plate decorating/painting techniques such as stenciling and chocolate striping. Upon completion, students should be able to demonstrate competence in combining a variety of dessert components enhanced with plate decorating techniques.

BPA-250   **Dessert and Bread Production**   1 8 0 5
Requisites: Take BPA-150; Take previously. Required. Take CUL-110(S22835) CUL-160(S22847) CUL-260(S22857) BPA-150 BPA-210(S22830) BPA-260(S22834); Take either previously or concurrently. Required.
This course is designed to merge artistry and innovation with the practical baking and pastry techniques utilized in a production setting. Emphasis is placed on quantity bread and roll-in dough production, plated and platter presentations, seasonal/theme product utilization and cost effectiveness. Upon completion, students should be able to plan, prepare and evaluate breads and desserts within a commercial environment and determine production costs and selling prices.

BPA-260   **Pastry and Baking Marketing**   2 2 0 3
Requisites: Take BPA-150 BPA-210(S22830); Take previously. Required. Take BPA-250(S22833); Take either previously or concurrently. Required. Take BPA-250(S23072) CUL-260(S22857); Take either previously or concurrently. Required.
This course is designed to cover the marketing concepts and merchandising trends utilized in bakery and pastry operations. Emphasis is placed on menu planning, pricing products/strategies, resale and wholesale distribution methods, legal implications, and advertising techniques. Upon completion, students should be able to create a marketing plan that will serve as a basis for a capstone experience.

BIOPROCESSING MANUFACTURING TECHNOLOGY (BPM PREFIX)

BPM-110   **Bioprocess Practices**   3 4 0 5
Requisites:
This course provides a study of plant operations including various plant utility systems and detailed study of the varied plant environments in a bioprocessing facility. Emphasis is placed on quality mindset and principles of validation through applications of monitoring procedures. Upon completion, students should be able to demonstrate the rigors of industry regulation and its necessity.

BLUEPRINT READING (BPR PREFIX)

BPR-111   **Print Reading**   1 2 0 2
Requisites:
This course introduces the basic principles of print reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic prints and visualize the features of a part or system.

BPR-130   **Print Reading-Construction**   3 0 0 3
Requisites:
This course covers the interpretation of prints and specifications that are associated with design and construction projects. Topics include interpretation of documents for foundations, floor plans, elevations, and related topics. Upon completion, students should be able to read and interpret construction prints and documents.

BPR-230   **Commercial Blueprints**   1 2 0 2
Requisites: Take BPR-130(S11505); Take previously. Required.
This course covers blueprints specific to commercial structures and requires basic blueprint reading skills and/or a commercial construction background. Topics include site, structural, mechanical, electrical, and plumbing blueprints and specifications. Upon completion, students should be able to interpret commercial blueprints and specifications.

BIOTECHNOLOGY (BTC PREFIX)

BTC-150   **Bioethics**   3 0 0 3
Requisites: Take DRE-098(S23643) ENG-002 ENG-111(S25433) or BSP-4002; Take either previously or concurrently. Required.
This course introduces the current ethics issues surrounding the biotechnology industries. Topics will include risk assessment, the relationships between science, technology, and society, and the effects of new biotechnology products upon the natural world. Upon completion, students should be able to demonstrate knowledge and critical thinking skills in decision-making related to bioethical issues.

BTC-181   **Basic Laboratory Techniques**   3 3 0 4
Requisites:
This course introduces the basic skills and knowledge necessary in a biological or chemical laboratory. Emphasis is placed on good manufacturing practices, safety, sustainable lab practices, solution preparation, and equipment operation and maintenance following standard operating procedures. Upon completion, students should be able to prepare and perform basic laboratory procedures using labware, solutions, and equipment according to prescribed protocols.

BTC-270   **Recombinant DNA Technology**   3 3 0 4
Requisites: Take 1 group; Take BTC-250(S20616) BTC-181(S13895); Take BIO-250 BTC-181(S13895); Take previously. Required.
This course covers basic methods in biotechnology for the manipulation of nucleic acids. Emphasis is placed on topics concerning techniques used in recombinant DNA technology, including PCR, restriction digests, mapping, cloning, and forensics. Upon completion, students should be able to demonstrate an understanding of the theory, practice, and application of recombinant DNA techniques.

BTC-275   **Industrial Microbiology**   3 3 0 4
Requisites: Take BIO-110(S13284) BIO-111(S13307) BIO-163 BIO-165 or BIO-168(S11555); Take previously. Required.
This course covers principles of microbiology and the impact microorganisms have on man and the environment in industrial settings where controlled environments are commonplace. Topics include the structure and physiology of various classes of microorganisms, microbial pathogenicity, infectious diseases, identification schemes, and prevention or minimization of contamination in biomanufacturing industrial settings. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, identification of microorganisms, and performing environmental monitoring.

BTC-281   **Bioprocess Techniques**   2 6 0 4
Requisites: Take BTC-181; Take previously. Required.
This course covers processes used in the production of biomolecules. Emphasis is placed on the production, characterization, and purification of biological products using fermentation, centrifugation, filtration, electrophoresis, and other techniques used in industry. Upon completion, students should be able to produce biological products using the various methods of bioprocessing.

BTC-285   **Cell Culture**   2 3 0 3
Requisites: Take BIO-175(S20491) BIO-275(S22585) or BTC-275(S23358); Take previously. Required.
This course introduces the theory and practices required to successfully initiate and maintain plant and animal cell cultures. Topics include aseptic techniques, the growth environment, routine maintenance of cell cultures, specialized culture techniques, and various applications. Upon completion, students should be able to demonstrate the knowledge and skills required to grow, maintain, and manipulate cells in culture.

CURRICULUM COURSE DESCRIPTIONS

BUSINESS (BUS PREFIX)

BUS-110   Introduction to Business   3 0 0 3
Requisites:
This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects.

BUS-115   Business Law I   3 0 0 3
Requisites:
This course introduces the student to the legal and ethical framework of business. Contracts, negotiable instruments, the law of sales, torts, crimes, constitutional law, the Uniform Commercial Code, and the court systems are examined. Upon completion the student should be able to identify legal and ethical issues that arise in business decisions and the laws that apply to them.

BUS-116   Business Law II   3 0 0 3
Requisites: Take BUS-115(S24153); Take previously. Required.
This course includes the study of the legal and ethical framework of business. Business Organizations, property law, intellectual property law, agency and employment law, consumer law, secured transactions, and bankruptcy are examined. Upon completion, the student should be able to identify legal and ethical issues that arise in business decisions and the laws that apply to them.

BUS-121   Business Math   2 2 0 3
Requisites:
This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business.

BUS-125   Personal Finance   3 0 0 3
Requisites:
This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan.

BUS-137   Principles of Management   3 0 0 3
Requisites:
This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management.

BUS-151   People Skills   3 0 0 3
Requisites:
This course introduces the basic concepts of identity and communication in the business setting. Topics include self-concept, values, communication styles, feelings and emotions, roles versus relationships, and basic assertiveness, listening, and conflict resolution. Upon completion, students should be able to distinguish between unhealthy, self-destructive, communication patterns and healthy, non-destructive, positive communication patterns.

BUS-153   Human Resource Management   3 0 0 3
Requisites:
This course introduces the functions of personnel/human resource management within an organization. Topics include equal opportunity and the legal environment, recruitment and selection, performance appraisal, employee development, compensation planning, and employee relations. Upon completion, students should be able to anticipate and resolve human resource concerns.

BUS-173   Procurement Management   3 0 0 3
Requisites:
This course examines purchasing and materials management including function, organization, quality and quantity considerations, pricing policies, supplier selection, and ethical and legal implications. Topics include purchasing procedures, value analysis, inventory control, logistics, capital equipment, budgets, and institutional and governmental purchasing practices. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques of purchasing and materials management.

BUS-175   **Contract Negotiations**   3 0 0 3
Requisites:
This course covers theory, strategies, techniques and tactics for negotiating contracts, and principles and practices of negotiations for government, corporate or institutional procurements. Topics include preparation and conduct of negotiations and methods of dealing with situations under different types of negotiations. Upon completion, students should be able to effectively negotiate contracts.

BUS-210   **Investment Analysis**   3 0 0 3
Requisites: Take ACC-111 or ACC-120(S10290); Take previously. Required.
This course examines the concepts related to financial investment and the fundamentals of managing investments. Emphasis is placed on the securities markets, stocks, bond, and mutual funds, as well as tax implications of investment alternatives. Upon completion, students should be able to analyze and interpret investment alternatives and report findings to users of financial information.

BUS-217   **Employment Law and Regulations**   3 0 0 3
Requisites:
This course introduces the principle laws and regulations affecting public and private organizations and their employees or prospective employees. Topics include fair employment practices, EEO, affirmative action, and employee rights and protections. Upon completion, students should be able to evaluate organization policy for compliance and assure that decisions are not contrary to law.

BUS-225   **Business Finance**   2 2 0 3
Requisites: Take ACC-120(S10290); Take previously. Required.
This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management.

BUS-230   **Small Business Management**   3 0 0 3
Requisites:
This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan.

BUS-234   **Training and Development**   3 0 0 3
Requisites:
This course covers developing, conducting, and evaluating employee training with attention to adult learning principles. Emphasis is placed on conducting a needs assessment, using various instructional approaches, designing the learning environment, and locating learning resources. Upon completion, students should be able to design, conduct, and evaluate a training program.

BUS-240   **Business Ethics**   3 0 0 3
Requisites:
This course introduces contemporary and controversial ethical issues that face the business community. Topics include moral reasoning, moral dilemmas, law and morality, equity, justice and fairness, ethical standards, and moral development. Upon completion, students should be able to demonstrate an understanding of their moral responsibilities and obligations as members of the workforce and society.

BUS-245   **Entrepreneurship II**   3 0 0 3
Requisites: Take BUS-139(S21145); Take previously. Required.
This course is designed to allow the student to develop a business plan. Topics include the need for a business plan, sections of the plan, writing the plan, and how to find assistance in preparing the plan. Upon completion, students should be able to design and implement a business plan based on sound entrepreneurship principles.

BUS-255   **Organizational Behavior in Business**   3 0 0 3
Requisites:
This course covers the impact of different management practices and leadership styles on worker satisfaction and morale, organizational effectiveness, productivity, and profitability. Topics include a discussion of formal and informal organizations, group dynamics, motivation, and managing conflict and change. Upon completion, students should be able to analyze different types of interpersonal situations and determine an appropriate course of action.

BUS-256   **Recruiting,Selection&Personnel Planning**   3 0 0 3
Requisites:
This course introduces the basic principles involved in managing the employment process. Topics include personnel planning, recruiting, interviewing and screening techniques, maintaining employee records; and voluntary and involuntary separations. Upon completion, students should be able to acquire and retain employees who match position requirements and fulfill organizational objectives.

BUS-258   **Compensation and Benefits**   3 0 0 3
Requisites:
This course is designed to study the basic concepts of pay and its role in rewarding performance. Topics include wage and salary surveys, job analysis, job evaluation techniques, benefits, and pay-for-performance programs. Upon completion, students should be able to develop and manage a basic compensation system to attract, motivate, and retain employees.

BUS-259   **Human Resource Management Applications**   3 0 0 3
Requisites: Take BUS-217(S24154) or BUS-234(S24155); Take previously. Required.
This course provides students in the Human Resource Management concentration the opportunity to reinforce their learning experiences from preceding HRM courses. Emphasis is placed on application of day-to-day HRM functions by completing in-basket exercises and through simulations. Upon completion, students should be able to determine the appropriate actions called for by typical events that affect the status of people at work. This course is a unique concentration requirement of the Human Resources Management concentration in the Business Administration program.

BUS-260   **Business Communication**   3 0 0 3
Requisites: Take ENG-110(S24002) or ENG-111(S24022); Take previously. Required.
This course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the work place.

BUS-274   **Contract Administration**   3 0 0 3
Requisites:
This course covers the technical and fundamental procedures of contract management. Topics include contract oversight, quality assurance, compliance, financing, cost controls, documentation, terminations and disputes, subcontract management, and audit. Upon completion, students should be able to apply the principles of administering contracts.

BUS-285   **Business Management Issues**   2 2 0 3
Requisites: Take BUS-137(S12782); Take previously. Required. Take BUS-110(S24149); Take previously.
Required.
This course covers contemporary issues that affect successful businesses and their managers and employees. Emphasis is placed on using case studies and exercises to develop analytical and problem-solving skills, ethics, quality management concepts, team skills, and effective communication. Upon completion, students should be able to apply the specific knowledge and skills covered to become more effective managers and employees.

CARPENTRY (CAR PREFIX)

CAR-140   **Basic Carpentry**   2 6 0 4
Requisites:
This course covers the basic construction of wood structures, and installation, maintenance, and repair of the many components within these structures. Topics include safe use of tools, implementation of standard practices, appropriate use of materials, and installation/repair of components such as doors, windows, roofing, and siding. Upon completion, students should be able to construct, install/repair wooden structures and components using appropriate tools, materials and standard practices from the carpentry trade.

CURRICULUM COURSE DESCRIPTIONS

COMPUTED TOMOGRAPHY (CAT PREFIX)

CAT-210   **CT Physics & Equipment**   3 0 0 3
Requisites:
This course covers the system operations and components, image processing and display, image quality, and artifacts in computed tomography. Emphasis is placed on the data acquisition components, tissue attenuation conversions, image manipulation, and factors controlling image resolution. Upon completion, students should be able to understand the physics and instrumentation used in computed tomography.

CAT-211   **CT Procedures**   4 0 0 4
Requisites:
This course is designed to cover specialized patient care, cross-sectional anatomy, contrast media, and scanning procedures in computed tomography. Emphasis is placed on patient assessment and monitoring, contrast agents' use, radiation safety, methods of data acquisition, and identification of cross-sectional anatomy. Upon completion, students should be able to integrate all facets of the imaging procedures in computed tomography.

CAT-224   **CT Clinical Practicum**   0 0 12 4
Requisites:
This course provides the opportunity to apply knowledge gained from classroom instruction to the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in computed tomography. Upon completion, students should be able to assume a variety of duties and responsibilities within the computed tomography clinical environment.

CAT-226   **CT Clinical Practicum**   0 0 18 6
Requisites:
This course provides the opportunity to apply knowledge gained from classroom instruction to the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in computed tomography. Upon completion, students should be able to assume a variety of duties and responsibilities within the computed tomography clinical environment.

CAT-261   **CT Exam Prep**   1 0 0 1
Requisites:
This course is a review of the components specific to CT imaging technology as practiced in didactic and clinical settings. Emphasis is placed on content specifications of the ARRT post primary certification in CT. Upon completion, students should be able to demonstrate an understanding of the topics presented for successful completion of the ARRT post-primary certification exam.

CYBER CRIME TECHNOLOGY (CCT PREFIX)

CCT-121   **Computer Crime Investigation**   3 2 0 4
Requisites: Take NOS-110(S20980) NET-125(S24501); Take previously. Required.
This course introduces the fundamental principles of computer crime investigation processes. Topics include crime scene/incident processing, information gathering techniques, data retrieval, collection and preservation of evidence, preparation of reports and court presentations. Upon completion, students should be able to identify cyber crime activity and demonstrate proper investigative techniques to process the scene and assist in case prosecution.

CCT-220   **Forensic Accounting**   3 3 0 4
Requisites: Take ACC-267; Take previously. Required.
This course introduces the basic principles and procedures of investigative accounting and analysis of financial evidence. Emphasis is placed on collecting data and evidence, evaluation of internal control systems, accounting systems, concealed income analysis and fraud detection. Upon completion, students should be able to apply generally accepted accounting standards and procedures for conducting a criminal investigation audit for financial information.

CCT-240   **Data Recovery Techniques**   2 3 0 3
Requisites: Take CCT-121; Take previously. Required.
This course introduces the unique skills and methodologies necessary to assist in the investigation and prosecution of cyber crimes. Topics include hardware and software issues, recovering erased files, overcoming encryption, advanced imaging, transient data, Internet issues and testimony considerations. Upon completion, students should be able to recover digital evidence, extract information for criminal investigation and legally seize criminal evidence.

CCT-250   **Network Vulnerabilities I**   2 2 0 3
Requisites: Take NET-110(S21056) or CTI-120(S22511); Take previously. Required. Take NOS-120(S24396)
NOS-130(S24397); Take previously. Required.
This course introduces students to penetration testing, network vulnerabilities, and hacking. Topics include an
overview of traditional network security, system hardening, and known weaknesses. Upon completion, students
should be able to evaluate weaknesses of traditional and wireless network for the purpose of incident response,
reconstruction, and forensic investigation.

CCT-251   **Network Vulnerabilities II**   2 2 0 3
Requisites: Take CCT-250(S21749); Take previously. Required.
This course advances students' knowledge of penetration testing, network vulnerabilities, and hacking. Topics include
analyzing advanced techniques for circumventing network security hardware and software. Upon completion,
students should be able to assemble test kits for multiple operating systems, scan and footprint networks, and
perform advanced forensic investigation.

CIVIL ENGINEERING AND GEOMATIC (CEG PREFIX)

CEG-111   **Introduction to Gis and Gnss**   2 4 0 4
Requisites:
This course introduces the methods and techniques used in the Geographic Information Systems (GIS) and Global
Navigation Satellite Systems (GNSS) professions. Emphasis is placed on data collection and mapping using GIS
software. Upon completion, students should be able to use GNSS technologies to collect field data and create GIS
maps.

CEG-115   **Intro to Tech & Sustainability**   2 3 0 3
Requisites:
This course introduces basic skills, sustainability concepts and career fields for technicians. Topics include career
options, technical vocabulary, dimensional analysis, measurement systems, engineering graphics, professional
ethics, and related topics. Upon completion, students should be able to identify drawing elements and create
sketches, perform basic engineering computations and identify measures of sustainable development.

CEG-115A   **Technology and Sustainability Lab**   0 3 0 1
Requisites: Take CEG-115; Take either previously or concurrently. Recommended.
This course provides a lab experience that requires students to apply principles of sustainable development and
engineering computations, measurement, and drawing to hands-on activities and in actual settings. Emphasis is
placed on basic engineering technology and sustainable development topics. Upon completion, students should be
able to recognize appropriate technologies for particular projects and scenarios.

CEG-151   **Cad for Engineering Technology**   2 3 0 3
Requisites:
This course introduces computer-aided drafting (CAD) software. Topics include file and data management, drawing,
editing, dimensioning commands, plotting, and related topics. Upon completion, students should be able to create
and plot basic drawings and maps using CAD software.

CEG-210   **Construction Materials & Methods**   2 3 0 3
Requisites: Take CEG-115 or EGR-115(S20666); Take previously. Required.
This course covers the behavior and properties of Portland cement, asphaltic concretes, and other construction
materials, including construction methods and equipment. Topics include cementing agents, aggregates, water and
admixture materials with their proportions, production, placement, consolidation, curing; and their inspection. Upon
completion, students should be able to proportion Portland concrete mixes to attain predetermined strengths, perform
standard control tests on Portland cement concrete, identify inspection criteria for concretes, identify construction
equipment and applications.

CEG-211   **Hydrology & Erosion Control**   2 3 0 3
Requisites: Take 1 group; Take MAT-121(S25429); Take MAT-171(S25432); Take DMA-060(S24985) DMA-
070(S24987) DMA-080(S24988); Take DMA-065(S24986); Take MAT-003; From rule RMINP2M; Take BSP-4003;
From rule BSPMINP2; Take previously. Required.
This course introduces basic engineering principles and characteristics of hydrology, erosion and sediment control.
Topics include storm water runoff, gravity pipe flow, open channel flow, low impact development (LID), erosion control
devices and practices. Upon completion, students should be able to analyze and design gravitational drainage
structures, identify LID and erosion control elements, and prepare a storm water drainage plan.

CEG-212   Introduction to Environmental Technology   2 3 0 3
Requisites: Take EGR-250 EGR-251 or MEC-210; Take previously. Required. Take 1 group; Option: Take EGR-250 CEG-115 or EGR-115; Option: Take EGR-251 CEG-115 or EGR-115; Option: Take MEC-210 CEG-115 or EGR-115; Take previously. Required.
This course introduces basic engineering principles of hydraulics, and water and wastewater technologies. Topics include fluid statics, fluid dynamics, flow measurement, the collection, treatment, and distribution of water and wastewater. Upon completion, students should be able to identify water and wastewater system elements, describe water and wastewater system processes, and perform basic hydraulics and treatment computations.

CEG-230   Subdivision Planning & Design   1 6 0 3
Requisites: Take CEG-151 DFT-151 or EGR-120(S20678); Take 1 courses; From courses CEG-211(S23515); Take SRV-111 or CIV-215(S23476); Take previously. Required. Take 1 group; Take CEG-151 CEG-211(S23951) CIV-125(S21521) SRV-111 CEG-115 or EGR-115(S20666); Take DFT-151 CEG-211(S23951) CIV-125(S21521) SRV-111 CEG-115 or EGR-115(S20666); Take EGR-120(S23536) CEG-211(S23951) CIV-125(S21521) SRV-111 CEG-115 or EGR-115(S20666); Take CEG-151 CEG-211(S23951) CIV-125(S21521) CIV-215(S23955) CEG-115 or EGR-115(S20666); Take DFT-151 CEG-211(S23951) CIV-125(S21521) CIV-215(S23955) CEG-115 or EGR-115(S20666); Take EGR-120(S23536) CEG-211(S23951) CIV-125(S21521) CIV-215(S23955) CEG-115 or EGR-115(S20666); Take previously. Required.
This course covers the planning and design concepts related to subdivisions including analysis of development standards, engineering, and the creation of CAD drawings. Topics include applicable codes, lot creation, roadway system layout, storm water drainage, low impact development (LID) concepts, and related topics. Upon completion, students should be able to prepare a set of subdivision plans.

CEG-235   Project Management and Estimating   2 3 0 3
Requisites: Take CIS-110(S21058) CIS-111(S21059) CEG-115 EGR-115(S20666) or EGR-125; Take previously. Required.
This course covers planning and estimating practices which are applicable to the civil engineering and related construction industries. Emphasis is placed on construction project planning and management, material take-offs labor and equipment requirements in accordance with industry formats, and other economic topics. Upon completion, students should be able to accurately complete material take-offs, prepare cost estimates, and prepare construction schedules.

CHEMISTRY (CHM PREFIX)

CHM-090   Chemistry Concepts   4 0 0 4
Requisites: Take 1 group; Take ENG-002 MAT-003; Take ENG-111(S24022) MAT-003; Take DRE-098(S23643) DMA-010 DMA-020 DMA-030 DMA-040(S23170); Take DRE-098(S23643) MAT-003; Take DRE-098(S23643) MAT-110(S24992); Take DRE-098(S23643) MAT-121(S24993); Take ENG-002 DMA-010 DMA-020 DMA-030 DMA-040(S23170); Take ENG-111(S24022) DMA-010 DMA-020 DMA-030 DMA-040(S23170); Take ENG-002 MAT-110(S24992); Take ENG-111(S24022) MAT-110(S24992); Take ENG-111(S24022) MAT-121(S24993); Take ENG-002 MAT-121(S24993); Take ENG-111(S24022) MAT-143(S24995); Take ENG-002 MAT-143(S24995); Take ENG-111(S24022) MAT-152(S24996); Take ENG-002 MAT-152(S24996); Take ENG-111(S24022) MAT-171(S24997); Take ENG-002 MAT-171(S24997); Take previously. Required.
This course provides a non-laboratory based introduction to basic concepts of chemistry. Topics include measurements, matter, energy, atomic theory, bonding, molecular structure, nomenclature, balancing equations, stoichiometry, solutions, acids and bases, gases, and basic organic chemistry. Upon completion, students should be able to understand and apply basic chemical concepts necessary for success in college-level science courses.

CHM-130   General, Organic, & Biochemistry   3 0 0 3
Requisites: Take 1 group; Take ENG-002 MAT-003; Take ENG-111(S24022) MAT-003; Take DRE-098(S23643) DMA-010 DMA-020 DMA-030 DMA-040(S23170); Take DRE-098(S23643) MAT-003; Take DRE-098(S23643) MAT-110(S24992); Take DRE-098(S23643) MAT-121(S24993); Take ENG-002 DMA-010 DMA-020 DMA-030 DMA-040(S23170); Take ENG-111(S24022) DMA-010 DMA-020 DMA-030 DMA-040(S23170); Take ENG-002 MAT-110(S24992); Take ENG-111(S24022) MAT-110(S24992); Take ENG-111(S24022) MAT-121(S24993); Take ENG-002 MAT-121(S24993); Take ENG-111(S24022) MAT-143(S24995); Take ENG-002 MAT-143(S24995); Take ENG-111(S24022) MAT-152(S24996); Take ENG-002 MAT-152(S24996); Take ENG-111(S24022) MAT-171(S24997); Take ENG-002 MAT-171(S24997); Take previously. Required.
This course provides a survey of basic facts and principles of general, organic, and biochemistry. Topics include measurement, molecular structure, nuclear chemistry, solutions, acid-base chemistry, gas laws, and the structure, properties, and reactions of major organic and biological groups. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts.

CHM-131   **Introduction to Chemistry**   3 0 0 3
Requisites:
This course introduces the fundamental concepts of inorganic chemistry. Topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields.

CHM-131A   **Introduction to Chemistry Lab**   0 3 0 1
Requisites: Take CHM-131; Take either previously or concurrently. Required.
This course is a laboratory to accompany CHM 131. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 131. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 131.

CHM-132   **Organic and Biochemistry**   3 3 0 4
Requisites: Take 1 group; Take CHM-131 CHM-131A; Take CHM-151; Take previously. Required.
This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts needed to pursue studies in related professional fields.

CHM-152   **General Chemistry II**   3 3 0 4
Requisites: Take CHM-151; Take previously. Required. Take CHM-151; Minimum grade C; Take previously. Required.
This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. Students will develop laboratory skills learned in CHM 151 and give an oral presentation on a chemically relevant subject.

CHM-251   **Organic Chemistry I**   3 3 0 4
Requisites: Take CHM-152; Take previously. Required. Take CHM-152; Minimum grade C; Take previously. Required.
This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers; further topics include isomerization, stereochemistry, and spectroscopy. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of covered organic topics as needed in CHM 252. Students will perform basic synthetic and analytic techniques on organic compounds.

CHM-252   **Organic Chemistry II**   3 3 0 4
Requisites: Take CHM-251; Take previously. Required. Take CHM-251; Minimum grade C; Take previously. Required.
This course provides continuation of the systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of aromatics, aldehydes, ketones, carboxylic acids and derivatives, amines and heterocyclics; multi-step synthesis will be emphasized. Upon completion, students should be able to demonstrate an understanding of organic concepts as needed to pursue further study in chemistry and related professional fields. Students will conduct a multi-step synthetic scheme in the laboratory component.

INFORMATION SYSTEMS (CIS PREFIX)

CIS-110   **Introduction to Computers**   2 2 0 3
Requisites:
This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems.

CIS-111   **Basic PC Literacy**   1 2 0 2
Requisites:
This course provides an overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and fundamental workplace use. Upon completion, students should be able to demonstrate basic personal computer skills.

CIS-115   **Introduction to Programming and Logic**   2 3 0 3
Requisites: Take 1 group; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983); Take DMA-025 DMA-040(S24983); Take MAT-121(S25429); Take MAT-171(S25432); Take MAT-003; Take BSP-4003; Take previously. Required.
This course introduces computer programming and problem solving in a structured program logic environment. Topics include language syntax, data types, program organization, problem solving methods, algorithm design, and logic control structures. Upon completion, students should be able to use top-down algorithm design and implement algorithmic solutions in a programming language.

CIVIL ENGINEERING TECHNOLOGY (CIV PREFIX)

CIV-111   **Soils and Foundations**   2 4 0 4
Requisites: Take EGR-250(S23987) EGR-251 or MEC-210(S20669); Take previously. Required. Take 1 group; Take EGR-250(S23987) CEG-115; Take EGR-250(S23987) EGR-115(S20666); Take EGR-251 CEG-115; Take EGR-251 EGR-115(S20666); Take MEC-210(S20669) CEG-115; Take MEC-210(S20669) EGR-115(S20666); Take previously. Required.
This course presents an overview of soil as a construction material using both analysis and testing procedures. Topics include index properties, classification, stress analysis, compressibility, compaction, dewatering, excavation, stabilization, settlement, and foundations. Upon completion, students should be able to perform basic soil tests and analyze engineering properties of soil.

CIV-125   **Civil/Surveying CAD**   1 6 0 3
Requisites: Take CEG-151 DFT-151 or ARC-114; Take previously. Required.
This course introduces civil/surveying computer-aided drafting (CAD) software. Topics include drawing, editing, and dimensioning commands; plotting; and other related civil/survying topics. Upon completion, students should be able to produce civil/surveying drawings using CAD software. This course utilizes Land Development Desktop Software.

CIV-215   **Highway Technology**   2 3 0 3
Requisites: Take 1 group; Take CEG-115 MAT-121(S23927); Take CEG-115 MAT-171(S23934); Take EGR-115(S20666) MAT-121(S23927); Take EGR-115(S20666) MAT-171(S23934); Take previously. Required. Take 1 group; Take CEG-115 MAT-121(S23927) CIV-125(S21521) SRV-111; Take CEG-115 MAT-171(S20807) CIV-125(S21521) SRV-111; Take EGR-115(S20666) MAT-121(S23927) CIV-125(S21521) SRV-111; Take EGR-115(S20666) MAT-171(S20807) CIV-125(S21521) SRV-111; Take previously. Required.
This course introduces the essential elements of roadway components and design. Topics include subgrade and pavement construction, roadway drawings and details, traffic analysis, geometric design and other related topics. Upon completion, students should be able to interpret roadway details and specifications, and produce street and highway construction drawings.

CIV-240   **Project Management**   2 3 0 3
Requisites:
This course introduces construction planning and scheduling techniques and project management software. Topics include construction safety, operation analysis, construction scheduling, construction control systems, claims and dispute resolutions, project records and documentation. Upon completion, students should be able to demonstrate an understanding of the roles of construction project participants, maintain construction records, and prepare construction schedules.

CRIMINAL JUSTICE (CJC PREFIX)

CJC-111	**Introduction to Criminal Justice**	3 0 0 3
Requisites:
This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options.

CJC-112	**Criminology**	3 0 0 3
Requisites:
This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

CJC-113	**Juvenile Justice**	3 0 0 3
Requisites:
This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify/discuss juvenile court structure/procedures, function and jurisdiction of juvenile agencies, processing/detention of juveniles, and case disposition.

CJC-115	**Crime Scene Photography**	2 3 0 3
Requisites:
This course covers methodologies for photographing crime scenes including their application to forensic sciences, the legal system, and the proper use of digital cameras and accessories. Topics include digital cameras, operational functions required to properly photograph physical evidence and crime scenes, factors affecting admissibility of crime scene photographs, and methods and techniques specific to photographing crime scenes. Upon completion, students should be able to operate digital cameras using appropriate settings to control exposure and depth of field, properly compose various types of crime scene photographs, and use specialized techniques to properly photograph key items of evidence.

CJC-120	**Interviews/Interrogations**	1 2 0 2
Requisites:
This course covers basic and special techniques employed in criminal justice interviews and interrogations. Emphasis is placed on the interview/interrogation process, including interpretation of verbal and physical behavior and legal perspectives. Upon completion, students should be able to conduct interviews/interrogations in a legal, efficient, and professional manner and obtain the truth from suspects, witnesses, and victims.

CJC-122	**Community Policing**	3 0 0 3
Requisites:
This course covers the historical, philosophical, and practical dimensions of community policing. Emphasis is placed on the empowerment of police and the community to find solutions to problems by forming partnerships. Upon completion, students should be able to define community policing, describe how community policing strategies solve problems, and compare community policing to traditional policing.

CJC-131	**Criminal Law**	3 0 0 3
Requisites:
This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

CJC-132	**Court Procedure & Evidence**	3 0 0 3
Requisites:
This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

CURRICULUM COURSE DESCRIPTIONS

CJC-141   Corrections   3 0 0 3
Requisites:
This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system.

CJC-144   Crime Scene Processing   2 3 0 3
Requisites:
This course introduces the theories and practices of crime scene processing and investigating. Topics include legal considerations at the crime scene, processing indoor and outdoor scenes, recording, note taking, collection and preservation of evidence and submission to the crime laboratory. Upon completion, the student should be able to evaluate and search various crime scenes and demonstrate the appropriate techniques.

CJC-146   Trace Evidence   2 3 0 3
Requisites:
This course provides a study of trace evidence as it relates to forensic science. Topics include collection, packaging, and preservation of trace evidence from crime scenes such as bombings, fires and other scenes. Upon completion, students should be able to demonstrate the fundamental concepts of trace evidence collection, preservation and submission to the crime laboratory.

CJC-161   Introduction to Homeland Security   3 0 0 3
Requisites:
This course introduces the historical, organizational and practical aspects of Homeland Security. Topics include a historic overview, definitions and concepts, organizational structure, communications, technology, mitigation, prevention and preparedness, response and recovery, and the future of Homeland Security. Upon completion, students should be able to explain essential characteristics of terrorism and Homeland Security, and define roles, functions and interdependency between agencies.

CJC-163   Transportation and Border Security   3 0 0 3
Requisites:
This course provides an in-depth view of modern border and transportation security including the technologies used for detecting potential threats from terrorists and weapons. Topics include an overview of security challenges, detection devices and equipment, transportation systems, facilities, threats and counter-measures, and security procedures, policies and agencies. Upon completion, students should be able to describe border security, the technologies used to enforce it, and the considerations and strategies of border security agencies.

CJC-170   Critical Incident Mgmt for Public Safety   3 0 0 3
Requisites:
This course prepares the student to specialize in the direct response, operations, and management of critical incidents. Emphasis is placed upon the theoretical and applied models to understand and manage disasters, terrorism, and school/work place violence. Upon completion, the student should be able to identify and discuss managerial techniques legal issues, and response procedures to critical incidents.

CJC-211   Counseling   3 0 0 3
Requisites:
This course introduces the basic elements of counseling and specific techniques applicable to the criminal justice setting. Topics include observation, listening, recording, interviewing, and problem exploration necessary to form effective helping relationships. Upon completion, students should be able to discuss and demonstrate the basic techniques of counseling.

CJC-212   Ethics & Community Relations   3 0 0 3
Requisites:
This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

CJC-213   **Substance Abuse**   3 0 0 3
Requisites:
This course is a study of substance abuse in our society. Topics include the history and classifications of drug abuse and the social, physical, and psychological impact of drug abuse. Upon completion, students should be able to identify various types of drugs, their effects on human behavior and society, and treatment modalities.

CJC-214   **Victimology**   3 0 0 3
Requisites:
This course introduces the study of victims. Emphasis is placed on roles/characteristics of victims, victim interaction with the criminal justice system and society, current victim assistance programs, and other related topics. Upon completion, students should be able to discuss and identify victims, the uniqueness of victims' roles, and current victim assistance programs.

CJC-215   **Organization & Administration**   3 0 0 3
Requisites:
This course introduces the components and functions of organization and administration as it applies to the agencies of the criminal justice system. Topics include operations/functions of organizations; recruiting, training, and retention of personnel; funding and budgeting; communications; span of control and discretion; and other related topics. Upon completion, students should be able to identify and discuss the basic components and functions of a criminal justice organization and its administrative operations.

CJC-222   **Criminalistics**   3 0 0 3
Requisites:
This course covers the functions of the forensic laboratory and its relationship to successful criminal investigations and prosecutions. Topics include advanced crime scene processing, investigative techniques, current forensic technologies, and other related topics. Upon completion, students should be able to identify and collect relevant evidence at simulated crime scenes and request appropriate laboratory analysis of submitted evidence.

CJC-225   **Crisis Intervention**   3 0 0 3
Requisites:
This course introduces critical incident intervention and management techniques as they apply to operational criminal justice practitioners. Emphasis is placed on the victim/offender situation as well as job-related high stress, dangerous, or problem-solving citizen contacts. Upon completion, students should be able to provide insightful analysis of emotional, violent, drug-induced, and other critical and/or stressful incidents that require field analysis and/or resolution.

CJC-231   **Constitutional Law**   3 0 0 3
Requisites:
The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts.

CJC-232   **Civil Liability**   3 0 0 3
Requisites:
This course covers liability issues for the criminal justice professional. Topics include civil rights violations, tort liability, employment issues, and other related topics. Upon completion, students should be able to explain civil trial procedures and discuss contemporary liability issues.

CJC-233   **Correctional Law**   3 0 0 3
Requisites:
This course introduces statutory/case law pertinent to correctional concepts, facilities, and related practices. Topics include examination of major legal issues encompassing incarceration, probation, parole, restitution, pardon, restoration of rights, and other related topics. Upon completion, students should be able to identify/discuss legal issues which directly affect correctional systems and personnel.

CJC-240 **Law Enforcement Mgmt & Supervision & Supervision** 3 0 0 3
Requisites:
This course provides a study of the best known methods and practices of police leadership and management. Topics include the role of the manager in law enforcement, communications, time-management in law enforcement, managing problems, training and law enforcement productivity. Upon completion, students should be able to identify and discuss methods and practices capable of moving law enforcement agencies forward into the twenty-first century.

CJC-244 **Footwear and Tire Imprint** 2 3 0 3
Requisites:
This course provides a study of the fundamental concepts of footwear and tire imprint evidence as related to forensic science. Topics include proper photographic recording, casting, recognition of wear patterns and imprint identification. Upon completion, the student should be able to recognize, record, photograph, and identify footwear and tire imprints.

CJC-246 **Advanced Friction Ridge Analysis** 2 3 0 3
Requisites: Take CJC-245; Take previously. Required.
This course introduces the theories and processes of advanced friction ridge analysis. Topics include evaluation of friction ridges, chart preparation, comparative analysis for values determination rendering proper identification, chemical enhancement and AFIS preparation and usage. Upon completion, students must show an understanding of proper procedures for friction ridge analysis through written testing and practical exercises.

CJC-250 **Forensic Biology I** 2 2 0 3
Requisites:
This course covers important biological principles that are applied in the crime laboratory. Topics include forensic toxicology, forensic serology, microscopy, and DNA typing analysis, with an overview of organic and inorganic analysis. Upon completion, students should be able to articulate how a crime laboratory processes physical evidence submitted by law enforcement agencies.

CJC-251 **Forensic Chemistry I** 3 2 0 4
Requisites:
This course provides a study of the fundamental concepts of chemistry as it relates to forensic science. Topics include physical and chemical properties of substances, metric measurements, chemical changes, elements, compounds, gases, and atomic structure. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of forensic chemistry.

CJC-255 **Issues in Criminal Justice Application** 3 0 0 3
Requisites: Take CJC-111 CJC-221 CJC-231; Take previously. Required.
This course provides an opportunity to exhibit interpersonal and technical skills required for application of criminal justice concepts in contemporary practical situations. Emphasis is placed on critical thinking and integration of theory and practical skills components. Upon completion, students should be able to demonstrate the knowledge required of any entry-level law enforcement officer.

CONSTRUCTION MANAGEMENT (CMT PREFIX)

CMT-112 **Construction Mgt I** 4 4 0 6
Requisites:
This course introduces students to the field of construction management technology. Topics include job planning, work methods, materials, equipment, and other related topics. Upon completion, students should be able to demonstrate basic knowledge of methods, materials, equipment, and the logical sequence of a construction project.

CMT-112AB **Construction Mgt I** 2 2 0 3
Requisites:
This course introduces students to the field of construction management technology. Topics include job planning, work methods, materials, equipment, and other related topics. Upon completion, students should be able to demonstrate basic knowledge of methods, materials, equipment, and the logical sequence of a construction project.

CMT-112BB **Construction Mgt I** 2 2 0 3
Requisites:
This course introduces students to the field of construction management technology. Topics include job planning, work methods, materials, equipment, and other related topics. Upon completion, students should be able to demonstrate basic knowledge of methods, materials, equipment, and the logical sequence of a construction project.

CMT-120 **Codes and Inspections** 3 0 0 3
Requisites:
This course covers building codes and the code inspections process used in the design and construction of residential and commercial buildings.Emphasis is placed on commercial, residential, and accessibility (ADA) building codes. Upon completion, students should understand the building code inspections process and apply building code principals and requirements to construction projects.

CMT-193A **Selected Topics in Construction Mgmt** 3 0 0 3
Requisites:
This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

CMT-210 **Construction Management Fundamentals** 3 0 0 3
Requisites:
This course introduces the student to the fundamentals of effective supervision emphasizing professionalism through knowledge and applied skills. Topics include safety, planning and scheduling, contracts, problem-solving, communications, conflict resolution, recruitment, employment laws and regulations, leadership, motivation, teamwork, discipline, setting objectives, and training. Upon completion, students should be able to demonstrate the basic skills necessary to be successful as a supervisor in the construction industry.

CMT-212 **Total Safety Performance** 3 0 0 3
Requisites: Take CMT-210(S13450); Take either previously or concurrently. Required.
This course covers the importance of managing safety and productivity equally by encouraging people to take individual responsibility for safety and health in the workplace. Topics include safety management, controlling construction hazards, communicating and enforcing policies, OSHA compliance, personal responsibility and accountability, safety planning, training, and personal protective equipment. Upon completion, the student should be able to properly supervise safety at a construction jobsite and qualify for OSHA Training Certification.

CMT-214 **Planning and Scheduling** 3 0 0 3
Requisites: Take CMT-210(S13450) BPR-130(S11505); Take previously. Required.
This course covers the need for and the process of planning construction projects, as well as the mechanics and vocabulary of project scheduling. Topics include project preplanning, scheduling formats, planning for production, short interval planning, schedule updating and revising, and computer-based planning and scheduling. Upon completion, the student should be able to understand the need for planning and scheduling, the language and logic of scheduling, and use of planning skills.

CMT-216 **Costs and Productivity** 3 0 0 3
Requisites: Take CMT-210(S13450); Take previously. Required.
This course covers the relationships between time, work completed, work-hours spent, schedule duration, equipment hours, and materials used. Topics include production rates, productivity unit rates, work method improvements, and overall total project cost control. Upon completion, the student should be able to demonstrate an understanding of how costs may be controlled and productivity improved on a construction project.

CMT-218 **Human Relations Issues** 3 0 0 3
Requisites: Take CMT-210(S13450); Take previously. Required.
This course provides instruction on human relations issues as they relate to construction project supervision. Topics include relationships, human behavior, project staffing issues, teamwork, effective communication networks, laws and regulations, and identifying and responding to conflict, crisis, and discipline. Upon completion, the student will demonstrate an understanding of the importance of human relations in the success of a construction project.

CMT-226 **Applications Project** 2 2 0 3
Requisites: Take BPR-130(S23275) BPR-230 CMT-210(S23270) CMT-112 CST-241(S23984) CMT-214; Take previously. Required.
This course provides an individual and/or integrated team approach to a practical construction management project. Topics include project selection, research and planning, implementation, and a final presentation. Upon completion,

students should be able to plan and implement an applications-oriented construction management project.

COMMUNICATION (COM PREFIX)

COM-120   **Intro to Interpersonal Communication**   3 0 0 3
Requisites: Take 1 group; Take ENG-080 RED-080; Take DRE-097(S23642); Take ENG-002; Take previously. Required.
This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations.

COM-140   **Introduction to Intercultural Communication**   3 0 0 3
Requisites: Take 1 group; Take ENG-080 RED-080; Take DRE-097(S23642); Take ENG-002; Take previously. Required.
This course introduces techniques of cultural research, definitions, functions, characteristics, and impacts of cultural differences in public address. Emphasis is placed on how diverse backgrounds influence the communication act and how cultural perceptions and experiences determine how one sends and receives messages. Upon completion, students should be able to demonstrate an understanding of the principles and skills needed to become effective in communicating outside one's primary culture.

COM-231   **Public Speaking**   3 0 0 3
Requisites: Take ENG-111(S13673); Minimum grade C; Take previously. Required.
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support.

COSMETOLOGY (COS PREFIX)

COS-111   **Cosmetology Concepts I**   4 0 0 4
Requisites: Take COS-112; Take either previously or concurrently. Required.
This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

COS-111AB   **Cosmetology Concepts I**   2 0 0 2
Requisites: Take COS-112; Take either previously or concurrently. Required.
This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

COS-111BB   **Cosmetology Concepts I**   2 0 0 2
Requisites: Take COS-112; Take either previously or concurrently. Required. Take COS-111AB; Take either previously or concurrently. Required.
This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

COS-112   **Salon I**   0 24 0 8
Requisites: Take COS-111; Take either previously or concurrently. Required.
This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services.

COS-112BB   Salon I   0 12 0 4
Requisites: Take COS-111; Take either previously or concurrently. Required. Take COS-112AB; Take either previously or concurrently. Required.
This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services.

COS-113   Cosmetology Concepts II   4 0 0 4
Requisites: Take COS-111 COS-112; Take previously. Required.
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

COS-113AB   Cosmetology Concepts II   2 0 0 2
Requisites: Take COS-111 COS-112; Take previously. Required.
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

COS-113BB   Cosmetology Concepts II   2 0 0 2
Requisites: Take COS-111 COS-112; Take previously. Required. Take COS-113AB; Take either previously or concurrently. Required.
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

COS-114   Salon II   0 24 0 8
Requisites: Take COS-111 COS-112; Take previously. Required.
This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS-114AB   Salon II   0 12 0 4
Requisites: Take COS-111 COS-112; Take previously. Required.
This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS-114BB   Salon II   0 12 0 4
Requisites: Take COS-111 COS-112; Take previously. Required. Take COS-114AB; Take either previously or concurrently. Required.
This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS-115AB   Cosmetology Concepts III   2 0 0 2
Requisites: Take COS-111 COS-112; Take previously. Required.
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

COS-115BB   Cosmetology Concepts III   2 0 0 2
Requisites: Take COS-111 COS-112; Take previously. Required.
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

CURRICULUM COURSE DESCRIPTIONS

COS-116   **Salon III**   0 12 0 4
Requisites: Take COS-111 COS-112; Take previously. Required.
This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS-116AB   **Salon III**   0 6 0 2
Requisites: Take COS-111 COS-112; Take previously. Required.
This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS-116BB   **Salon III**   0 6 0 2
Requisites: Take COS-111 COS-112; Take previously. Required.
This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS-117   **Cosmetology Concepts IV**   2 0 0 2
Requisites: Take COS-111 COS-112; Take previously. Required.
This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

COS-118   **Salon IV**   0 21 0 7
Requisites: Take COS-111 COS-112; Take previously. Required.
This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entry-level employment requirements.

COS-120   **Esthetics Salon I**   0 18 0 6
Requisites:
This course covers the techniques of esthetics in a comprehensive experience in a simulated salon setting. Topics include client consultation, facials, body treatments, hair removal, make-up applications, and color analysis. Upon completion, students should be able to safely and competently demonstrate esthetic services on clients in a salon setting.

COS-125   **Esthetics Concepts II**   2 0 0 2
Requisites:
This course covers more comprehensive esthetics concepts. Topics include nutrition, business management, makeup, and color analysis. Upon completion students should be able to demonstrate an understanding of the advanced esthetics concepts and meet course requirements.

COS-126   **Esthetics Salon II**   0 18 0 6
Requisites:
This course provides experience in a simulated esthetics setting. Topics include machine facials, aromatherapy, surface manipulation in relation to skin care, electricity, and apparatus. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology licensing examination for Estheticians.

COS-223   **Contemp Hair Coloring**   1 3 0 2
Requisites: Take COS-111 COS-112; Take previously. Required.
This course covers basic color concepts, hair coloring problems, and application techniques. Topics include color theory, terminology, contemporary techniques, product knowledge, and other related topics. Upon completion, students should be able to identify a clients color needs and safely and competently perform color applications and correct problems.

COS-224   **Trichology & Chemistry**   1 3 0 2
Requisites:
This course is a study of hair and the interaction of applied chemicals. Emphasis is placed on pH actions and the reactions and effects of chemical ingredients. Upon completion, students should be able to demonstrate an understanding of chemical terminology, pH testing, and chemical reactions on hair.

COS-225   **Advanced Contemporary Hair Coloring**   1 3 0 2
Requisites: Take COS-223; Take previously. Required.
This course covers advanced techniques in coloring applications and problem solving situations. Topics include removing unwanted color, replacing pigment and re-coloring, removing coatings, covering grey and white hair, avoiding color fading, and poor tint results. Upon completion, students should be able to apply problem solving techniques in hair coloring situations.

COS-240   **Contemporary Design**   1 3 0 2
Requisites: Take COS-111 COS-112; Take previously. Required.
This course covers methods and techniques for contemporary designs. Emphasis is placed on contemporary designs and other related topics. Upon completion, students should be able to demonstrate and apply techniques associated with contemporary design.

COMPUTER SCIENCE (CSC PREFIX)

CSC-120   **Computing Fundamentals I**   3 2 0 4
Requisites: Take 1 group; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984); Take MAT-121(S25429); Take MAT-171(S25432); Take DMA-025 DMA-040(S24983) DMA-050(S24984); Take DMA-025 DMA-045; Take DMA-010 DMA-020 DMA-030 DMA-045; Take MAT-003; Take BSP-4003; Take previously. Required.
This course provides the essential foundation for the discipline of computing and a program of study in computer science, including the role of the professional. Topics include algorithm design, data abstraction, searching and sorting algorithms, and procedural programming techniques. Upon completion, students should be able to solve problems, develop algorithms, specify data types, perform sorts and searches, and use an operating system.

CSC-121   **Python Programming**   2 3 0 3
Requisites:
This course introduces computer programming using the Python programming language. Emphasis is placed on common algorithms and programming principles utilizing the standard library distributed with Python. Upon completion, students should be able to design, code, test, and debug Python language programs.

CSC-124   **Introduction to Data Science Programming**   2 2 0 3
Requisites:
This course covers the key technologies used to manipulate, store and analyze big data. Topics include scripting languages, noSQL databases, database scalability, performance metrics and tuning. Upon completion, students should be able to use programming techniques to investigate data sets and algorithms.

CSC-130   **Computing Fundamentals II**   3 2 0 4
Requisites: Take CSC-120(S11470); Take previously. Required.
This course provides in-depth coverage of the discipline of computing and the role of the professional. Topics include software design methodologies, analysis of algorithm and data structures, searching and sorting algorithms, and file organization methods. Upon completion, students should be able to use software design methodologies and choice of data structures and understand social/ethical responsibilities of the computing professional. This course is taught in Python.

CSC-133   **C Programming**   2 3 0 3
Requisites:
This course introduces computer programming using the C programming language with structured programming principles. Topics include input/output operations, iteration, arithmetic operations, arrays, pointers, filters, and other related topics. Upon completion, students should be able to design, code, test and debug at a beginning level. The focus of this course is C programming for microcontrollers and embedded systems.

CSC-134   C++ Programming   2 3 0 3
Requisites: Take MAT-121(S25429) MAT-143(S25430) MAT-152(S25431) MAT-171(S25432) MAT-271(S23939) or MAT-252(S25063); Take previously. Required.
This course introduces computer programming using the C++ programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level.

CSC-151   Java Programming   2 3 0 3
Requisites: Take MAT-121(S25429) MAT-143(S25430) MAT-152(S25431) MAT-171(S25432) MAT-271(S23939) or MAT-252(S25063); Take previously. Required.
This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion students should be able to design, code, test, debug JAVA language programs.

CSC-154   Software Development   2 2 0 3
Requisites: Take DBA-120; Take previously. Required. Take CSC-134(S21066) CSC-139(S21071) CSC-151 or CSC-221; Take previously. Required.
This course covers the fundamentals of software development. Emphasis is placed on the full spectrum of team software development methodologies, software development project management, version control, issue tracking, regression testing, automated build and deployment. Upon completion, students should be able to work in a team environment and apply software development methodologies and software quality assurance principles.

CSC-221   Advanced Python Programming   2 2 0 3
Requisites: Take CSC-121; Take previously. Required.
This course introduces advanced computer programming using the Python programming language. Emphasis is placed on the advanced programming concepts including advanced algorithms and programming principles utilizing standard and third party library tools. Upon completion, students should be able to design, code, test, and debug advanced Python language programs.

CSC-227   Cloud Application Development   2 2 0 3
Requisites: Take CSC-121 CSC-134(S21066) or CSC-151; Take previously. Required.
This course introduces how to build, deploy, host, and manage applications using cloud technologies. Topics include building cloud applications using cloud toolsets, defining and managing service models, storage fundamentals, secure backup system and database programming. Upon completion, students should be able to develop and host cloud applications, as well as design and develop services that access local and remote data from various data sources.

CSC-234   Advanced C++ Programming   2 3 0 3
Requisites: Take CSC-134(S21066); Take previously. Required.
This course is a continuation of CSC 134 using the C++ programming language with standard programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug and document programming solutions.

CSC-251   Advanced JAVA Programming   2 3 0 3
Requisites: Take CSC-151; Take previously. Required.
This course is a continuation of CSC 151 using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment.

CSC-289   Programming Capstone Project   1 4 0 3
Requisites: Take CTS-115(S20996) CTI-110(S22510) CTI-120(S22511); Take previously. Required. Take CSC-154; Take previously. Required. Take CSC-122 CSC-234(S21079) CSC-239(S21083) CSC-251 CSC-253 or CSC-221; Take previously. Required. Take CSC-256 or DBA-240; Take previously. Required.
This course provides an opportunity to complete a significant programming project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, testing, presentation, and implementation. Upon completion, students should be able to complete a project from the definition phase through implementation.

CSC-293A   **Selected Topics in**   2 3 0 3
Requisites:
This course introduces the basic concepts and key use cases of distributed ledger technology for business networks.

CONSTRUCTION (CST PREFIX)

CST-131   **OSHA/Safety/Certification**   2 2 0 3
Requisites:
This course covers the concepts of work site safety. Topics include OSHA regulations, tool safety, and certifications which relate to the construction industry. Upon completion, students should be able to identify and maintain a safe working environment based on OSHA regulations and maintain proper records and certifications.

CST-150   **Building Science**   2 2 0 3
Requisites:
This course introduces concepts and techniques for the design and interaction of the mechanical systems of high performance buildings. Topics include building envelope, heating, ventilation and air conditioning (HVAC), indoor air quality, lighting, plumbing and electrical. Upon completion, students should be able to understand building systems interaction and performance.

CST-241   **Planning/Estimating I**   2 2 0 3
Requisites: Take BPR-130(S23275) MAT-121(S23927) or MAT-171(S23934); Take previously. Required.
This course covers the procedures involved in planning and estimating a construction/building project. Topics include performing quantity take-offs of materials necessary for a building project. Upon completion, students should be able to accurately complete a take-off of materials and equipment needs involved in a construction project.

CST-242   **Planning/Estimating II**   3 2 0 4
Requisites: Take CST-241(S16266); Take previously. Required.
This course covers planning and estimating practices which are applicable to commercial construction. Emphasis is placed on planning and developing take-offs of materials, labor, and equipment in accordance with industry formats. Upon completion, students should be able to accurately complete take-offs and planning time lines necessary to complete a commercial structure.

COMPUTER TECH INTEGRATION (CTI PREFIX)

CTI-110   **Web, Programming, and Database Foundation**   2 2 0 3
Requisites:
This course covers the introduction of the tools and resources available to students in programming, mark-up language and services on the Internet. Topics include standard mark-up language Internet services, creating web pages, using search engines, file transfer programs; and database design and creation with DBMS products. Upon completion students should be able to demonstrate knowledge of programming tools, deploy a web-site with mark-up tools, and create a simple database table.

CTI-130   **Operating Systems and Device Foundation**   4 4 0 6
Requisites:
This course covers the basic hardware and software of a personal computer, including installation, operations and interaction with popular microcomputer operating systems. Topics include components identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers.

CTI-140   **Virtualization Concepts**   1 4 0 3
Requisites: Take CTI-130(S22512) or NOS-110(S20980); Take previously. Required.
This course introduces operating system virtualization. Emphasis is placed on virtualization terminology, virtual machine storage, virtual networking and access control. Upon completion, students should be able to perform tasks related to installation, configuration and management of virtual machines.

CTI-141   **Cloud and Storage Concepts**   1 4 0 3
Requisites: Take CTI-130(S22512) or CTS-120(S23679); Take previously. Required.
This course introduces cloud computing and storage concepts. Emphasis is placed on cloud terminology, virtualization, storage networking and access control. Upon completion, students should be able to perform tasks related to installation, configuration and management of cloud storage systems.

CTI-240   **Virtualization Administration I**   1 4 0 3
Requisites: Take CTI-140; Take previously. Required.
This course covers datacenter virtualization concepts. Topics include data storage, virtual network configuration, virtual machine and virtual application deployment. Upon completion, students should be able to perform tasks related to virtual machine and hypervisor installation and configuration.

CTI-241   **Virtualization Administration II**   1 4 0 3
Requisites: Take CTI-240; Take previously. Required.
This course covers administration of datacenter virtualization infrastructure. Topics include access control, fault tolerance, scalability, resource management, virtual machine migration and troubleshooting. Upon completion, students should be able to perform tasks related to virtualization security, data protection and resource monitoring.

CTI-260   **Data Center Troubleshooting**   2 2 0 3
Requisites: Take CTI-240 NET-126(S24383); Take previously. Required.
This course covers troubleshooting in a highly available, high performance, storage and computing system. Topics include provisioning, monitoring, diagnosing, and taking corrective actions in storage environments relating to Storage Area Network (SAN), Network Attached Storage (NAS), data protection and recovery. Upon completion, students should be able to demonstrate an understanding of SAN and NAS technologies, topologies, configuration, data protection, and fault triage and remediation.

COMPUTER INFORMATION TECHNOLOGY (CTS PREFIX)

CTS-115   **Information Systems Business Concepts**   3 0 0 3
Requisites:
The course introduces the role of IT in managing business processes and the need for business process and IT alignment. Emphasis is placed on industry need for understanding business challenges and developing/managing information systems to contribute to the decision making process based on these challenges. Upon completion, students should be able to demonstrate knowledge of the 'hybrid business manager' and the potential offered by new technology and systems.

CTS-120   **Hardware/Software Support**   2 3 0 3
Requisites:
This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers.

CTS-130   **Spreadsheet**   2 2 0 3
Requisites:
This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts.

CTS-135   **Integrated Software Intro**   2 4 0 4
Requisites: Take CTI-120(S22511) or CIS-110(S21058); Take previously. Required.
This course instructs students in the Windows or Linux based program suites for word processing, spreadsheet, database, personal information manager, and presentation software. This course prepares students for introductory level skills in database, spreadsheet, personal information manager, word processing, and presentation applications to utilize data sharing. Upon completion, students should be able to design and integrate data at an introductory level to produce documents using multiple technologies.

CTS-155   **Tech Support Functions**   2 2 0 3
Requisites:
This course introduces a variety of diagnostic and instructional tools that are used to evaluate the performance of technical support technologies. Emphasis is placed on technical support management techniques and support technologies. Upon completion, students should be able to determine the best technologies to support and solve actual technical support problems.

CTS-220   **Advanced Hardware/Software Support**   2 3 0 3
Requisites: Take CTS-120(S23679); Take previously. Required.
This course provides advanced knowledge and competencies in hardware and operating system technologies for computer technicians to support personal computers. Emphasis is placed on: configuring and upgrading; diagnosis and troubleshooting; as well as preventive maintenance of hardware and system software. Upon completion, students should be able to install, configure, diagnose, perform preventive maintenance, and maintain basic networking on personal computers.

CTS-230   **Advanced Spreadsheet**   2 2 0 3
Requisites: Take CTS-130(S21000); Take previously. Required.
This course covers advanced spreadsheet design and development. Topics include advanced functions and statistics, charting, macros, databases, and linking. Upon completion, students should be able to demonstrate competence in designing complex spreadsheets.

CTS-255   **Advanced Tech Support Functions**   2 2 0 3
Requisites: Take CTS-155; Take previously. Required.
This course introduces a variety of diagnostic and instructional tools that are used to evaluate the performance of technical support technologies. Topics include technical support management techniques, evaluation, and methods of deployment for technical support technologies. Upon completion, students should be able to determine the best technologies to support and solve more complex technical support problems.

CTS-285   **Systems Analysis & Design**   3 0 0 3
Requisites: Take 1 group; Take CTI-110(S22510) CTS-115(S20996); Take CIS-115(S24352) CTS-115(S20996); Take previously. Required.
This course introduces established and evolving methodologies for the analysis, design, and development of an information system. Emphasis is placed on system characteristics, managing projects, prototyping, CASE/OOM tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

CTS-288   **Professional Practices in IT**   2 2 0 3
Requisites:
This course provides students with the business skills needed for success in the information technology field. Topics include portfolio development, resume design, interviewing techniques and professional practices. Upon completion, students should be able to prepare themselves and their work for a career in the information technology field.

CTS-289   **System Support Project**   1 4 0 3
Requisites: Take CTI-110(S22510) CTI-120(S22511) CTS-115(S20996); Take previously. Required. Take CTI-110(S22510) CTI-120(S22511) NOS-120(S24396) NOS-130(S24397) CTS-115(S20996); Take previously. Required.
This course provides an opportunity to complete a significant support project with minimal instructor assistance. Emphasis is placed on written and oral communication skills, project definition, documentation, installation, testing, presentation, and user training. Upon completion, students should be able to complete a project from the definition phase through implementation.

CURRICULUM COURSE DESCRIPTIONS

CULINARY (CUL PREFIX)

CUL-110   **Sanitation and Safety**   2 0 0 2
Requisites:
This course introduces the basic principles of sanitation and safety relative to the hospitality industry. Topics include personal hygiene, sanitation and safety regulations, use and care of equipment, the principles of food-borne illness, and other related topics. Upon completion, students should be able to demonstrate an understanding of the content necessary for successful completion of a nationally recognized food/safety/sanitation exam.

CUL-112   **Nutrition for Foodservice**   3 0 0 3
Requisites: Take CUL-110(S22835) CUL-140(S22844) or CUL-142(S22845); Take previously. Required. Take CUL-112A; Take either previously or concurrently. Required.
This course covers the principles of nutrition and its relationship to the foodservice industry. Topics include personal nutrition fundamentals, weight management, exercise, nutritional adaptation/analysis of recipes/menus, healthy cooking techniques and marketing nutrition in a foodservice operation. Upon completion, students should be able to apply basic nutritional concepts to food preparation and selection.

CUL-112A   **Nutrition for Foodservice Lab**   0 3 0 1
Requisites: Take CUL-112(S10923); Take either previously or concurrently. Required. Take CUL-110(S22835) CUL-140(S22844) or CUL-142(S22845); Take previously. Required. Take CUL-112(S22837); Take concurrently. Required.
This course provides a laboratory experience for enhancing student skills in the principles of nutrition and its relationship to the foodservice industry. Emphasis is placed on personal nutrition fundamentals, weight management/exercise, nutritional adaptation/analysis of recipes/menus, healthy cooking techniques and marketing nutrition in a foodservice operation. Upon completion, students should be able to apply basic nutritional concepts to food preparation and selection.

CUL-130   **Menu Design**   2 0 0 2
Requisites:
This course introduces menu design and its relationship to foodservice operations. Topics include layout, marketing, concept development, dietary concerns, product utilization, target consumers and trends. Upon completion, students should be able to design, create and produce menus for a variety of foodservice settings.

CUL-135A   **Food and Beverage Service Lab**   0 2 0 1
Requisites: Take CUL-135(S10202); Take either previously or concurrently. Required.
This course provides a laboratory experience for enhancing student skills in effective food and beverage service. Emphasis is placed on practical experiences including greeting/service of guests, dining room set-up, profitability, menu sales and merchandising, service styles and reservations. Upon completion, students should be able to demonstrate practical applications of human relations and the skills required in the service of foods and beverages.

CUL-140   **Culinary Skills I**   2 6 0 5
Requisites: Take CUL-110(S22835); Take either previously or concurrently. Required.
This course introduces the fundamental concepts, skills and techniques in basic cookery, and moist, dry and combination heat. Emphasis is placed on recipe conversion, measurements, terminology, classical knife cuts, safe food/equipment handling, flavorings/seasonings, stocks/sauces/soups, and related topics. Upon completion, students should be able to exhibit the basic cooking skills used in the foodservice industry.

CUL-142   **Fundamentals of Food**   2 6 0 5
Requisites: Take CUL-110(S22835); Take either previously or concurrently. Required.
This course introduces the student to the basic principles of cooking, baking and kitchen operations. Topics include preparation methods for protein, starch, vegetable/fruit identification/selection, storage; breakfast cookery, breads, sweet dough/pastries, basic fabrication, knife skills, and mise en place. Upon completion, students should be able to execute efficiently a broad range of basic cooking/baking skills as they apply to different stations in foodservice operations.

CUL-150   **Food Science**   1 2 0 2
Requisites: Take CUL-110(S22835) CUL-142(S22845) or CUL-140(S22844); Take previously. Required.
This course covers the chemical and physical changes in foods that occur with cooking, handling, and processing. Emphasis is placed on practical application of heat transfer and its effect on color/flavor/texture, emulsification, protein coagulation, leavening agents, viscosity, and gel formation. Upon completion, students should be able to demonstrate an understanding of these principles as they apply to food preparation in an experimental setting.

CUL-160   **Baking I**   1 4 0 3
Requisites: Take CUL-110(S22835); Take either previously or concurrently. Required. Take CUL-
140(S22844) or CUL-142(S22845); Take either previously or concurrently. Required.
This course covers basic ingredients, techniques, weights and measures, baking terminology and formula
calculations. Topics include yeast/chemically leavened products, laminated doughs, pastry dough batter, pies/tarts,
meringue, custard, cakes and cookies, icings, glazes and basic sauces.   Upon completion, students should be able
to demonstrate proper scaling and measurement techniques, and prepare and evaluate a variety of bakery products.

CUL-170   **Garde Manger I**   1 4 0 3
Requisites: Take CUL-110(S22835); Take either previously or concurrently. Required. Take CUL-
140(S22844); Take previously. Required.
This course introduces basic cold food preparation techniques and pantry production. Topics include salads,
sandwiches, appetizers, dressings, basic garnishes, cheeses, cold sauces, and related food items. Upon completion,
students should be able to present a cold food display and exhibit an understanding of the cold kitchen and its related
terminology.

CUL-214   **Wine Appreciation**   1 2 0 2
Requisites:
This course provides an introduction to information about wine from all the major wine producing regions. Emphasis
is placed on the history of wine, production, characteristics, wine list development, laws, purchasing and storing
requirements. Upon completion, students should be able to evaluate varietal wines and basic food pairings. Must be
21 years old or older to take this class.

CUL-240   **Culinary Skills II**   1 8 0 5
Requisites: Take 1 group; Take CUL-110(S22835) CUL-140(S22844); Take CUL-110(S22835) CUL-
142(S22845) CUL-170(S22849); Take previously. Required. Take CUL-110(S22835) CUL-140(S22844); Take
previously. Required.
This course is designed to further students' knowledge of the fundamental concepts, skills, and techniques involved in
basic cookery. Emphasis is placed on meat identification/fabrication, butchery and cooking techniques/methods;
appropriate vegetable/starch accompaniments; compound sauces; plate presentation; breakfast cookery; and
quantity food preparation. Upon completion, students should be able to plan, execute, and successfully serve entrees
with complementary side items.

CUL-250   **Classical Cuisine**   1 8 0 5
Requisites: Take CUL-110(S22835) CUL-140(S22844) CUL-240(S22853); Take previously. Required. Take
CUL-110(S22835) CUL-140(S22844) CUL-160(S22847) CUL-170(S22849) CUL-240(S22853); Take previously.
Required. Take WBL-112; Take either previously or concurrently. Required.
This course is designed to reinforce the classical culinary kitchen. Topics include the working Grand Brigade of the
kitchen, signature dishes and classical banquets. Upon completion, students should be able to demonstrate
competence in food preparation in a classical/upscale restaurant or banquet setting.

CUL-260   **Baking II**   1 4 0 3
Requisites: Take CUL-110(S22835) CUL-160(S22847); Take previously. Required. Take CUL-110(S22835)
CUL-160(S22847); Take previously. Required.
This course is designed to further students' knowledge in ingredients, weights and measures, baking terminology and
formula calculation. Topics include classical desserts, frozen desserts, cake and torte production, decorating and
icings/glazes, dessert plating and presentation.   Upon completion, students should be able to demonstrate pastry
preparation, plating, and dessert buffet production skills.

CUL-270   **Garde Manger II**   1 4 0 3
Requisites: Take CUL-110(S22835) CUL-140(S22844) CUL-170(S22849); Take previously. Required. Take
CUL-110(S22835) CUL-140(S22844) CUL-170(S22849); Take previously. Required.
This course is designed to further students' knowledge in basic cold food preparation techniques and pantry
production. Topics include pates, terrines, galantines, decorative garnishing skills, carving, charcuterie, smoking,
canapés, hors d'oeuvres, and related food items. Upon completion, students should be able to design, set up, and
evaluate a catering/event display to include a cold buffet with appropriate showpieces.

CUL-287   **Cultural Experience**   2 2 0 3
Requisites: Take CUL-110(S11030) CUL-140(S12163) CUL-240(S13191); Take previously. Required. Take CUL-110(S22835) CUL-140(S22844) CUL-240(S22853); Take previously. Required.
This course is designed to provide the background cultural information necessary for students to maximize a cultural experience. Emphasis is placed on language skills, culture, culinary traditions and cuisines, and an appreciation of the local history. Upon completion, students should exhibit an understanding of the unique character of the studied culture, specifically those relating to culinary arts.

DATABASE MANAGEMENT TECHNOLOGY (DBA PREFIX)

DBA-120   **Database Programming I**   2 2 0 3
Requisites:
This course is designed to develop SQL programming proficiency. Emphasis is placed on data definition, data manipulation, and data control statements as well as on report generation. Upon completion, students should be able to write programs which create, update, and produce reports.

DBA-130   **Introduction to Nosql Databases**   2 2 0 3
Requisites: Take CTI-110(S22510); Take previously. Required.
This course introduces large scale data oriented web solutions on noSQL Databases. Topics include the advantages of developing and implementing noSQL Database systems. Upon completion, students should be able to design, develop, implement, and administer noSQL Database structures on business environments.

DBA-240   **Database Analysis and Design**   2 3 0 3
Requisites: Take DBA-120; Take previously. Required.
This course is an exploration of the established and evolving methodologies for the analysis, design, and development of a database system. Emphasis is placed on business data characteristics and usage, managing database projects, prototyping and modeling, and CASE tools. Upon completion, students should be able to analyze, develop, and validate a database implementation plan.

DENTAL (DEN PREFIX)

DEN-100   **Basic Orofacial Anatomy**   2 0 0 2
Requisites:
This course provides a basic introduction to the structures of the head, neck, and oral cavity. Topics include tooth morphology, head and neck anatomy, histology, and embryology. Upon completion, students should be able to demonstrate knowledge of normal structures and development and how they relate to the practice of dental assisting.

DEN-101   **Preclinical Procedures**   4 6 0 7
Requisites:
This course provides instruction in procedures for the clinical dental assistant as specified by the North Carolina Dental Practice Act. Emphasis is placed on orientation to the profession, infection control techniques, instruments, related expanded functions, and diagnostic, operative, and specialty procedures. Upon completion, students should be able to demonstrate proficiency in clinical dental assisting procedures.

DEN-102   **Dental Materials**   2 4 0 4
Requisites:
This course provides instruction in identification, properties, evaluation of quality, principles, and procedures related to manipulation and storage of operative and specialty dental materials. Emphasis is placed on the understanding and safe application of materials used in the dental office and laboratory. Upon completion, students should be able to demonstrate proficiency in the laboratory and clinical application of routinely used dental materials.

DEN-103   **Dental Sciences**   2 0 0 2
Requisites:
This course is a study of oral pathology, pharmacology, and dental office emergencies. Topics include oral pathological conditions, dental therapeutics, and management of emergency situations. Upon completion, students should be able to recognize abnormal oral conditions, identify classifications, describe actions and effects of commonly prescribed drugs, and respond to medical emergencies.

DEN-104   **Dental Health Education**   2 2 0 3
Requisites:
This course covers the study of preventive dentistry to prepare dental assisting students for the role of dental health educator. Topics include etiology of dental diseases, preventive procedures, and patient education theory and practice. Upon completion, students should be able to demonstrate proficiency in patient counseling and oral health instruction in private practice or public health settings.

DEN-105   **Practice Management**   2 0 0 2
Requisites:
This course provides a study of principles and procedures related to management of the dental practice. Emphasis is placed on maintaining clinical and financial records, patient scheduling, and supply and inventory control. Upon completion, students should be able to demonstrate fundmental skills in dental practice management.

DEN-106   **Clinical Practice I**   2 0 12 6
Prerequisites: Take DEN-101; Take previously. Required.
This course is designed to provide experience assisting in a clinical setting. Emphasis is placed on the application of principles and procedures of four-handed dentistry and laboratory and clinical support functions. Upon completion, students should be able to utilize classroom theory and laboratory and clinical skills in a dental setting.

DEN-107   **Clinical Practice II**   1 0 12 5
Prerequisites: Take DEN-106; Take previously. Required.
This course is designed to increase the level of proficiency in assisting in a clinical setting. Emphasis is placed on the application of principles and procedures of four-handed dentistry and laboratory and clinical support functions. Upon completion, students should be able to combine theoretical and ethical principles necessary to perform entry-level skills including functions delegable to a DA II.

DEN-110   **Orofacial Anatomy**   2 2 0 3
Requisites:
This course introduces the structures of the head, neck, and oral cavity. Topics include tooth morphology, head and neck anatomy, histology, and embryology. Upon completion, students should be able to relate the identification of normal structures and development to the practice of dental assisting and dental hygiene.

DEN-111   **Infection/Hazard Control**   2 0 0 2
Requisites:
This course introduces the infection and hazard control procedures necessary for the safe practice of dentistry. Topics include microbiology, practical infection control, sterilization and monitoring, chemical disinfectants, aseptic technique, infectious diseases, OSHA standards, and applicable North Carolina laws. Upon completion, students should be able to understand infectious diseases, disease transmission, infection control procedures, biohazard management, OSHA standards, and applicable North Carolina laws.

DEN-112   **Dental Radiography**   2 3 0 3
Requisites:
This course provides a comprehensive view of the principles and procedures of radiology as they apply to dentistry. Topics include techniques in exposing, processing, and evaluating radiographs, as well as radiation safety, quality assurance, and legal issues. Upon completion, students should be able to demonstrate proficiency in the production of diagnostically acceptable radiographs using appropriate safety precautions.

DEN-120   **Dental Hygiene Preclinic Lecture**   2 0 0 2
Corequisites: Take DEN-121; Take concurrently. Required.
This course introduces preoperative and clinical dental hygiene concepts. Emphasis is placed on the assessment phase of patient care as well as the theory of basic dental hygiene instrumentation. Upon completion, students should be able to collect and evaluate patient data at a basic level and demonstrate knowledge of dental hygiene instrumentation.

DEN-121   **Dental Hygiene Preclinical Lab**   0 6 0 2
Corequisites: Take DEN-120; Take concurrently. Required.
This course provides the opportunity to perform clinical dental hygiene procedures discussed in DEN 120. Emphasis is placed on clinical skills in patient assessment and instrumentation techniques. Upon completion, students should be able to demonstrate the ability to perform specific preclinical procedures.

CURRICULUM COURSE DESCRIPTIONS

DEN-123   **Nutrition/Dental Health**   2 0 0 2
Requisites:
This course introduces basic principles of nutrition with emphasis on nutritional requirements and their application to individual patient needs. Topics include the study of Federal Nutritional Guidelines, nutrient functions, Recommended Daily Allowances, Adequate Intake, Tolerable Upper Intake Level, Estimated Average Requirement, and related psychological principles. Upon completion, students should be able to recommend and counsel individuals on their food intake as related to their dental health.

DEN-124   **Periodontology**   2 0 0 2
Prerequisites: Take DEN-110; Take previously. Required.
This course provides an in-depth study of the periodontium, periodontal pathology, periodontal monitoring, and the principles of periodontal therapy. Topics include periodontal anatomy and a study of the etiology, classification, and treatment modalities of periodontal diseases. Upon completion, students should be able to describe, compare, and contrast techniques involved in periodontal/maintenance therapy, as well as patient care management.

DEN-125   **Dental Office Emergencies**   0 2 0 1
Requisites:
This course provides a study of the management of dental office emergencies. Topics include methods of prevention, necessary equipment/drugs, medicolegal considerations, recognition and effective initial management of a variety of emergencies. Upon completion, the student should be able to recognize, assess and manage various dental office emergencies and activate advanced medical support when indicated.

DEN-130   **Dental Hygiene Theory I**   2 0 0 2
Prerequisites: Take DEN-120; Take previously. Required.
Corequisites: Take DEN-131; Take concurrently. Required.
This course is a continuation of the didactic dental hygiene concepts necessary for providing an oral prophylaxis. Topics include deposits/removal, instrument sharpening, patient education, fluorides, planning for dental hygiene treatment, charting, and clinical records and procedures. Upon completion, students should be able to demonstrate knowledge needed to complete a thorough oral prophylaxis.

DEN-131   **Dental Hygiene Clinic I**   0 0 9 3
Prerequisites: Take DEN-121; Take previously. Required.
Corequisites: Take DEN-130 either previously or concurrently. Required.
This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of the recall patients with gingivitis or light deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

DEN-140   **Dental Hygiene Theory II**   1 0 0 1
Prerequisites: Take DEN-130; Take previously. Required.
Corequisites: Take DEN-141 concurrently. Required.
This course introduces principles in treatment modification. Topics include modification of treatment for pain management and advanced radiographic interpretation. Upon completion, students should be able to differentiate necessary treatment modifications and radiographic abnormalities.

DEN-141   **Dental Hygiene Clinic II**   0 0 6 2
Prerequisites: Take DEN-131; Take previously. Required.
Corequisites: Take DEN-140(S14315); Take concurrently. Required.
This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of patients with early periodontal disease and subgingival deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

DEN-220   **Dental Hygiene Theory III**   2 0 0 2
Prerequisites: Take DEN-140; Take previously. Required.
Corequisites: Take DEN-221; Take concurrently. Required.
This course introduces advanced principles of patient care. Topics include advanced periodontal debridement, subgingival irrigation, air polishing, special needs and case presentations. Upon completion, students should be able to demonstrate knowledge of methods of treatment and management of periodontally compromised and special needs patients.

DEN-221   **Dental Hygiene Clinic III**   0 0 12 4
Prerequisites: Take DEN-141; Take previously. Required.
Corequisites: Take DEN-220; Take concurrently. Required.
This course continues skill development in providing an oral prophylaxis. Emphasis is placed on treatment of patients with moderate to advanced periodontal involvement and moderate deposits. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

DEN-222   **General & Oral Pathology**   2 0 0 2
Prerequisites: Take BIO-163 BIO-165 or BIO-168; Take previously. Required.
This course provides a general knowledge of oral pathological manifestations associated with selected systemic and oral diseases. Topics include developmental and degenerative diseases, selected microbial diseases, specific and nonspecific immune and inflammatory responses with emphasis on recognizing abnormalities. Upon completion, students should be able to differentiate between normal and abnormal tissues and refer unusual findings to the dentist for diagnosis.

DEN-223   **Dental Pharmacology**   2 0 0 2
Prerequisites: Take BIO-163 BIO-165 or BIO-168; Take either previously or concurrently. Required.
This course provides basic drug terminology, general principles of drug actions, dosages, routes of administration, adverse reactions, and basic principles of anesthesiology. Emphasis is placed on knowledge of drugs in overall understanding of patient histories and health status. Upon completion, students should be able to recognize that each patient's general health or drug usage may require modification of the treatment procedures.

DEN-224   **Materials and Procedures**   1 3 0 2
Prerequisites: Take DEN-111; Take previously. Required.
This course introduces the physical properties of materials and related procedures used in dentistry. Topics include restorative and preventive materials, fabrication of casts and appliances, and chairside functions of the dental hygienist. Upon completion, students should be able to demonstrate proficiency in the laboratory and/or clinical application of routinely used dental materials and chairside functions.

DEN-230   **Dental Hygiene Theory IV**   1 0 0 1
Prerequisites: Take DEN-220; Take previously. Required.
Corequisites: Take DEN-231 concurrently. Required.
This course provides an opportunity to increase knowledge of the profession. Emphasis is placed on dental specialties, technological advances, and completion of a case study presentation. Upon completion, students should be able to demonstrate knowledge of various disciplines of dentistry, technological advances and principles of case presentations.

DEN-231   **Dental Hygiene Clinic IV**   0 0 12 4
Prerequisites: Take DEN-221; Take previously. Required.
Corequisites: Take DEN-230 concurrently. Required.
This course continues skill development in providing an oral prophylaxis. Emphasis is placed on periodontal maintenance and on treating patients with moderate to advanced/refractory periodontal disease. Upon completion, students should be able to assess these patients' needs and complete the necessary dental hygiene treatment.

DEN-232   **Community Dental Health**   2 3 0 3
Requisites:
This course provides a study of the principles and methods used in assessing, planning, implementing, and evaluating community dental health programs. Topics include epidemiology, research methodology, biostatistics, preventive dental care, dental health education, program planning, and financing and utilization of dental services. Upon completion, students should be able to assess, plan, implement, and evaluate a community dental health program.

DEN-233   **Professional Development**   2 0 0 2
Requisites:
This course includes professional development, ethics, and jurisprudence with applications to practice management. Topics include conflict management, state laws, resumes, interviews, and legal liabilities as health care professionals. Upon completion, students should be able to demonstrate the ability to practice dental hygiene within established ethical standards and state laws.

CURRICULUM COURSE DESCRIPTIONS

DESIGN: CREATIVE (DES PREFIX)

DES-112   **Building and Construction Systems**   3 0 0 3
Requisites: Take ARC-111 ARC-114; Take either previously or concurrently. Required.
This course provides an overview of the residential construction process for the interior designer. Emphasis is placed on providing the fundamental knowledge needed by the designer in residential construction basics and methods, including electrical and lighting, plumbing, sustainability, mechanical and ventilation, and the building envelope. Upon completion, students should be able to demonstrate effective communication required for effective collaboration with architects, engineers, and building contractors.

DES-125   **Visual Presentation I**   0 6 0 2
Requisites:
This course introduces visual presentation techniques for communicating ideas. Topics include drawing, perspective drawing, rendering and mixed media. Upon completion, students should be able to present a design concept through graphic media.

DES-135   **Principles and Elements of Design I**   2 4 0 4
Requisites:
This course introduces the basic concepts and terminology of design as they relate to the design profession. Topics include line, pattern, space, mass, shape, texture, color, unity, variety, rhythm, emphasis, balance, proportion, scale, and function. Upon completion, students should be able to demonstrate an understanding of the principles covered through 2D and 3D exploration.

DES-138   **Space Planning**   2 3 0 3
Requisites: Take ARC-111 ARC-114(S10248); Take previously. Required.
This course covers the topics of space planning in both residential and commercial interiors. Emphasis placed on designing for the functionality of interiors through space planning. Upon completion, students should be able to graphically communicate space plans for a variety of interior types.

DES-210   **Professional Practices for Interior Design**   2 0 0 2
Requisites:
This course introduces contemporary business practices for interior design. Topics include employment skills, business formations, professional associations, preparation of professional contracts and correspondence, and means of compensation. Upon completion, students should be able to demonstrate an understanding of basic business practices as they relate to the interior design profession.

DES-220   **Interior Design Fundamentals**   1 6 0 3
Requisites: Take 1 group; Take DES-135(S10718) ARC-111; Take DES-110(S10337); Take DFT-115; Take previously. Required. Take ARC-114(S10248); Take previously. Required.
This course provides an introduction to the application of interior design principles. Emphasis is placed on spatial relationships, material selections, craftsmanship, and visual presentation techniques. Upon completion, students should be able to apply interior design principles and illustrate design solutions through visual communication.

DES-225   **Textiles for Interiors**   2 2 0 3
Requisites:
This course includes the study of textiles and their applications for a variety of interiors. Emphasis is placed on history, manufacturing processes, fiber characteristics, and residential and non-residential applications. Upon completion, students should be able to specify appropriate textiles.

DES-230   **Residential Design I**   1 6 0 3
Requisites: Take DES-220(S24228); Take either previously or concurrently. Required. Take DES-125(S24222) ARC-264(S22026) or GRD-151; Take either previously or concurrently. Required.
This course includes principles of interior design for various residential design solutions. Emphasis is placed on visual presentation and selection of appropriate styles to meet specifications. Upon completion, students should be able to present scaled floor plans, elevations, specifications, color schemes finishes and furniture selection.

DES-235   **Products**   2 2 0 3
Requisites: Take DES-220; Take either previously or concurrently. Required.
This course provides an overview of interior products. Topics include floor coverings; wall coverings and finishes; ceilings, moldings, and furniture construction techniques; and other interior components. Upon completion, students should be able to identify and select appropriate materials and furnishings for interior spaces based on application.

CURRICULUM COURSE DESCRIPTIONS

DES-240   **Commercial and Contract Design I**   1 6 0 3
Requisites: Take DES-220(S21676); Take previously. Required. Take DES-193A(L52494); Take previously. Required. Take DES-280(S24237) or ARC-131(S23274); Take either previously or concurrently. Required.
This course is designed to focus on commercial/contract design including retail, office, institutional, healthcare and hospitality design. Emphasis is placed on ADA requirements, building codes and standards, space planning, and selection of appropriate materials for non-residential interiors. Upon completion, students should be able to analyze design and present non-residential projects.

DES-255   **History of Interiors and Furnishings I**   3 0 0 3
Requisites:
This course introduces architecture, interiors, and furnishings in a variety of historic styles from Prehistoric to Neoclassical. Emphasis is placed on vocabulary, chronology, and style recognition. Upon completion, students should be able to recognize, classify and describe major styles of furniture, interiors, and architecture.

DES-256   **History of Interiors and Furnishings II**   3 0 0 3
Requisites:
This course continues the study of architecture, interiors, and furnishings from a variety of historic styles from Colonial to Contemporary. Emphasis is placed on style recognition, vocabulary, and chronology. Upon completion, students should be able to recognize, classify and describe major styles of furniture, interiors, and exteriors.

DES-265   **Lighting/Interior Design**   1 2 0 2
Requisites: Take DES-135(S24225) ARC-111 ARC-114(S10248); Take previously. Required.
This course introduces theory and contemporary concepts in lighting. Topics include light levels, light quality, lamps and fixtures, and their use and application in interior design. Upon completion, students should be able to visually communicate light concepts and requirements based on national standards and select solutions for specific lighting scenarios.

DES-280   **Codes and Standards/Interior Design**   3 0 0 3
Requisites: Take DES-220(S24228); Take previously. Required.
This course introduces standard building codes as they relate to interior design. Topics include state and federal codes and standards related to accessibility, fire codes, egress, occupancy, and plumbing requirements. Upon completion, students should be able to research and interpret and apply applicable codes.

DES-285   **Capstone/Interior Design**   2 6 0 4
Requisites: Take DES-230(S24230) DES-240(S24233); Take previously. Required. Take DES-210(S24227); Take either previously or concurrently. Required.
This course provides additional studio time to investigate areas of special interest, upgrade weaknesses, and/or capitalize on strengths. Topics include a broad range of options, both residential and non-residential, combining individual research and instructional guidance. Upon completion, students should be able to complete the graphics, client folder, and all schedules for a professional project.

DRAFTING (DFT PREFIX)

DFT-151   **CAD I**   2 3 0 3
Requisites:
This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing. This course uses AutoCAD software.

DFT-152   **CAD II**   2 3 0 3
Requisites: Take ARC-114 or DFT-151; Take previously. Required.
This course introduces extended CAD applications. Emphasis is placed upon intermediate applications of CAD skills. Upon completion, students should be able to use extended CAD applications to generate and manage drawings. This course uses AutoCAD software.

DFT-153   **CAD III**   2 3 0 3
Requisites:
This course introduces advanced CAD applications. Emphasis is placed upon advanced applications of CAD skills. Upon completion, students should be able to use advanced CAD applications to generate and manage data. This course uses Creo software.

DFT-154   Intro to Solid Modeling   2 3 0 3
Requisites:
This course is an introduction to basic three-dimensional solid modeling and design software. Topics include basic design, creation, editing, rendering and analysis of solid models, and creation of multiview drawings. Upon completion, students should be able to use design techniques to create, edit, render and generate a multiview drawing. This course uses Solidwork software.

DFT-170   Engineering Graphics   2 2 0 3
Requisites:
This course introduces basic engineering graphics skills and applications. Topics include sketching, selection and use of current methods and tools, and the use of engineering graphics applications. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices. This course utilizes Solidworks software.

DFT-254   Intermediate Solid Modeling & Rendering   2 3 0 3
Requisites: Take DFT-154(S20155); Take previously. Required.
This course presents a continuation of basic three-dimensional solid modeling and design software. Topics include advanced study of parametric design, creation, editing, rendering and analysis of solid model assemblies, and multiview drawing generation. Upon completion, students should be able to use parametric design techniques to create and analyze the engineering design properties of a model assembly. This course uses Solidworks software.

DIGITAL MEDIA TECHNOLOGY (DME PREFIX)

DME-110   Introduction to Digital Media   2 2 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course introduces students to key concepts, technologies, and issues related to digital media. Topics include emerging standards, key technologies and related design issues, terminology, media formats, career paths, and ethical issues. Upon completion, students should be able to demonstrate the various media formats that are used in digital media technology.

DME-115   Graphic Design Tools   2 2 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course provides students with an introduction to creative expression and art/design techniques in a digital environment. Emphasis is placed on designing, creating, editing and integrating visual components consisting of bit-mapped and vector-based images, drawings, banners, text, simple animations, and multiple layers. Upon completion, students should be able to design and produce a range of visual products using digital processing techniques.

DME-140   Introduction to Audio/Video Media   2 2 0 3
Requisites: Take 1 group; Take GRD-152; Take WEB-111(S22416); Take DME-115; Take DME-110; Take previously. Required.
This course is designed to teach students how to manipulate digital and audio content for multimedia applications. Topics include format conversion and a review of current technologies and digital formats. Upon completion, students should be able to modify existing audio and video content to meet a range of production requirements associated with digital media applications.

DRAMA/THEATRE (DRA PREFIX)

DRA-111   Theatre Appreciation   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S13673); Take DRE-097(S23642); Take ENG-002; Take previously. Required.
This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience's appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate a vocabulary of theatre terms and to recognize the contributions of various theatre artists.

DRA-112   Literature of the Theatre   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S13673); Take DRE-097(S23642); Take ENG-002; Take previously. Required.
This course provides a survey of dramatic works from the classical Greek through the present. Emphasis is placed on

the language of drama, critical theory, and background as well as on play reading and analysis. Upon completion, students should be able to articulate, orally and in writing, their appreciation and understanding of dramatic works.

DRA-126   Storytelling   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-097(S23642); Take ENG-002; Take previously. Required.
This course introduces the art of storytelling and the oral traditions of folk literature. Topics include the history of storytelling, its value and purpose, techniques of the storyteller, and methods of collecting verbal art. Upon completion, students should be able to present and discuss critically stories from the world's repertory of traditional lore.

DRA-130   Acting I   0 6 0 3
Requisites: Take 1 group; Take ENG-080 RED-080; Take DRE-097(S23642); Take ENG-002; Take previously. Required.
This course provides an applied study of the actor's craft. Topics include role analysis, training the voice, and body concentration, discipline, and self-evaluation. Upon completion, students should be able to explore their creativity in an acting ensemble.

ECONOMICS (ECO PREFIX)

ECO-151   Survey of Economics   3 0 0 3
Requisites:
This course, for those who have not received credit for ECO 251 or 252, introduces basic concepts of micro- and macroeconomics. Topics include supply and demand, optimizing economic behavior, prices and wages, money, interest rates, banking system, unemployment, inflation, taxes, government spending, and international trade. Upon completion, students should be able to explain alternative solutions for economic problems faced by private and government sectors.

ECO-251   Principles of Microeconomics   3 0 0 3
Requisites:
This course introduces economic analysis of individual, business, and industry in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives.

ECO-252   Principles of Macroeconomics   3 0 0 3
Requisites:
This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals.

ELECTRONEURODIAGNOSTIC TECHNOLOGY (EDT PREFIX)

EDT 110 **Neuroscience/Pathological Conditions** 4 0 0 4
Requisites:
This course covers the anatomy and physiology of the nervous system as well as those disease processes which affect nervous system components. Topics include anatomy, physiology and pathology of the neuron, brain, spinal cord, peripheral nerves, and the special senses. Upon completion, students should be able to understand the structure and function of the nervous system and how this structure/function is affected by specific diseases.

EDT-111 **Laboratory Management** 1 0 0 1
Requisites:
This course provides the skills and knowledge necessary to effectively manage and/or function as a team player in an electroneurodiagnostics department. Topics include the role of an effective manager, the role of a team player, techniques for scheduling, record keeping/storage, and creation/implementation of department policies. Upon completion, students should be able to understand those skills necessary to manage an electroneurodiagnostics department, both independently and as a team worker.

EDT-112 **Instrumentation/Recording Methods** 3 0 0 3
Requisites:
This course covers theories of electrode placement, various instrumentation components used in neurological testing, and optimal recording techniques based on patient status. Topics include the International 10-20 System of electrode placement, electrode types/applications, electronics applicable to neurological testing, instrument controls, montages, and polarity/localization. Upon completion, students should be able to understand the theories underlying optimal utilization of electrodes and instrumentation for neurological testing.

EDT-113 **Clinical Correlates** 2 0 0 2
Requisites:
This course covers normal and abnormal neurological test findings associated with the anatomy/physiology/pathology covered in EDT 110. Topics include normal and abnormal neurological test results, artifacts, and activation procedures utilizing teaching records from affiliated laboratories. Upon completion, students should be able to identify patterns and artifacts on neurological tests in order that optimal recording strategies may be utilized.

EDT-114 **Special Procedures** 3 0 0 3
Requisites: Take EDT-112; Take previously. Required.
This course provides a basic understanding of special testing procedures used in neurological diagnosis. Topics include foundations of evoked potentials, nerve conduction studies, operating room monitoring, ambulatory EEGs, long-term video monitoring, polysomnography, and various radiological procedures. Upon completion, students should be able to demonstrate an understanding of the principles of various special procedures used in neurological diagnosis.

EDT-115 **EDT Laboratory Practice** 0 6 0 2
Requisites:
This course provides a practical application of theories covered in previous EDT courses. Emphasis is placed on practical skill development in neurological testing, appropriate patient rapport, infection control, and electrical safety guidelines, using mock situations. Upon completion, students should be able to conduct optimal neurological testing in mock situations.

EDT-116 **Electroneurodiagnostic Technology Clinical Experience** 0 0 36 12
Requisites: Take EDT-118; Take previously. Required.
This course provides clinical experience in a hospital, outpatient clinic or physician's office setting, under the supervision of a qualified technologist or qualified physician. Emphasis is placed on qualified interaction between patients/family and hospital personnel and optimal skill level development in electroneurodiagnostic procedures. Upon completion, students should be able to conduct themselves professionally in a clinical setting and conduct optimal electroneurodiagnostic procedures as ordered by physicians.

EDT-118 **EDT Laboratory Practice II** 0 9 0 3
Requisites: Take EDT-115(S16313); Take previously. Required.
This course is a continuation of EDT 115. Emphasis is placed on practical skills developed in neurological testing, to include the basic EEG along with special testing procedures. Upon completion, students should be able to conduct neurological testing in mock situations.

EDT 120   Intraoperative Neuromonitoring and Evoked Potentials   2 15 0 7
Requisites: Take EDT-114; Take previously. Required.
This course provides additional knowledge and skills in the special testing procedure of intraoperative Neuromonitoring (IONM). Emphasis is placed on the application of skills associated with the neurological testing procedures with special focus on Intraoperative Neuromonitoring and Evoked Potentials (EP). Upon completion, students should be able to conduct themselves professionally in a clinical setting and conduct optimal IONM and EP procedures as ordered by physicians.

EDUCATION (EDU PREFIX)

EDU-119   Introduction to Early Childhood Education   4 0 0 4
Requisites:
This course introduces the foundations of early childhood education, the diverse educational settings for young children, professionalism and planning intentional developmentally appropriate experiences for each child. Topics include theoretical foundations, national early learning standards, NC Foundations for Early Learning and Development, state regulations, program types, career options, professionalism, ethical conduct, quality inclusive environments, and curriculum responsive to the needs of each child/family. Upon completion, students should be able to design a career/professional development plan, appropriate environments, schedules, and activity plans.

EDU-131   Child, Family, and Community   3 0 0 3
Requisites:
This course covers the development of partnerships among culturally, linguistically and ability diverse families, children, schools and communities through the use of evidence-based strategies. Emphasis is placed on developing skills and identifying benefits for establishing and supporting respectful relationships between diverse families, programs/schools, and community agencies/resources reflective of the NAEYC Code of Ethical Conduct and the Code of Ethics for North Carolina Educators. Upon completion, students should be able to identify appropriate relationship building strategies between diverse families, children birth through adolescence, schools, and communities and demonstrate a variety of communication skills including appropriate use of technology to support every child. This course covers the development of partnerships between culturally, linguistically and ability diverse families, children, schools and communities through the use of evidence-based strategies. Emphasis is placed on developing skills and identifying benefits for establishing, and supporting, respectful, relationships between diverse families, programs/schools, and community agencies/resources reflective of the NAEYC Code of Ethical Conduct and the Code of Ethics for North Carolina Educators. Upon completion, students should be able to identify appropriate relationship building strategies between diverse families, children birth through adolescence, schools, and communities and demonstrate a variety of communication skills including appropriate use of technology to support every child.

EDU-144   Child Development I   3 0 0 3
Requisites:
This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse.

EDU-145   Child Development II   3 0 0 3
Requisites:
This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse.

EDU-146 **Child Guidance** 3 0 0 3
Requisites:
This course introduces evidence-based strategies to build nurturing relationships with each child by applying principles and practical techniques to facilitate developmentally appropriate guidance. Topics include designing responsive/supportive learning environments, cultural, linguistic and socio-economic influences on behavior, appropriate expectations, the importance of communication with children/families including using technology and the use of formative assessments in establishing intentional strategies for children with unique needs. Upon completion, students should be able to demonstrate direct/indirect strategies to encourage social skills, self-regulation, emotional expression and positive behaviors while recognizing the relationship between children's social, emotional and cognitive development.

EDU-151 **Creative Activities** 3 0 0 3
Requisites:
This course introduces developmentally supportive creative learning environments with attention to divergent thinking, creative problem-solving, evidence-based teaching practices, and open-ended learning materials while applying NC Foundations for Early Learning and Development. Emphasis is placed on observation of process driven learning experiences in art, music, creative movement, dance, and dramatics for every young child age birth through eight, integrated through all domains and academic content. Upon completion, students should be able to examine, create, and adapt developmentally creative learning materials, experiences, and environments for children that are culturally, linguistically, and ability diverse.

EDU-153 **Health, Safety and Nutrition** 3 0 0 3
Requisites:
This course covers promoting and maintaining the health and well-being of every child. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, health benefits of active play, recognition and reporting of abuse/neglect, and state regulations. Upon completion, students should be able to apply knowledge of NC Foundations for Early Learning and Development for health, safety, nutritional needs and safe learning environments.

EDU-157 **Active Play** 2 2 0 3
Requisites:
This course introduces physical activities to promote the development of the whole child, birth through middle childhood. Topics include active play, outdoor learning, design of the environment, development of play skills, loose parts play, nature play, risk benefit assessment, advocacy, and family/community connection. Upon completion, students should be able to discuss the stages of play, the role of teachers in play, active play environments, advocate for the child's right to play, and plan and assess appropriate experiences using NC Foundations for Early Learning and Development.

EDU-162 **Observation and Assessment in Early Childhood Education** 3 0 0 3
Requisites:
This course introduces the research, benefits, goals, and ethical considerations associated with observation and formative assessment in early childhood education. Emphasis is placed on the implementation of multiple observation/assessment strategies including anecdotal records, event samples, rating scales, and portfolios to create appropriate learning experiences. Upon completion, students should be able to practice responsible assessment and effectively use tools to assess the child, teacher practices and indoor and outdoor environments to enhance programming; and explain the importance of assessment partnerships with families and other professionals.

EDU-163 **Classroom Management and Instruction** 3 0 0 3
Requisites:
This course examines classroom management and evidence-based instructional strategies that create supportive learning environments to provide developmentally appropriate guidance for school-age populations. Topics include classroom management and organization, teaching strategies, individual student differences and learning styles, ongoing systematic observation, and developmentally appropriate classroom guidance techniques. Upon completion, students should be able to utilize developmentally appropriate behavior management and high quality instructional strategies that enhance the teaching/learning process and promote students' academic success.

EDU-184   **Early Childhood Introductory Practicum**   1 3 0 2
Requisites: Take EDU-119(S24238); Take previously. Required. Take EDU-119(S24238) EDU-131(S25339) EDU-153(S25348) EDU-144(S25341) or EDU-145(S25342); Take previously. Required.
This course introduces students to early childhood settings and applying skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on observing children and assisting in the implementation of developmentally appropriate activities/environments for all children; and modeling reflective/professional practices. Upon completion, students should be able to demonstrate developmentally appropriate interactions with children and ethical/professional behaviors as indicated by assignments and onsite faculty visits.

EDU-187   **Teaching and Learning for All**   3 3 0 4
Requisites:
This course introduces students to knowledge, concepts, and best practices needed to provide developmentally appropriate, effective, inclusive, and culturally responsive educational experiences in the classroom. null Topics include growth and development, learning theory, student motivation, teaching diverse learners, classroom management, inclusive environments, student-centered practices, instructional strategies, teaching methodologies, observation/assessment techniques, educational planning, reflective practice, collaboration, cultural competence, ethics, professionalism, and leadership. null Upon completion, students should be able to identify the knowledge, skills, roles, and responsibilities of an effective educator as defined by state and national professional teaching standards.

EDU-216   **Foundations of Education**   3 0 0 3
Requisites:
This course introduces the examination of the American educational systems and the teaching profession. Topics include the historical and philosophical influences on education, various perspectives on educational issues, and experiences in birth through grade 12 classrooms. Upon completion, students should be able to reflect on classroom observations, analyze the different educational approaches, including classical/traditional and progressive, and have knowledge of the various roles of educational systems at the federal, state and local level.

EDU-221   **Children With Exceptionalities**   3 0 0 3
Requisites: Take 1 group; Take EDU-144(S25341) EDU-145(S25342); Take PSY-244(S12069) PSY-245(S11997); Take previously. Required.
This course covers atypical patterns of child development, inclusive/diverse settings, evidenced-based educational/family plans, differentiated instruction, adaptive materials, and assistive technology. Emphasis is placed on the characteristics of exceptionalities and delays, early intervention/special education, transitions, observation, developmental screening, formative assessment of children, and collaborating with families and community partners. Upon completion, students should be able to recognize diverse abilities, describe the referral process, identify community resources, explain the importance of collaboration with families/professionals, and develop appropriate strategies/adaptations to support children in all environments with best practices as defined by laws, policies and the NC Foundations for Early Learning and Development.

EDU-234   **Infants, Toddlers, and Twos**   3 0 0 3
Requisites: Take EDU-119(S24238); Take previously. Required.
This course covers the development of high-quality, individualized, responsive/engaging relationships and experiences for infants, toddlers, and twos. Emphasis is placed on typical and atypical child development, working with diverse families to provide positive, supportive, and engaging early learning activities and interactions through field experiences and the application of the NC Foundations for Early Learning and Development. Upon completion, students should be able to demonstrate responsive curriculum planning, respectful relationships and exposure to a variety of developmentally appropriate experiences/materials that support a foundation for healthy development and growth of culturally, linguistically and ability diverse children birth to 36 months.

EDU-235   **School-Age Development and Programs**   3 0 0 3
Requisties:
This course includes developmentally appropriate practices in group settings for school-age children. Emphasis is placed on principles of development, environmental planning, and positive guidance techniques and program development. Upon completion, students should be able to discuss developmental principles for culturally, linguistically, and ability diverse children ages five to twelve and plan and implement developmentally appropriate programs and activities.

EDU-250   **Teacher Licensure Preparation**   3 0 0 3
Requisites: Take 1 group; Take ENG-111(S25433) MAT-143(S24995); Take ENG-111(S25433) MAT-152(S24996); Take ENG-111(S25433) MAT-171(S25432); Take previously. Required.
This course provides information and strategies necessary for transfer to a teacher licensure program at a senior institution. Topics include entry level teacher licensure exam preparation, performance based assessment systems, requirements for entry into teacher education programs, the process to become a licensed teacher in North Carolina, and professionalism including expectations within the field of education. Upon completion, students should be able to utilize educational terminology and demonstrate knowledge of teacher licensure processes including exam preparation, technology based portfolio assessment, and secondary admissions processes to the school of education at a senior institution.

EDU-251   **Exploration Activities**   3 0 0 3
Requisites:
This course covers fundamental concepts in the content areas of science, technology, engineering, math and social studies through investigative experiences. Emphasis is placed on exploring fundamental concepts, developmentally appropriate scope and sequence, and teaching strategies to engage each child in the discovery approach. Upon completion, students should be able to understand major concepts in each content area and implement appropriate experiences for young children.

EDU-261   **Early Childhood Administration I**   3 0 0 3
Requisites: Take EDU-119(S24238); Take either previously or concurrently. Required.
This course introduces principles and practices essential to preparing and supporting child care administrators. Topics include program philosophy, policies and procedures, NC Child Care Law and Rules, business planning, personnel and fiscal management, and NAEYC Code of Ethical Conduct Supplement for Early Childhood Program Administration. Upon completion, students should be able to articulate a developmentally appropriate program philosophy, locate current state licensing regulations, analyze a business plan and examine comprehensive program policies and procedures.

EDU-262   **Early Childhood Administration II**   3 0 0 3
Requisites: Take EDU-119(S24238) EDU-261(S25391); Take previously. Required.
This course focuses on advocacy/leadership, public relations/community outreach and program quality/evaluation for diverse early childhood programs. Topics include program evaluation/accreditation, involvement in early childhood professional organizations, leadership/mentoring, family, volunteer and community involvement and early childhood advocacy. Upon completion, students should be able to define and evaluate all components of early childhood programs, develop strategies for advocacy and integrate community into programs.

EDU-263   **School-Age Program Administration**   2 0 0 2
Requisites:
This course introduces the methods and procedures for development and administration of school-age programs in the public or proprietary setting. Emphasis is placed on the construction and organization of the physical environment. Upon completion, students should be able to plan, develop and administer a quality school-age program.

EDU-279   **Literacy Development and Instruction**   3 3 0 4
Requisites:
This course is designed to provide students with concepts and skills of literacy development, instructional methods/materials and assessment techniques needed to provide scientifically-based, systematic reading and writing instruction into educational practice. null Topics include literacy concepts, reading and writing development, developmentally appropriate pedagogy, culturally-responsive instruction, standards-based outcomes, lesson planning, formative/summative assessment, recognizing reading difficulties, research-based interventions, authentic learning experiences, classroom implementation, and reflective practice. null Upon completion, students should be able to plan, implement, assess, evaluate, and demonstrate developmentally appropriate literacy instruction aligned to the NC Standard Course of Study and other state and national standards.

EDU-280   **Language and Literacy Experiences**   3 0 0 3
Requisites:
This course provides evidence-based strategies for enhancing language and literacy experiences that align with NC Foundations for Early Learning and Development. Topics include developmental sequences for children's emergent receptive and expressive language, print concepts, appropriate observations/assessments, literacy enriched environments, quality selection of diverse literature, interactive media, and inclusive practices. Upon completion, students should be able to select, plan, implement and evaluate developmentally appropriate language and literacy experiences for children who are culturally, linguistically and ability diverse.

EDU-282   Early Childhood Literature   3 0 0 3
Requisites:
This course covers the history, selection, and integration of literature and language in the early childhood curriculum. Topics include the history and selection of developmentally appropriate children's literature and the use of books and other media to enhance language and literacy in the classroom. Upon completion, students should be able to select appropriate books for storytelling, reading aloud, puppetry, flannel board use, and other techniques for children who are culturally, linguistically, and ability diverse.

EDU-284   Early Childhood Capstone Practicum   1 9 0 4
Requisites: Take 1 group; Take EDU-119(S24238) EDU-144(S24559) EDU-145(S24560) EDU-146(S24561) EDU-151(S24562); Take EDU-119(S24238) PSY-244(S12069) PSY-245(S11997) EDU-146(S24561) EDU-151(S24562); Take EDU-119(S24238) EDU-144(S24559) PSY-245(S11997) EDU-146(S24561) EDU-151(S24562); Take EDU-119(S24238) PSY-244(S12069) EDU-145(S24560) EDU-146(S24561) EDU-151(S24562); Take previously. Required. Take EDU-184(S25363); Take previously. Required.
This course is designed to allow students to demonstrate acquired skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/engaging families; and modeling reflective and professional practices based on national and state guidelines. Upon completion, students should be able to apply NC Foundations for Early Learning and Development to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors, including the use of appropriate technology, as indicated by assignments and onsite faculty assessments.

ENGLISH AS A FOREIGN LANGUAGE (EFL PREFIX)

EFL-055   English for Special Purpose   3 0 0 3
Requisites:
This course will provide instruction in academic and professional language for non-native speakers of English. Emphasis is placed on development of integrated language use for carrying out a specific academic task. Upon completion, students should be able to demonstrate improved language skills for participation and success within the particular topic area.

EFL-061   Listening/Speaking I   5 0 0 5
Requisites:
This course is designed to provide the basic oral/aural language skills needed for essential daily conversation on campus and in the community. Emphasis is placed on vocabulary building, communication in various social and academic situations, and various spoken grammatical skills. Upon completion, students should be able to produce and understand English dealing with routine topics using basic syntax and vocabulary skills.

EFL-062   Listening/Speaking II   5 0 0 5
Requisites: Take EFL-061; Take previously. Required.
This course is designed to enhance intermediate listening and speaking skills of non-native speakers of English. Emphasis is placed on the ability to hold extended conversation and on the ability to understand extended spoken discourse. Upon completion, students should be able to demonstrate improved listening skills and strategies in a variety of settings.

EFL-063   Listening/Speaking III   5 0 0 5
Requisites: Take EFL-062; Take previously. Required.
This course is designed to increase the ability and confidence of high intermediate-level non-native speakers of English in verbal expression and listening comprehension. Emphasis is placed on listening/speaking skills which would be appropriate for group discussions, oral presentations, and note taking. Upon completion, students should be able to successfully participate in high intermediate-level listening and speaking activities.

EFL-064   Listening-Speaking IV   5 0 0 5
Requisites: Take EFL-063; Take previously. Required.
This course is designed to prepare advanced-level non-native speakers of English for academic and professional speaking and listening activities. Emphasis is placed on learning and practicing strategies of effective oral expression and comprehension of spoken discourse in informal and formal settings. Upon completion, students should be able to effectively participate in activities appropriate to academic and professional settings.

CURRICULUM COURSE DESCRIPTIONS

EFL-071   **Reading I**   5 0 0 5
Requisites:
This course is designed to help those literacy skills achieve reading fluency in English at the beginning level. Emphasis is placed on basic academic and cultural vocabulary and reading strategies which include self-monitoring, and recognizing organizational styles and context clues. Upon completion, students should be able to use these strategies to read and comprehend basic academic, narrative, and expository texts.

EFL-073   **Reading III**   5 0 0 5
Requisites: Take EFL-072; Take previously. Required.
This course is designed to develop fundamental reading and study strategies at the intermediate level needed for curriculum programs. Emphasis is placed on building vocabulary and cultural knowledge, improving comprehension, and developing study strategies on basic-level college materials and literary works. Upon completion, students should be able to read and comprehend narrative and expository texts at the intermediate instructional level.

EFL-074   **Reading IV**   5 0 0 5
Requisites: Take EFL-073; Take previously. Required.
This course is designed to enhance the academic reading skills for successful reading ability as required in college-level courses. Emphasis is placed on strategies for effective reading and the utilization of these strategies to improve comprehension, analytical skills, recall, and overall reading speed. Upon completion, students should be able to comprehend, synthesize, and critique multi-disciplinary college-level reading/textbook materials.

EFL-081   **Grammar I**   5 0 0 5
Requisites: Take EFL-091; Take either previously or concurrently. Recommended.
This course provides non-native speakers of English with a variety of fundamental grammatical concepts which enrich language skills and comprehension. Emphasis is on key basic grammatical structures and opportunities for practice which incorporate grammatical knowledge into various skills areas. Upon completion, students should be able to demonstrate comprehension and correct usage of specified grammatical concepts.

EFL-082   **Grammar II**   5 0 0 5
Requisites: Take EFL-081; Take previously. Required.
This course provides non-native speakers of English with a variety of basic grammatical concepts which enrich language skills and comprehension. Emphasis is on key low-intermediate grammatical structures and opportunities for practice which incorporate grammatical knowledge into various skills areas. Upon completion, students should be able to demonstrate by written and oral means the comprehension and correct usage of specified grammatical concepts

EFL-083   **Grammar III**   5 0 0 5
Requisites: Take EFL-082; Take previously. Required.
This course is designed to provide high-intermediate non-native speakers of English with a knowledge of grammatical structures that improves academic communication. Emphasis is placed on using high-intermediate grammatical structures in meaningful contexts through exercises integrating the use of newly acquired structures with previously learned structures. Upon completion, students should be able to demonstrate improved proficiency, comprehension, and grammatical accuracy.

EFL-084   **Grammar IV**   5 0 0 5
Requisites: Take EFL-083; Take previously. Required.
This course is designed to give non-native speakers of English a full understanding of advanced grammatical structures and techniques. Emphasis is placed on oral and written communicative fluency through the study of advanced grammatical forms. Upon completion, students should be able to incorporate the structures covered in both spoken and written form, demonstrating improved proficiency, comprehension, and grammatical accuracy.

EFL-091   **Composition I**   5 0 0 5
Requisites: Take EFL-081; Take either previously or concurrently. Recommended.
This course introduces basic sentence structure and writing paragraphs. Emphasis is placed on word order, verb tense-aspect system, auxiliaries, word forms, and simple organization and basic transitions in writing paragraphs. Upon completion, students should be able to demonstrate a basic understanding of grammar and ability to write English paragraphs using appropriate vocabulary, organization, and transitions.

EFL-093   Composition III   5 0 0 5
Requisites: Take EFL-092; Take previously. Required.
This course covers intermediate-level academic and general-purpose writing. Emphasis is placed on the writing process, content, organization, and language use in formal academic compositions in differing rhetorical modes. Upon completion, students should be able to effectively use the writing process in a variety of rhetorical modes.

EFL-094   Composition IV   5 0 0 5
Requisites: Take EFL-093; Take previously. Required.
This course prepares low-advanced non-native speakers of English to determine the purpose of their writing and to write paragraphs and essays to fulfill that purpose. Emphasis is placed on unity, coherence, completeness, audience, the writing process, and the grammatical forms and punctuation appropriate for each kind of writing. Upon completion, students should be able to write unified, coherent, and complete paragraphs and essays which are grammatical and appropriate for the intended audience.

EFL-095   Composition V   5 0 0 5
Requisites: Take EFL-094; Take previously. Required.
This course is designed to prepare advanced non-native speakers of English for college-level composition courses. Emphasis is placed on the study and process of writing formal essays and research papers and the analysis of literary, expository, and descriptive writings. Upon completion, students should be able to write and analyze professional and peer compositions and apply basic research principles.

ENGINEERING (EGR PREFIX)

EGR-115   Intro to Technology   2 3 0 3
Requisites:
This course introduces the basic skills and career fields for technicians. Topics include career options, technical vocabulary, dimensional analysis, measurement systems, engineering graphics, calculator applications, professional ethics, safety practices, and other related topics. Upon completion, students should be able to demonstrate an understanding of the basic technologies, prepare drawings and sketches, and perform computations using a scientific calculator. This course is an introduction to CAD using AutoCAD software.

EGR-115A   Intro to Technology Lab   0 3 0 1
Requisites: Take EGR-115(S20666); Take either previously or concurrently. Required.
This course provides a laboratory setting for EGR 111. Emphasis is placed on developing skills in dimensional analysis, measurement systems, engineering graphics, and calculator applications. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in EGR 115.

EGR-131   Introduction to Electronics Technology   1 2 0 2
Requisites:
This course introduces the basic skills required for electrical/electronics technicians. Topics include soldering/desoldering, safety and sustainability practices, test equipment, scientific calculators, AWG wire table, the resistor color code, electronic devices, problem solving, and use of hand tools. Upon completion, students should be able to solder/desolder, operate test equipment, apply problem-solving techniques, and use a scientific calculator.

EGR-150   Intro to Engineering   1 2 0 2
Requisites: Take 1 group; Take MAT-003; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983); Take MAT-121(S24993); Take MAT-143(S24995); Take MAT-152(S24996); Take MAT-171(S24997); Take previously. Required.
This course is an overview of the engineering profession. Topics include goal setting and career assessment, ethics, public safety, the engineering method and design process, written and oral communication, interpersonal skills and team building, and computer applications. Upon completion, students should be able to understand the engineering process, the engineering profession, and utilize college resources to meet their educational goals.

EGR-212   Logic System Design I   3 0 0 3
Requisites: Take MAT-271 PHY-251; Take previously. Required. Take PHY-251; Minimum grade C; Take previously. Required. Take MAT-272; Minimum grade C; Take previously. Required.
This course provides an introduction to digital circuits and analysis. Topics include Boolean Algebra; mixed logic; design of combinational circuits; introduction to sequential systems; and MSI building blocks. Upon completion, students should be able to analyze and design digital circuits and systems.

EGR-215   **Network Theory I**   3 0 0 3
Requisites: Take PHY-251 MAT-272(S13612); Take previously. Required. Take PHY-252 MAT-273(S13616); Take either previously or concurrently. Required.
This course provides an introduction to Kirchoff's laws and terminal equations, circuit analysis techniques and network theorems, transient and natural response, and state variable analysis. Topics include Kirchoff's laws, Ohm's law, circuit analysis techniques, Network theorems, singularity functions, transient and natural responses, power, and state variable analysis. Upon completion, students should be able to analyze electric circuits involving capacitors, inductors, and resistors to determine required parameters.

EGR-216   **Logic and Network Lab**   0 3 0 1
Requisites: Take PHY-251 MAT-272(S13612); Take previously. Required. Take EGR-215; Take either previously or concurrently. Required.
This course provides laboratory experiments in network measurements and logic design and laboratory equipment and techniques. Topics include network measurement and applications, experimental logic design and introduction to laboratory equipment and techniques. Upon completion, students should be able to complete network measurement logic design and be able to use laboratory equipment with proper techniques.

EGR-220   **Engineering Statics**   3 0 0 3
Requisites: Take PHY-251; Take previously. Required. Take MAT-272(S13612); Take either previously or concurrently. Required. Take PHY-251; Minimum grade C; Take previously. Required. Take MAT-273(S23941); Take either previously or concurrently. Required. Take MAT-272(S23940); Minimum grade C; Take previously. Required.
This course introduces the concepts of engineering based on forces in equilibrium. Topics include concentrated forces, distributed forces, forces due to friction, and inertia as they apply to machines, structures, and systems. Upon completion, students should be able to solve problems which require the ability to analyze systems of forces in static equilibrium.

EGR-225   **Engineering Dynamics**   3 0 0 3
Requisites: Take EGR-220; Take previously. Required. Take MAT-273(S13616); Take either previously or concurrently. Required. Take EGR-220; Minimum grade C; Take previously. Required.
This course introduces the concepts of engineering based on the analysis of motion in Cartesian, cylindrical, and spherical coordinate systems. Topics include the two and three dimensional motion of particles and rigid bodies, the forces associated with that motion, and relative motion between two coordinate systems. Upon completion, students should be able to solve problems which require the ability to analyze the motion and forces involved in a dynamic system.

EGR-228   **Intro to Solid Mechanics**   3 0 0 3
Requisites: Take EGR-220; Take previously. Required.
This course provides an introduction to engineering theory of deformable solids and applications. Topics include stress and deformation resulting from axial, torsion, and bending loads; shear and moment diagrams; Mohr's circle of stress; and strain and buckling of columns. Upon completion, students should be able to analyze solids subject to various forces and design systems using a variety of materials.

EGR-251   **Statics**   2 2 0 3
Requisites: Take MAT-121(S23927) MAT-171(S23934) or MAT-271(S23939); Take previously. Required.
This course covers the concepts and principles of statics. Topics include systems of forces and moments on structures in two- and three-dimensions in equilibrium. Upon completion, students should be able to analyze forces and moments on structures.

EGR-252   **Strength of Materials**   2 2 0 3
Requisites: Take EGR-251; Take previously. Required.
This course covers the principles and concepts of stress analysis. Topics include centroids, moments of inertia, shear/moment diagrams, and stress and strain. Upon completion, students should be able to perform a stress and strain analysis on structural components.

EGR-285   **Design Project**   0 4 0 2
Requisites: Take EGR-251 ELN-260; Take previously. Required.
This course provides the opportunity to design an instructor-approved project using previously acquired skills. Emphasis is placed on selection, proposal, design, testing, and documentation of the approved project. Upon completion, students should be able to present and demonstrate projects.

CURRICULUM COURSE DESCRIPTIONS

ELECTRICITY (ELC PREFIX)

ELC-111   **Introduction to Electricity**   2 2 0 3
Requisites:
This course introduces the fundamental concepts of electricity and test equipment to non-electrical/electronics majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

ELC-112   **DC/AC Electricity**   3 6 0 5
Requisites:
This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/AC circuits.

ELC-113   **Residential Wiring**   2 6 0 4
Requisites: Take ELC-118; Take either previously or concurrently. Required.
This course introduces the care/usage of tools and materials used in residential electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical print reading; planning, layout; and installation of electrical distribution equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with residential electrical installations.

ELC-114   **Commercial Wiring**   2 6 0 4
Requisites: Take ELC-118; Take previously. Required.
This course provides instruction in the application of electrical tools, materials, and test equipment associated with commercial electrical installations. Topics include the NEC; safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with commercial electrical installations.

ELC-114C   **Commercial Wiring**   2 0 0 2
Requisites: Take ELC-113(S23518); Take previously. Required.
This course provides instruction in the application of electrical tools, materials, and test equipment associated with commercial electrical installations. Topics include the NEC; safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with commercial electrical installations.

ELC-114L   **Commercial Wiring**   0 6 0 2
Requisites: Take ELC-113(S23518); Take previously. Required. Take ELC-114C; Take either previously or concurrently. Required.
This course provides instruction in the application of electrical tools, materials, and test equipment associated with commercial electrical installations. Topics include the NEC; safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with commercial electrical installations.

ELC-115   **Industrial Wiring**   2 6 0 4
Requisites: Take ELC-114(S23519); Take previously. Required. Take ELC-121(S21591); Take either previously or concurrently. Required.
This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment.

ELC-117   **Motors and Controls**   2 6 0 4
Requisites: Take 1 group; Option: Take ELC-112; Option: Take ELC-131; Take previously. Required.
This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

ELC-117C   **Motors and Controls**   2 0 0 2
Requisites: Take 1 group; Take ELC-111; Take ELC-112(S23481); Take ELC-131(S23482); Take previously. Required.
This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

ELC-117L   **Motors and Controls**   0 6 0 2
Requisites: Take 1 group; Take ELC-111; Take ELC-112(S23481); Take ELC-131(S23482); Take previously. Required. Take ELC-117C; Take either previously or concurrently. Required.
This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

ELC-118   **National Electrical Code**   1 2 0 2
Requisites:
This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

ELC-119   **NEC Calculations**   1 2 0 2
Requisites: Take ELC-112(S23481); Take previously. Required.
This course covers branch circuit, feeder, and service calculations. Emphasis is placed on sections of the National Electrical Code related to calculations. Upon completion, students should be able to use appropriate code sections to size wire, conduit, and overcurrent devices for branch circuits, feeders, and service.

ELC-121   **Electrical Estimating**   1 2 0 2
Requisites:
This course covers the principles involved in estimating electrical projects. Topics include take-offs of materials and equipment, labor, overhead, and profit. Upon completion, students should be able to estimate simple electrical projects.

ELC-126   **Electrical Computations**   2 2 0 3
Requisites:
This course introduces the fundamental applications of mathematics which are used by an electrical/electronics technician. Topics include whole numbers, fractions, decimals, powers, roots, simple electrical formulas, and usage of a scientific calculator. Upon completion, students should be able to solve simple electrical mathematical problems.

ELC-127   **Software for Technicians**   1 3 0 2
Requisites:
This course introduces computer software which can be used to solve electrical/electronics problems. Topics include electrical/electronics calculations and applications. Upon completion, students should be able to utilize a personal computer for electrical/electronics- related applications.

ELC-128   **Introduction to Programmable Logic Controller**   2 3 0 3
Requisites: Take ELC-117; Take previously. Required.
This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to understand basic PLC systems and create simple programs.

ELC-128C   **Introduction to Programmable Logic Controller**   2 0 0 2
Requisites: Take ELC-117(S23521) or ELC-131(S23482); Take previously. Required.
This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to understand basic PLC systems and create simple programs.

ELC-128L   **Introduction to Programmable Logic Controller**   0 3 0 1
Requisites: Take ELC-117(S23521) or ELC-131(S23482); Take previously. Required. Take ELC-128C; Take either previously or concurrently. Required.
This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to understand basic PLC systems and create simple programs.

ELC-131   **Circuit Analysis I**   3 3 0 4
Requisites: Take ELC-131A(S23483); Take concurrently. Required.
This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment.

ELC-131A   **Circuit Analysis I Lab**   0 3 0 1
Requisites: Take ELC-131(S13459); Take either previously or concurrently. Required.
This course provides laboratory assignments as applied to fundamental principles of DC/AC electricity. Emphasis is placed on measurements and evaluation of electrical components, devices and circuits. Upon completion, the students will gain hands-on experience by measuring voltage, current, and opposition to current flow utilizing various meters and test equipment.

ELC-134   **Transformer Applications**   1 2 0 2
Requisites: Take ELC-117(S23521); Take previously. Required.
This course covers single- and three-phase transformer applications as found in industrial/commercial buildings and machinery. Topics include transformer principles, single- and three-phase calculations, and connections. Upon completion, students should be able to understand single-and three-phase transformers, make transformer connections, and make calculations.

ELC-220   **Photovoltaic System Technology**   2 3 0 3
Requisites: Take ALT-120; Take previously. Required.
This course introduces the concepts, tools, techniques, and materials needed to understand systems that convert solar energy into electricity with photovoltaic (pv) technologies. Topics include site analysis for system integration, building codes, and advances in photovoltaic technology. Upon completion, students should be able to demonstrate an understanding of the principles of photovoltaic technology and current applications.

ELC-221   **Advanced Photovoltaic System Designs**   2 3 0 3
Requisites: Take ELC-220; Take previously. Required.
This course introduces specific elements in photovoltaic (pv) systems technologies including efficiency, modules, inverters, charge controllers, batteries, and system installation. Topics include National Electrical Code (NEC), electrical specifications, photovoltaic system components, array design and power integration requirements that combine to form a unified structure. Upon completion, students should be able to demonstrate an understanding of various photovoltaic designs and proper installation of NEC compliant solar electric power systems.

ELECTRONICS (ELN PREFIX)

ELN-112   **Diesel Electronics System**   2 6 0 4
Requisites:
This course introduces electronic theory and applications as used in medium and heavy duty vehicles. Emphasis is placed on the basic function and operation of semiconductor and integrated circuits. Upon completion, students should be able to identify electronic components, explain their use and function, and use meters and flow charts to diagnose and repair systems.

ELN-113   **Electronic Fuel Injection**   1 2 0 2
Requisites:
This course covers the function of the various sensors used to provide feedback control to current model diesel engines. Emphasis is placed on the operation of ECM-controlled fuel injectors and testing using current industry methods. Upon completion, students should be able to obtain information from the electronic fuel system using current test programs, fault tree, and digital meters.

ELN-131   Analog Electronics I   3 3 0 4
Requisites: Take ELC-131(S23482); Take previously. Required.
This course introduces the characteristics and applications of semiconductor devices and circuits. Emphasis is placed on analysis, selection, biasing, and applications. Upon completion, students should be able to construct, analyze, verify, and troubleshoot analog circuits using appropriate techniques and test equipment.

ELN-132   Analog Electronics II   3 3 0 4
Requisites: Take ELN-131(S23487); Take previously. Required.
This course covers additional applications of analog electronic circuits with an emphasis on analog and mixed signal integrated circuits (IC). Topics include amplification, filtering, oscillation, voltage regulation, and other analog circuits. Upon completion, students should be able to construct, analyze, verify, and troubleshoot analog electronic circuits using appropriate techniques and test equipment.

ELN-133   Digital Electronics   3 3 0 4
Requisites: Take 1 group; Take DRE-098(S23643); Take ENG-002; Take previously. Required. Take 1 group; Take DMA-010 DMA-020 DMA-030 DMA-040(S23170) DMA-050(S23171) DMA-060(S23172); Take MAT-003; Take previously. Required.
This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, medium scale integration (MSI) and large scale integration (LSI) circuits, analog to digital (AD) and digital to analog (DA) conversion, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

ELN-150   Computer-Aided Drafting for Electronics   1 3 0 2
Requisites:
This course introduces computer-aided drafting (CAD) with an emphasis on applications in the electronics field. Topics include electronics industry standards (symbols, schematic diagrams, layouts); drawing electronic circuit diagrams; and specialized electronic drafting practices and components such as resistors, capacitors, and ICs. Upon completion, students should be able to prepare electronic drawings with CAD software.

ELN-152   Fabrication Techniques   1 3 0 2
Requisites:
This course covers the fabrication methods required to create a prototype product from the initial circuit design. Topics include CAD, layout, sheet metal working, component selection, PC board layout and construction, reverse engineering, soldering, and other related topics. Upon completion, students should be able to design and construct an electronic product with all its associated documentation.

ELN-231   Industrial Controls   2 3 0 3
Requisites: Take ELC-131; Take previously. Required.
This course introduces the fundamental concepts of control and rotating machinery and associated peripheral devices. Topics include rotating machine theory, ladder logic, electromechanical and solid state relays, motor controls, pilot devices, three-phase power systems, and other related topics. Upon completion, students should be able to interpret schematics and demonstrate an understanding of electromechanical and electronic control of rotating machinery.

ELN-232   Introduction to Microprocessors   3 3 0 4
Requisites: Take ELN-133(S23488); Take previously. Required.
This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include low-level language programming, bus architecture, I/O systems, memory systems, interrupts, and other related topics. Upon completion, students should be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment.

ELN-233   Microprocessor Systems   3 3 0 4
Requisites: Take CSC-133(S21065) ELN-232(S21640); Take previously. Required.
This course covers the application and design of microprocessor control systems. Topics include control and interfacing of systems using AD/DA, serial/parallel I/O, communication protocols, and other related applications. Upon completion, students should be able to design, construct, program, verify, analyze, and troubleshoot fundamental microprocessor interface and control circuits using related equipment.

ELN-234   **Communication Systems**   3 3 0 4
Requisites: Take ELN-131(S23487); Take previously. Required.
This course introduces the fundamentals of electronic communication systems. Topics include the frequency spectrum, electrical noise, modulation techniques, characteristics of transmitters and receivers, and digital communications. Upon completion, students should be able to interpret analog and digital communication circuit diagrams, analyze transmitter and receiver circuits, and use appropriate communication test equipment.

ELN-235   **Data Communication Systems**   3 3 0 4
Requisites: Take ELC-112(S23481) or ELC-131(S23482); Take previously. Required.
This course covers data communication systems and the transmission of digital information from source to destination. Topics include data transmission systems, interfaces and modems, protocols, networks, and other related topics. Upon completion, students should be able to demonstrate knowledge of the concepts associated with data communication systems.

ELN-260   **Prog Logic Controllers**   3 3 0 4
Requisites:
This course provides a detailed study of PLC applications, with a focus on design of industrial controls using the PLC. Topics include PLC components, memory organization, math instructions, documentation, input/output devices, and applying PLCs in industrial control systems. Upon completion, students should be able to select and program a PLC system to perform a wide variety of industrial control functions.

ELN-275   **Troubleshooting**   1 3 0 2
Requisites: Take ELN-131(S23487); Take either previously or concurrently. Required.
This course covers techniques of analyzing and repairing failures in electronic equipment. Topics include safety, signal tracing, use of service manuals, and specific troubleshooting methods for analog, digital, and other electronics-based circuits and systems. Upon completion, students should be able to logically diagnose and isolate faults and perform necessary repairs to meet manufacturers' specifications.

EMERGENCY MEDICAL CARE (EMS PREFIX)

EMS-110   **EMT**   6 6 3 9
Requisites:
This course introduces basic emergency medical care. Topics include preparatory, airway, patient assessment, medical emergencies, trauma, infants and children, and operations. Upon completion, students should be able to demonstrate the knowledge and skills necessary to achieve North Carolina State or National Registry EMT certification.

EMS-110AB   **EMT**   3 3 0 4
Requisites:
This course introduces basic emergency medical care. Topics include preparatory, airway, patient assessment, medical emergencies, trauma, infants and children, and operations. Upon completion, students should be able to demonstrate the knowledge and skills necessary to achieve North Carolina State or National Registry EMT certification.

EMS-110BB   **EMT**   3 3 3 5
Requisites: Take EMS-110AB(L56659); Take either previously or concurrently. Required.
This course introduces basic emergency medical care. Topics include preparatory, airway, patient assessment, medical emergencies, trauma, infants and children, and operations. Upon completion, students should be able to demonstrate the knowledge and skills necessary to achieve North Carolina State or National Registry EMT certification.

EMS-120   **Advanced EMT**   4 6 0 6
Requisites: Take EMS-110(S25182); Take previously. Required. Take EMS-121(S25184); Take either previously or concurrently. Required.
This course is designed to provide the essential information on pre-hospital management techniques appropriate to the level of the Advanced EMT. Topics must meet current credentialing and/or regulatory guidelines for the Advanced EMT as outlined by the NC Office of EMS. Upon completion, students should be able to demonstrate competency at the Advanced EMT level.

EMS-121   AEMT Clinical Practicum   0 0 6 2
Requisites: Take EMS-110(S25182); Take previously. Required. Take EMS-120(S25183); Take either previously or concurrently. Required.
This course provides the hospital and field internship/clinical experiences required in preparation for the Advanced EMT certification. Emphasis is placed on performing patient assessments, treatments, and interactions appropriate at the Advanced EMT level of care. Upon completion, students should be able to demonstrate competency at the Advanced EMT skill level.

EMS-122   EMS Clinical Practicum I   0 0 3 1
Requisites: Take EMS-110(S25182); Take previously. Required.
This course provides the introductory hospital clinical experience for the paramedic student. Emphasis is placed on mastering fundamental paramedic skills. Upon completion, students should be able to demonstrate competency with fundamental paramedic level skills.

EMS-125   EMS Instructor Methodology   2 2 0 3
Requisites:
This course covers the information needed to develop and instruct EMS courses. Topics include instructional methods, lesson plan development, time management skills, and theories of adult learning. Upon completion, students should be able to teach EMS courses and meet the North Carolina EMS requirements for instructor methodology. Students must be admitted into the Emergency Medical Science program to be able to register for this course.

EMS-131   Advanced Airway Management   1 2 0 2
Requisites: Take EMS-110(S25182); Take previously. Required.
This course is designed to provide advanced airway management techniques and is required for paramedic certification. Topics must meet current guidelines for advanced airway management in the pre-hospital setting. Upon completion, students should be able to properly utilize all airway adjuncts and pharmacology associated with airway control and maintenance.

EMS-140   Rescue Scene Management   1 3 0 2
Requisites:
This course introduces rescue scene management. Topics include response to hazardous material conditions, incident command, and extrication of patients from a variety of situations. Upon completion, students should be able to recognize and manage rescue operations based upon initial and follow-up scene assessment. Students must be admitted into the Emergency Medical Science program to be able to register for this course.

EMS-150   Emergency Vehicles and EMS Communication   1 3 0 2
Requisites:
This course covers the principles governing emergency vehicles, maintenance of emergency vehicles, and EMS communication equipment. Topics include applicable motor vehicle laws affecting emergency vehicle operation, defensive driving, collision avoidance techniques, communication systems, and information management systems. Upon completion, students should have a basic knowledge of emergency vehicles, maintenance, and communication needs. Students must be admitted into the Emergency Medical Science program to be able to register for this course.

EMS-160   Cardiology I   2 3 0 3
Requisites: Take EMS-110(S25182); Take previously. Required.
This course introduces the study of cardiovascular emergencies and is required for paramedic certification. Topics include anatomy and physiology, pathophysiology, electrophysiology, and rhythm interpretation. Upon completion, students should be able to recognize and interpret rhythms.

EMS-210   Advanced Patient Assessment   1 3 0 2
Requisites: Take EMS-110(S25182); Take previously. Required.
This course covers advanced patient assessment techniques and is required for paramedic certification. Topics include initial assessment, medical-trauma history, field impression, complete physical exam process, on-going assessment, and documentation skills. Upon completion, students should be able to utilize basic communication skills and record and report collected patient data.

EMS-220   **Cardiology II**   2 3 0 3
Requisites: Take EMS-122(S25185) EMS-130(S25187) EMS-160(S25189); Take previously. Required.
This course provides an in-depth study of cardiovascular emergencies and is required for paramedic certification. Topics include assessment and treatment of cardiac emergencies, cardiac pharmacology, and patient care. Upon completion, students should be able to manage the cardiac patient.

EMS-221   **EMS Clinical Practicum II**   0 0 6 2
Requisites: Take EMS-121(S25184) or EMS-122(S25185); Take previously. Required.
This course provides clinical experiences in the hospital and/or field. Emphasis is placed on increasing the proficiency of students' skills and abilities in patient assessments and the delivery of care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

EMS-231   **EMS Clinical Practicum III**   0 0 9 3
Requisites: Take EMS-122(S25185); Take previously. Required.
This course provides clinical experiences in the hospital and/or field. Emphasis is placed on enhancing the students' skills and abilities in providing advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

EMS-235   **EMS Management**   2 0 0 2
Requisites:
This course stresses the principles of managing a modern emergency medical service system. Topics include structure and function of municipal governments, EMS grantsmanship, finance, regulatory agencies, system management, legal issues, and other topics relevant to the EMS manager. Upon completion, students should be able to understand the principles of managing emergency medical service delivery systems.

EMS-240   **Patients With Special Challenges**   1 2 0 2
Requisites: Take EMS-122(S23872) EMS-130(S23874); Take previously. Required.
This course includes concepts of crisis intervention and techniques of interacting with patients with special challenges and is required for paramedic certification. Topics include appropriate intervention and interaction for neglected, abused, terminally ill, chronically ill, technology assisted, bariatric, physically challenged, mentally challenged, or assaulted patients as well as behavioral emergencies. Upon completion, students should be able to recognize and manage the care of patients with special challenges.

EMS-241   **EMS Clinical Practicum IV**   0 0 12 4
Requisites: Take EMS-231(S25192); Take previously. Required.
This course provides clinical experiences in the hospital and/or field. Emphasis is placed on mastering the skills/competencies required of the paramedic providing advanced-level care. Upon completion, students should be able to provide advanced-level patient care as an entry-level paramedic.

EMS-250   **Medical Emergencies**   3 3 0 4
Requisites: Take EMS-122(S23872) EMS-130(S23874); Take previously. Required.
This course provides an in-depth study of medical conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include appropriate interventions/treatments for disorders/diseases/injuries affecting the following systems: respiratory, neurological, abdominal/gastrointestinal, endocrine, genitourinary, musculoskeletal, and immunological as well as toxicology, infectious diseases and diseases of the eyes, ears, nose and throat. Upon completion, students should be able to recognize, assess and manage the care of frequently encountered medical conditions based upon initial patient assessment.

EMS-260   **Trauma Emergencies**   1 3 0 2
Requisites: Take EMS-122(S23872) EMS-130(S23874); Take previously. Required.
This course provides in-depth study of trauma including pharmacological interventions for conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include an overview of thoracic, abdominal, genitourinary, orthopedic, neurological, and multi-system trauma, soft tissue trauma of the head, neck, and face as well as environmental emergencies. Upon completion, students should be able to recognize and manage trauma situations based upon patient assessment and should adhere to standards of care.

EMS-270   **Life Span Emergencies**   3 3 0 4
Requisites: Take EMS-122(S25185) EMS-130(S25187); Take previously. Required.
This course covers medical/ethical/legal issues and the spectrum of age-specific emergencies from conception through death required for paramedic certification. Topics include gynecological, obstetrical, neonatal, pediatric, and geriatric emergencies and pharmacological therapeutics. Upon completion, students should be able to recognize and treat age-specific emergencies.

CURRICULUM COURSE DESCRIPTIONS

EMS-280   **EMS Bridging Course**   2 2 0 3
Requisites:
This course is designed to provide currently credentialed state or national Paramedic students with the most current education trends in Paramedic Practice. Emphasis is placed on transitions in healthcare. Upon completion, students should be able to integrate emerging trends in pre-hospital care.

ENGLISH (ENG PREFIX)

ENG-002   **Transition English**   0 6 0 3
Requisites:
This course provides an opportunity to customize foundational English content in specific areas and will include developing a growth mindset. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in college-level English. Upon completion, students should be able to build a stronger foundation for success in their gateway level English courses by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

ENG-011   **Writing and Inquiry Support**   1 2 0 2
Requisites:
This course is designed to support students in the development of skills necessary for success in ENG 111 by complementing, supporting, and reinforcing ENG 111 Student Learning Outcomes. Emphasis is placed on developing a growth mindset, expanding skills for use in active reading and writing processes, recognizing organizational relationships within texts from a variety of genres and formats, and employing appropriate technology when reading and composing texts. Upon completion, students should be able to apply active reading strategies to college-level texts and produce unified, well-developed writing using standard written English.

ENG-110   **Freshman Composition**   3 0 0 3
Requisites: Take DRE-097(S23642) ENG-002 or BSP-4002; Take previously. Required. Take DRE-097(S23642) ENG-002 BSP-4002 or ENG-111(S25433); Take previously. Required.
This course is designed to develop informative and business writing skills. Emphasis is placed on logical organization of writing, including effective introductions and conclusions, precise use of grammar, and appropriate selection and use of sources. Upon completion, students should be able to produce clear, concise, well-organized short papers.

ENG-111   **Writing and Inquiry**   3 0 0 3
Requisites: Take 1 group; Take DRE-097(S23642); Take ENG-002; Take BSP-4002; Take previously. Required. Take 1 group; Take DRE-098(S23643); Take ENG-002; From rule RMINP2; Take BSP-4002; From rule BSPMINP2; Take ENG-011; Take either previously or concurrently. Required.
This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course will also introduce students to the skills needed to produce a college-level research essay.

ENG-112   **Writing and Research in the Disciplines**   3 0 0 3
Requisites: Take ENG-111(S25433); Take previously. Required. Take ENG-111(S24022); Minimum grade C; Take previously. Required.
This course, the second in a series of two, introduces research techniques, documentation styles, and writing strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented writing and research projects. Upon completion, students should be able to evaluate and synthesize information from primary and secondary sources using documentation appropriate to various disciplines.

ENG-114   **Professional Research & Reporting**   3 0 0 3
Requisites: Take ENG-111(S13673); Take previously. Required. Take ENG-111(S13673); Minimum grade C; Take previously. Required.
This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations. The student will be able to research a targeted company, write a letter of application and resume for a specific job as well as demonstrate the ability to present competently his or her qualifications in a job interview.

ENG-125 Creative Writing I   3 0 0 3
Requisites: Take ENG-111(S13673); Take previously. Required.
This course is designed to provide students with the opportunity to practice the art of creative writing. Emphasis is placed on writing, fiction, poetry, and sketches. Upon completion, students should be able to craft and critique their own writing and critique the writing of others.

ENG-232 American Literature II   3 0 0 3
Requisites: Take ENG-112(S24024) ENG-113 or ENG-114(S13706); Take previously. Required.
This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts.

ENG-241 British Literature I   3 0 0 3
Requisites: Take ENG-112(S24024) ENG-113 or ENG-114(S13706); Take previously. Required.
This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

ENG-242 British Literature II   3 0 0 3
Requisites: Take ENG-112(S13681) ENG-113 or ENG-114(S13706); Take previously. Required.
This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

ENG-261 World Literature I   3 0 0 3
Requisites: Take ENG-112(S13681) ENG-113 or ENG-114(S13706); Take previously. Required.
This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from their literary beginnings through the seventeenth century. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works.

ENG-262 World Literature II   3 0 0 3
Requisites: Take ENG-112(S13681) ENG-113 or ENG-114(S13706); Take previously. Required.
This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from the eighteenth century to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works.

ENG-273 African-American Literature   3 0 0 3
Requisites: Take ENG-112(S13681) ENG-113 or ENG-114(S13706); Take previously. Required.
This course provides a survey of the development of African-American literature from its beginnings to the present. Emphasis is placed on historical and cultural context, themes, literary traditions, and backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and respond to selected texts.

ENVIRONMENTAL SCIENCE (ENV PREFIX)

ENV-212 Instrumentation   3 3 0 4
Requisites: Take 1 group; Take ENV-110(S13454); Take BIO-140 BIO-140A; Take PTC-110; Take previously. Required. Take CHM-132(S12618); Take either previously or concurrently. Required.
This course introduces analytical techniques used in quantitative analysis of chemical samples. Emphasis is placed on both classical wet techniques of chemical analysis and modern instrumental techniques. Upon completion, students should be able to use the methodologies and technologies involved in chemical analysis.

CURRICULUM COURSE DESCRIPTIONS

EMERGENCY PREPAREDNESS (EPT PREFIX)

EPT-140　　　**Emergency Management**　　　　　　　　　　　3 0 0 3
Requisites:
This course covers the four phases of emergency management: mitigation, preparedness, response, and recovery. Topics include organizing for emergency management, coordinating for community resources, public sector liability, and the roles of government agencies at all levels. Upon completion, students should be able to demonstrate an understanding of comprehensive emergency management and the integrated emergency management system.

EPT-150　　　**Incident Management**　　　　　　　　　　　　3 0 0 3
Requisites:
This course introduces the National Incident Management System (NIMS). Topics include integrating command and control systems, maintaining communication within command and control systems, and using NIMS procedures. Upon completion, students should be able to demonstrate knowledge of key concepts necessary for operating within the National Incident Management System.

EPT-210　　　**Response & Recovery**　　　　　　　　　　　　3 0 0 3
Requisites:
This course introduces the basic concepts, operational procedures, and authorities involved in response and recovery efforts to major disasters. Topics include federal, state, and local roles and responsibilities in major disaster, response, and recovery work, with an emphasis on governmental coordination. Upon completion, students should be able to implement a disaster response plan and assess the needs of those involved in a major disaster.

EPT-230　　　**Emergency Planning**　　　　　　　　　　　　3 0 0 3
Requisites:
This course covers the rationale for and methods related to a comprehensive approach to emergency planning. Topics include the emergency planning process, command arrangement, coordination, budgetary issues, environmental contamination issues, and public policy concerns. Upon completion, students should be able to develop an emergency plan for a community.

FIRE PROTECTION (FIP PREFIX)

FIP-120　　　**Introduction to Fire Protection**　　　　　　　　3 0 0 3
Requisites:
This course provides an overview of the development, methods, systems and regulations that apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and related subjects. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field.

FIP-124　　　**Fire Prevention & Public Education**　　　　　　3 0 0 3
Requisites:
This course introduces fire prevention concepts as they relate to community and industrial operations referenced in NFPA standard 101. Topics include the development and maintenance of fire prevention programs, educational programs, and inspection programs. Upon completion, students should be able to research, develop, and present a fire safety program to a citizens or industrial group.

FIP-128　　　**Detection and Investigation**　　　　　　　　　3 0 0 3
Requisites:
This course covers procedures for determining the origin and cause of accidental and incendiary fires referenced in NFPA standard 921. Topics include collection and preservation of evidence, detection and determination of accelerants, courtroom procedure and testimony, and documentation of the fire scene. Upon completion, students should be able to conduct a competent fire investigation and present those findings to appropriate officials or equivalent.

FIP-136　　　**Inspections and Codes**　　　　　　　　　　　3 0 0 3
Requisites:
This course covers the fundamentals of fire and building codes and procedures to conduct an inspection referenced in NFPA standard 1730. Topics include review of fire and building codes, writing inspection reports, identifying hazards, plan reviews, site sketches, and other related topics. Upon completion, students should be able to conduct a fire code compliance inspection and produce a written report.

FIP-152   **Fire Protection Law**   3 0 0 3
Requisites:
This course covers fire protection law as referenced in NFPA standard 1. Topics include legal terms, contracts, liability, review of case histories, and other related topics. Upon completion, students should be able to discuss laws, codes, and ordinances as they relate to fire protection.

FIP-162   **Firefighter Safety and Wellness**   3 0 0 3
Requisites:
The purpose of this course is to reduce firefighter injuries and fatalities by discussing topics that impact firefighter safety. Emphasis is placed on national standards, the 16 Life Safety Initiatives, and current events to identify changes needed to create a culture of safety. Upon completion, students should be able to define and describe the need for cultural and behavioral changes within the emergency services.

FIP-164   **OSHA Standards**   3 0 0 3
Requisites:
This course covers public and private sector OSHA work site requirements referenced in NFPA standard 1250. Emphasis is placed on accident prevention and reporting, personal safety, machine operations, and hazardous material handling. Upon completion, students should be able to analyze and interpret specific OSHA regulations and write workplace policies designed to achieve compliance.

FIP-176   **HazMat: Operations**   4 0 0 4
Requisites:
This course is designed to increase first responder awareness of the type, nature, physiological effects of, and defensive techniques for mitigation of HazMat incidents. Topics include recognition, identification, regulations and standards, zoning, resource usage, defensive operations, and other related topics. Upon completion, students should be able to recognize and identify the presence of hazardous materials and use proper defensive techniques for incident mitigation.

FIP-220   **Fire Fighting Strategies**   3 0 0 3
Requisites:
This course provides preparation for command of initial incident operations involving emergencies within both the public and private sector referenced in NFPA standards 1561, 1710, and 1720. Topics include incident management, fire-ground tactics and strategies, incident safety, and command/control of emergency operations. Upon completion, students should be able to describe the initial incident system as it relates to operations involving various emergencies in fire and non-fire situations.

FIP-221   **Advanced Fire Fighting Strategies**   3 0 0 3
Requisites: Take FIP-220(S23898); Take previously. Required.
This course covers command-level operations for multi-company/agency operations involving fire and non-fire emergencies. Topics include advanced use of the Incident Command System(ICS), advanced incident analysis, command-level fire operations, and control of both man made and natural major disasters. Upon completion, students should be able to describe proper and accepted systems for the mitigation of emergencies at the level of overall scene command.

FIP-229   **Fire Dynamics and Combustion**   3 0 0 3
Requisites:
This course covers the theories and fundamentals of how and why fires start and spread, and how they are safely controlled referenced in NFPA standard 1001. Topics include components of fire, fire sources, fire behavior, properties of combustible solids, classification of hazards, and the use of fire extinguishing agents. Upon completion, students should be able to describe the properties of matter and dynamics of fire, identify fuel sources, and compare suppressants and extinguishment techniques.

FIP-232   **Hydraulics and Water Distribution**   2 2 0 3
Requisites:
This course covers the flow of fluids through fire hoses, nozzles, appliances, pumps, standpipes, water mains, and other devices reference in NFPA standard 25. Emphasis is placed on supply and delivery systems, fire flow testing, hydraulic calculations, and other related topics. Upon completion, students should be able to perform hydraulic calculations, conduct water availability tests, and demonstrate knowledge of water distribution systems.

FIP-240   **Fire Service Supervision**   3 0 0 3
Requisites:
This course covers supervisory skills and practices in the fire protection field. Topics include the supervisor's job, supervision skills, the changing work environment, managing change, organizing for results, discipline and grievances, and safety. Upon completion, students should be able to demonstrate an understanding of the roles and responsibilities of effective fire service supervision, meeting elements of NFPA 1021.

FIP-244   **Fire Protection Project**   3 0 0 3
Requisites:
This course provides an opportunity to apply knowledge covered in previous courses to employment situations that the fire protection professional will encounter referenced in NFPA standard 1001. Emphasis is placed on the development of comprehensive and professional practices. Upon completion, students should be able to demonstrate knowledge of the fire protection service through written and performance evaluations.

FIP-256   **Municipal Public Relations**   3 0 0 3
Requisites:
This course is a general survey of municipal public relations and their effect on the governmental process referenced in NFPA standard 1035. Topics include principles of public relations, press releases, press conferences, public information officers, image surveys, and the effects of perceived service on fire protection delivery. Upon completion, students should be able to manage public relations functions of organizations which meet elements of NFPA 1021 for Fire Officer I and II.

FIP-260   **Fire Protection Planning**   3 0 0 3
Requisites: Take FIP-228(S23902) FIP-240(S23908); Take previously. Required.
This course covers the need for a comprehensive approach to fire protection planning referenced in NFPA standards 424 and 1620. Topics include the planning process, using an advisory committee, establishing goals and objectives, and techniques used to approve and implement a plan. Upon completion, students should be able to demonstrate a working knowledge of the concepts and principles of planning as it relates to fire protection.

FIP-276   **Managing Fire Services**   3 0 0 3
Requisites:
This course provides an overview of fire department operative services referenced in NFPA standard 1021. Topics include finance, staffing, equipment, code enforcement, management information, specialized services, legal issues, planning, and other related topics. Upon completion, students should be able to understand concepts and apply fire department management and operations principles.

FRENCH (FRE PREFIX)

FRE-111   **Elementary French I**   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take DRE-098(S23643); Take ENG-111(S13673); Take ENG-002; Take previously. Required. Take FRE-181; Take either previously or concurrently. Required.
This course introduces the fundamental elements of the French language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness.

FRE-112   **Elementary French II**   3 0 0 3
Requisites: Take FRE-111; Take previously. Required. Take FRE-111; Minimum grade C; Take previously. Required. Take FRE-182; Take either previously or concurrently. Required.
This course is a continuation of FRE 111 focusing on the fundamental elements of the French language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate further cultural awareness.

FRE-181   **French Lab 1**   0 2 0 1
Requisites: Take 1 group; Take ENG-090 RED-090; Take DRE-098(S23643); Take ENG-111(S13673); Take ENG-002; Take previously. Required. Take FRE-111; Take either previously or concurrently. Required.
This course provides an opportunity to enhance acquisition of the fundamental elements of the French language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness.

FRE-182 **French Lab 2** 0 2 0 1
Requisites: Take FRE-181; Take previously. Required. Take FRE-181; Minimum grade C; Take previously. Required. Take FRE-112; Take either previously or concurrently. Required.
This course provides an opportunity to enhance acquisition of the fundamental elements of the French language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate cultural awareness.

FRE-211 **Intermediate French I** 3 0 0 3
Requisites: Take FRE-112; Take previously. Required. Take FRE-112; Minimum grade C; Take previously. Required. Take FRE-281; Take either previously or concurrently. Required.
This course provides a review and expansion of the essential skills of the French language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

FRE-281 **French Lab 3** 0 2 0 1
Requisites: Take FRE-182; Take previously. Required. Take FRE-182; Minimum grade C; Take previously. Required. Take FRE-211; Take either previously or concurrently. Required.
This course provides an opportunity to enhance the review and expansion of the essential skills of the French language. Emphasis is placed on the study of authentic and representative literary and cultural texts through the use of supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

GEOLOGY (GEL PREFIX)

GEL-111 **Geology** 3 2 0 4
Requisites: Take 1 group; Take ENG-002 MAT-003; Take ENG-111(S24022) MAT-003; Take DRE-098(S23643) DMA-010 DMA-020 DMA-030 DMA-040(S24983); Take DRE-098(S23643) MAT-003; Take DRE-098(S23643) MAT-110(S24992); Take DRE-098(S23643) MAT-121(S24993); Take ENG-002 DMA-010 DMA-020 DMA-030 DMA-040(S24983); Take ENG-111(S24022) DMA-010 DMA-020 DMA-030 DMA-040(S24983); Take ENG-002 MAT-110(S24992); Take ENG-111(S24022) MAT-110(S24992); Take ENG-111(S24022) MAT-121(S24993); Take ENG-002 MAT-121(S24993); Take ENG-111(S24022) MAT-143(S24995); Take ENG-002 MAT-143(S24995); Take ENG-111(S24022) MAT-152(S24996); Take ENG-002 MAT-152(S24996); Take ENG-111(S24022) MAT-171(S24997); Take ENG-002 MAT-171(S24997); Take previously. Required.
This course introduces basic landforms and geological processes. Topics include rocks, minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth.

GEL-230 **Environmental Geology** 3 2 0 4
Requisites: Take GEL-111(S12347) GEL-120 or PHS-130; Take previously. Required. Take GEL-111(S12347) GEL-120 or PHS-130; Minimum grade C; Take previously. Required.
This course provides insights into geologic forces that cause environmental changes influencing man's activities. Emphasis is placed on natural hazards and disasters caused by geologic forces. Upon completion, students should be able to relate major hazards and disasters to the geologic forces responsible for their occurrence.

GEOGRAPHIC INFORMATION SYSTEMS (GIS PREFIX)

GIS-111 **Introduction to GIS** 2 2 0 3
Requisites:
This course introduces the hardware and software components of a Geographic Information System and reviews GIS applications. Topics include data structures and basic functions, methods of data capture and sources of data, and the nature and characteristics of spatial data and objects. Upon completion, students should be able to identify GIS hardware components, typical operations, products/applications, and differences between database models and between raster and vector systems.

GIS-112 **Introduction to GPS** 2 2 0 3
Requisites:
This course provides an overview of Global Positioning Systems (GPS). Topics include the theory, implementation, and operations of GPS, as well as alternate data source remote sensing. Upon completion, students should be able to demonstrate an understanding of the fundamentals of GPS.

GIS-121 **Georeferencing & Mapping** 2 2 0 3
Requisites: Take GIS-111 or CEG-111; Take previously. Required.
This course introduces coordinate systems, fundamentals of surveying, and cartography. Topics include the theory, acquisition, and use of locational data using both continuous and discrete georeferencing methods. Upon completion, students should be able to identify appropriate coordinate systems for a situation and translate data into correct map form.

GIS-246 **Principles of Property Mapping** 2 2 0 3
Requisites: Take CEG-111 or GIS-111; Take previously. Required.
This course covers interpreting and understanding land records, updating parcel data, and utilizing the data for information retrieval and spatial analysis. Topics include the use and development of parcel information, parcel boundaries, and legal land descriptions. Upon completion, students should be able to demonstrate an understanding of the fundamentals of parcel mapping.

GRAPHIC DESIGN (GRD PREFIX)

GRD-110 **Typography I** 2 2 0 3
Requisites: Take 1 group; Take DRE-097(S23642) DMA-010 DMA-020 DMA-030; Take ENG-002 MAT-003; Take previously. Required.
This course introduces the history and mechanics of type and its application to layout and design. Topics include typographic fundamentals, anatomy, measurements, composition, identification, and terminology. Upon completion, students should be able to demonstrate proficiency in design application, analysis, specification, and creation of typographic elements.

GRD-121 **Drawing Fundamentals I** 1 3 0 2
Requisites:
This course increases observation skills using basic drawing techniques and media in graphic design. Emphasis is placed on developing the use of graphic design principles, media applications, spatial considerations, drawing styles, and approaches. Upon completion, students should be able to show competence and proficiency in finished works. Students should process basic drawing ability to successfully complete drawing at the college level.

GRD-142 **Graphic Design II** 2 4 0 4
Requisites: Take ART-121(S12130) DES-135(S10718) or GRD-141; Take previously. Required. Take GRD-151 GRD-110; Take previously. Required.
This course covers the application of visual elements and design principles in advertising and graphic design. Topics include creation of various designs, such as logos, advertisements, posters, outdoor advertising, and publication design. Upon completion, students should be able to effectively apply design principles and visual elements to projects.

GRD-145 **Design Applications I** 0 3 0 1
Requisites: Take GRD-141; Take either previously or concurrently. Required. Take GRD-151; Take previously. Required.
This course introduces visual problem solving. Emphasis is placed on application of design principles. Upon completion, students should be able to produce projects utilizing basic design concepts.

GRD-146 **Design Applications II** 0 3 0 1
Requisites: Take GRD-142; Take either previously or concurrently. Required. Take GRD-151 GRD-152; Take previously. Required.
This course is designed to provide additional hands-on training in graphic design. Emphasis is placed on producing comprehensive projects utilizing concepts and technologies covered in GRD 141 and GRD 142. Upon completion, students should be able to provide solutions to design problems.

GRD-151 **Computer Design Basics** 1 4 0 3
Requisites: Take DRE-097(S23642) or ENG-002; Take previously. Required.
This course covers designing and drawing with various types of software applications for advertising and graphic design. Emphasis is placed on creative and imaginative use of space, shapes, value, texture, color, and typography to provide effective solutions to advertising and graphic design problems. Upon completion, students should be able to use the computer as a creative tool.

GRD-152   Computer Design Techniques I   1 4 0 3
Requisites: Take GRD-151; Take previously. Required. Take 1 group; Take DMA-010 DMA-020 DMA-030;
Take MAT-003; Take previously. Required.
This course covers complex design problems utilizing various design and drawing software applications. Topics
include the expressive use of typography, image, and organization to communicate a message. Upon completion,
students should be able to use appropriate computer software to professionally present their work.

GRD-167   Photographic Imaging I   1 4 0 3
Requisites:
This course introduces basic camera operations and photographic production. Topics include subject composition,
depth of field, shutter control, light control, color, photo-finishing, and digital imaging, correction and output. Upon
completion, students should be able to produce traditional and/or digital photographic prints with acceptable technical
and compositional quality.

GRD-230   Technical Illustration   1 3 0 2
Requisites: Take ART-131 DES-125(S11944) or GRD-121; Take previously. Required. Take 1 group; Take
GRD-152 ART-131; Take GRD-152 DES-125(S11944); Take GRD-152 GRD-121; Take previously. Required.
This course introduces technical and industrial illustration techniques. Topics include orthographic, isometric, linear
perspective, and exploded views. Upon completion, students should be able to demonstrate competence in various
technical rendering techniques.

GRD-240   User Interface/User Experience   2 3 0 3
Requisites: WEB 140 Take previously. Required.
This course introduces a design-centric approach to user interface and user experience design, and offers practical,
skill-based instruction centered around a visual communications perspective. Emphasis is placed on demonstrating
the stages of the UI/UX development process, including user research and analysis, choosing methodologies,
defining a project's strategy, scope, and information architecture, developing sitemaps and wireframes, performing
user testing, and producing prototypes. Upon completion, students should be able to demonstrate current best
practices and conventions in UX design and apply them to create effective and compelling digital screen-based
experiences.

GRD-241   Graphic Design III   2 4 0 4
Requisites: Take DES-136(S10746) or GRD-142; Take previously. Required. Take 1 group; Take DES-
136(S10746) GRD-110 GRD-152; Take GRD-142 GRD-110 GRD-152; Take previously. Required.
This course is an advanced exploration of various techniques and media for advertising and graphic design.
Emphasis is placed on advanced concepts and solutions to complex and challenging graphic design problems. Upon
completion, students should be able to demonstrate competence and professionalism in visual problem solving.

GRD-246   Design Applications III   0 3 0 1
Requisites: Take GRD-241; Take either previously or concurrently. Required. Take GRD-110 GRD-152; Take
previously. Required.
This course is designed to provide additional hands-on training in graphic design. Emphasis is placed on producing
complex design projects utilizing concepts and technologies taught in GRD 241. Upon completion, students should
be able to produce complex design projects for reproduction.

GRD-265   Digital Print Production   1 4 0 3
Requisites: Take GRD-151 or GRA-151; Take previously. Required. Take 1 group; Take GRD-151 GRD-152;
Take GRA-151 GRD-152; Take previously. Required.
This course covers preparation of digital files for output and reproduction. Emphasis is placed on output options,
separations, color proofing, and cost and design considerations. Upon completion, students should be able to
prepare files and select appropriate output methods for design solutions. Topics include sustainable and eco-friendly
printing solutions including Forest Stewardship Council certification.

GRD-280   Portfolio Design   2 4 0 4
Requisites: Take 1 group; Take GRD-142 GRD-152; Take GRD-142 GRA-152; Take previously. Required.
Take WEB-140(S21133) GRD-146; Take previously. Required.
This course covers the organization and presentation of a design/advertising or graphic art portfolio and appropriate
related materials. Emphasis is placed on development and evaluation of the portfolio, design and production of a
resume and self-promotional materials, and interview techniques. Upon completion, students should be able to
prepare and professionally present an effective portfolio and related self-promotional materials.

GRD-282   Advertising Copywriting   1 2 0 2
Requisites: Take ENG-110(S20133) or ENG-111(S13673); Take previously. Required. Take GRD-142; Take previously. Required.
This course covers copywriting for print, electronic, and broadcast advertising and promotion. Topics include advertising strategies, proposals, headlines, slogans, and text copy for various types of advertising. Upon completion, students should be able to write and articulate advertising proposals and understand the ethical and regulatory environment for advertising.

GRD 285   Client Media Relations   1 3 0 2
Requisites: Take One Set:
Set 1: GRD-142 and GRA-121
Set 2: GRD-142 and GRA-152
Set 3: GRD-142 and GRD-152
This course introduces a design-centric approach to user interface and user experience design, and offers practical, skill-based instruction centered around a visual communications perspective. Emphasis is placed on demonstrating the stages of the UI/UX development process, including user research and analysis, choosing methodologies, defining a project's strategy, scope, and information architecture, developing sitemaps and wireframes, performing user testing, and producing prototypes. Upon completion, students should be able to demonstrate current best practices and conventions in UX design and apply them to create effective and compelling digital screen-based experiences.

GERONTOLOGY (GRO PREFIX)

GRO-120   Gerontology   3 0 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course covers the psychological, social, and physical aspects of aging. Emphasis is placed on the factors that promote mental and physical well-being. Upon completion, students should be able to recognize the aging process and its psychological, social, and physical aspects.

GRO-220   Psychological & Social Aspects of Aging   3 0 0 3
Requisites: Take PSY-150; Take previously. Required.
This course introduces the individual and social aspects of the aging process. Topics include psychological and social factors of aging; roles of older adults within families, work, and community; and adjustments to aging and retirement.

GRO-230   Health, Wellness, & Nutrition   3 2 0 4
Requisites:
This course covers basic concepts of health, wellness, and nutrition related to aging. Emphasis is placed on nutrition and diet, physical activity and exercise, and maintenance of well-being. Upon completion, students should be able to identify health, wellness, and nutrition concepts related to aging.

GRO-250   Aging Policies Programs and Services   2 0 0 2
Requisites: Take GRO-120(S22966); Take previously. Required.
This course covers the development of state and federal policies, programs, and services for an aging population as a result of demographic shifts. Topics include initial federal programs addressing aging issues, emerging challenges and trends, the role of needs assessment and outcome measures that shape policies, and contemporary issues. Upon completion, students should be able to articulate about initial federal programs; assess emerging challenges and trends; demonstrate the value of needs assessments; and identify contemporary issues.

HEALTHCARE BUSINESS INFOMATIC (HBI PREFIX)

HBI-113   Survey of Medical Insurance   3 0 0 3
Requisites: Take HBI-110; Take previously. Required.
This course is a survey of the healthcare insurance system. Emphasis is placed on the foundation necessary for understanding the healthcare delivery system, terminology and practices of healthcare insurance, and provider reimbursement. Upon completion, students should have an understanding of healthcare insurance and how outcomes are addressed through healthcare informatics.

CURRICULUM COURSE DESCRIPTIONS

HEALTH (HEA PREFIX)

HEA-110 **Personal Health/Wellness** 3 0 0 3
Requisites:
This course provides an introduction to basic personal health and wellness. Emphasis is placed on current health issues such as nutrition, mental health, and fitness. Upon completion, students should be able to demonstrate an understanding of the factors necessary to the maintenance of health and wellness. This course will include practical, real-life applications to the material presented in the text that encourage students to apply the material to their own lives.

HEA-112 **First Aid & CPR** 1 2 0 2
Requisites:
This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained.

HEAVY EQUIPMENT MAINTENANCE (HET PREFIX)

HET-110 **Diesel Engines** 3 9 0 6
Requisites:
This course introduces theory, design, terminology, and operating adjustments for diesel engines. Emphasis is laced on safety, theory of operation, inspection, measuring, and rebuilding diesel engines according to factory specifications. Upon completion, students should be able to measure, diagnose problems, and repair diesel engines.

HET-115 **Electronic Engines** 2 3 0 3
Requisites:
This course introduces the principles of electronically controlled diesel engines. Emphasis is placed on testing and adjusting diesel engines in accordance with manufacturers' specifications. Upon completion, students should be able to diagnose, test, and calibrate electronically controlled diesel engines.

HET-125 **Preventive Maintenance** 1 3 0 2
Requisites:
This course introduces preventive maintenance practices used on medium and heavy duty vehicles and rolling assemblies. Topics include preventive maintenance schedules, services, DOT rules and regulations, and road ability. Upon completion, students should be able to set up and follow a preventive maintenance schedule as directed by manufacturers.

HET-128 **Medium/Heavy Duty Tune Up** 1 2 0 2
Requisites:
This course introduces tune-up and troubleshooting according to manufacturers' specifications. Topics include troubleshooting engine systems, tune-up procedures, and use and care of special test tools and equipment. Upon completion, students should be able to troubleshoot, diagnose, and repair engines and components using appropriate diagnostic equipment.

HET-134 **Diesel Fuel and Power System** 2 3 0 3
Requisites:
This course introduces the principles of fuel injection and other power systems used in the heavy equipment industry including newer and cleaner technology. Emphasis is placed on test equipment, component functions, safety, and theories of older conventional and newer and cleaner Tier III and Tier IV fuel systems. Upon completion, students should be able to diagnose and service fuel systems and explain proper safety procedures on alternative fuel systems used in heavy equipment industry.

HET-231 **Medium/Heavy Duty Brake Systems** 1 3 0 2
Requisites:
This course covers the theory and repair of braking systems used in medium and heavy-duty vehicles. Topics include air, hydraulic, and ABS system diagnosis and repair. Upon completion, students should be able to troubleshoot, adjust, and repair braking systems on medium and heavy-duty vehicles.

CURRICULUM COURSE DESCRIPTIONS

HET-232   **Medium/Heavy Duty Brake Systems Lab**   0 3 0 1
Requisites: Take HET-231; Take either previously or concurrently. Required.
This course provides a laboratory setting to enhance the skills for troubleshooting, adjusting, and repairing brake systems on medium and heavy duty vehicles. Emphasis is placed on practical experiences that enhance the topics presented in HET 231. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in HET 231.

HET-233   **Suspension and Steering**   2 4 0 4
Requisites:
This course introduces the theory and principles of medium and heavy duty steering and suspension systems. Topics include wheel and tire problems, frame members, fifth wheel, bearings, and coupling systems. Upon completion, students should be able to troubleshoot, adjust, and repair suspension and steering components on medium and heavy duty vehicles.

HEALTH AND FITNESS SCIENCES (HFS PREFIX)

HFS-110   **Exercise Science**   4 0 0 4
Requisites:
This course is a survey of scientific principles, methodologies, and research as applied to exercise and physical adaptations to exercise. Topics include the basic elements of kinesiology, biomechanics, and motor learning. Upon completion, students should be able to identify and describe physiological responses and adaptations to exercise.

HFS-111   **Fitness & Exer Testing I**   3 2 0 4
Requisites:
This course introduces the student to graded exercise testing. Topics include various exercise testing protocols with methods for prescribing exercise programs based on exercise tolerance tests and the use of various equipment and protocols. Upon completion, students should be able to conduct specific exercise tests and the use of various equipment.

HFS-116   **Pvnt & Care Exer Injuries**   2 2 0 3
Requisites:
This course provides information about the care and prevention of exercise injuries. Topics include proper procedures, prevention techniques, and on-site care of injuries. Upon completion, students should be able to demonstrate the knowledge and skills necessary to prevent and care for exercise related injuries.

HFS-118   **Fitness Facility Management**   4 0 0 4
Requisites:
This course provides information about the management and operation of health and fitness facilities and programs. Topics include human resources, sales and marketing, member retention, financial management, facility design and maintenance, and risk management. Upon completion, students should be able to demonstrate the knowledge and skills necessary to effectively manage a fitness facility.

HFS-120   **Group Exercise Instruction**   2 2 0 3
Requisites: Take HFS-110; Take previously. Required.
This course introduces the concepts and guidelines of instructing exercise classes. Topics include program designs, working with special populations, and principles of teaching and monitoring physical activity. Upon completion, students should be able to demonstrate basic skills in instructing an exercise class and monitoring workout intensity.

HFS-210   **Personal Training**   2 2 0 3
Requisites: Take HFS-110 HFS-111; Take previously. Required.
This course introduces the student to the aspects of personal (one-on-one) training. Topics include training systems, marketing, and program development. Upon completion, students should be able to demonstrate personal training techniques and competencies of same.

HFS-212   **Exercise Programming**   2 2 0 3
Requisites: Take HFS-110; Take previously. Required.
This course provides information about organizing, scheduling, and implementation of physical fitness programs. Topics include programming for various age groups, competitive activities and special events, and evaluating programs. Upon completion, students should be able to organize and implement exercise activities in a competent manner.

CURRICULUM COURSE DESCRIPTIONS

HFS-218 **Lifestyle Chng & Wellness** 3 2 0 4
Requisites:
This course introduces health risk appraisals and their application to lifestyle changes. Topics include nutrition, weight control, stress management, and the principles of exercise. Upon completion, students should be able to conduct health risk appraisals and apply behavior modification techniques in a fitness setting.

HISTORY (HIS PREFIX)

HIS-112 **World Civilizations II** 3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations.

HIS-121 **Western Civilization I** 3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course introduces western civilization from pre-history to the early modern era. Topics include ancient Greece, Rome, and Christian institutions of the Middle Ages and the emergence of national monarchies in western Europe. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early western civilization.

HIS-122 **Western Civilization II** 3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course introduces western civilization from the early modern era to the present. Topics include the religious wars, the Industrial Revolution, World Wars I and II, and the Cold War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern western civilization.

HIS-131 **American History I** 3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history.

HIS-132 **American History II** 3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War.

HEALTHCARE MANAGEMENT (HMT PREFIX)

HMT-110 **Introduction to Healthcare Management** 3 0 0 3
Requisites: Take DRE-097(S23642) ENG-002 or ENG-111(S25433); Take previously. Required.
This course introduces the functions, practices, organizational structures, and professional issues in healthcare management. Emphasis is placed on planning, controlling, directing, and communicating within health and human services organizations. Upon completion, students should be able to apply the concepts of management within a healthcare service environment.

HMT-211   **Long-Term Care Administration**   3 0 0 3
Requisites: Take HMT-110(S20232); Take previously. Required.
This course introduces the administration of long-term care facilities and services. Emphasis is placed on nursing home care, home health care, hospice, skilled nursing facilities, and other long-term care services. Upon completion, students should be able to distinguish between the different long-term care offerings, criteria for use, and benefits of the patient, resident, and participant.

HMT-212   **Management of Healthcare Organizations**   3 0 0 3
Requisites: Take HMT-110(S20232); Take previously. Required.
This course examines current issues affecting the management of healthcare delivery systems. Topics include current problems, changes, and challenges in the healthcare environment. Upon completion, students should be able to identify current health care issues and their impact on healthcare management.

HORTICULTURE (HOR PREFIX)

HOR-114   **Landscape Construction**   2 2 0 3
Requisites:
This course introduces the design and fabrication of landscape structures/features. Emphasis is placed on safety, tool identification and use, material selection, construction techniques, and fabrication. Upon completion, students should be able to design and construct common landscape structures/features.

HOR-160   **Plant Materials I**   2 2 0 3
Requisites:
This course covers identification, culture, characteristics, and use of plants in a sustainable landscape. Emphasis is placed on nomenclature, identification, growth requirements, cultural requirements, soil preferences, and landscape applications. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials, including natives and invasive plants.

HOR-161   **Plant Materials II**   2 2 0 3
Requisites:
This course provides a supplementary opportunity to cover identification, culture, characteristics, and use of plants in a sustainable landscape, giving students a broader knowledge of available landscape plants for utilization in landscapes and plant production. Emphasis is placed on nomenclature, identification, growth requirements, cultural requirements, soil preferences, landscape applications and expansion of the plant palette. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials, including natives and invasive plants.

HOR-162   **Applied Plant Science**   2 2 0 3
Requisites:
This course introduces the basic concepts of botany as they apply to horticulture. Topics include nomenclature, physiology, morphology, and anatomy as they apply to plant culture. Upon completion, students should be able to apply the basic principles of botany to horticulture.

HOSPITALITY MANAGEMENT (HRM PREFIX)

HRM-110   **Introduction to Hospitality and Tourism**   3 0 0 3
Requisites:
This course covers the growth and progress of the hospitality industry. Topics include tourism, lodging, resorts, gaming, restaurants, foodservice and clubs. Upon completion, students should be able to demonstrate an understanding of the background, context, and career opportunities that exist within the hospitality industry.

HRM-120   **Front Office Procedures**   3 0 0 3
Requisites:
This course introduces a systematic approach to lodging front office procedures. Topics include reservations, registration, guest satisfaction, occupancy and revenue management, security, interdepartmental communications, and related guest services. Upon completion, students should be able to demonstrate a basic understanding of current front office operating systems, including efficient and courteous guest services.

HRM-125 **Etiquette for Hospitality**   1 0 0 1
Requisites:
This course covers social skills needed to effectively interact within organizational and customer situations. Topics include general social manners, personal appearance, table manners, restaurant and meeting etiquette, and business interaction. Upon completion, students should be able to function with confidence in various social, cultural, and professional situations.

HRM-210 **Meetings and Event Planning**   3 0 0 3
Requisites:
This course introduces concepts related to the planning and operation of conventions, trade shows, professional meetings, and foodservice events. Emphasis is placed on methods of marketing, selling, organizing, and producing conventions, events, and trade shows that will increase financial and environmental value. Upon completion, students should be able to demonstrate an understanding of management principles for multi-function, multi-day conferences and events.

HRM-215 **Restaurant Management**   3 0 0 3
Requisites: Take CUL-135(S22842) or HRM-124(S22904); Take previously. Required. Take 1 group; Take CUL-135(S10202) CUL-135A(S11193); Take HRM-124(S21353); Take previously. Required.
This course provides an overview of the responsibilities and activities encountered in managing a food and beverage operation. Topics include planning, organization, accounting, marketing, trends, and human resources from an integrated managerial viewpoint. Upon completion, students should be able to demonstrate an understanding of the operation of a restaurant.

HRM-220 **Cost Control-Food and Beverage**   3 0 0 3
Requisites: Take MAT-110(S23926); Take previously. Required.
This course introduces controls and accounting procedures as applied to costs in the hospitality industry. Topics include reports, cost control, planning and forecasting, control systems, financial statements, operational efficiencies, labor controls and scheduling. Upon completion, students should be able to demonstrate an understanding of food, beverage, and labor cost control systems for operational troubleshooting and problem solving.

HRM-225 **Beverage Management**   3 0 0 3
Requisites:
This course introduces the management of beverages served in hospitality operations. Topics include history and trends; service, procurement and storage; knowledge and control of wines and fermented/distilled beverages; and non-alcoholic beverages, coffees, and teas. Upon completion, students should be able to demonstrate an understanding of responsible alcohol service and the knowledge of beverages consumed in a hospitality operation.

HRM-235 **Quality Management-Hospitality**   3 0 0 3
Requisites:
This course introduces the various schools of thought in achievement and implementation of quality standards for the hospitality industry. Emphasis is placed on developing and maintaining quality in the delivery of the tangible and intangible aspects of the service product. Upon completion, students should be able to demonstrate an understanding of quality service principles and apply them within a hospitality/service environment.

HRM-240 **Marketing for Hospitality**   3 0 0 3
Requisites:
This course covers planning, organizing, directing, and analyzing the results of marketing programs for the hospitality industry. Emphasis is placed on target marketing, marketing mix, analysis, product and image development, use of current media, sales planning, advertising, public relations, and collateral materials. Upon completion, students should be able to apply the marketing process as it relates to the hospitality industry.

HRM-245 **Human Resource Management-Hospitality** 3 0 0 3
Requisites:
This course introduces a systematic approach to human resource management in the hospitality industry. Topics include training/development, staffing, selection, hiring, recruitment, evaluation, benefit administration, employee relations, labor regulations/laws, discipline, motivation, productivity, shift management, contract employees and organizational culture. Upon completion, students should be able to apply human resource management skills for the hospitality industry.

HRM-275   **Leadership-Hospitality**   3 0 0 3
Requisites:
This course introduces leadership traits, styles, and the roles and responsibilities of successful hospitality leaders while developing the student's personal leadership skills. Topics include formal and informal hospitality leadership; defining effective and ineffective leadership behavior; and leadership organizational change and planning within the hospitality industry. Upon completion, students will be able to apply appropriate leadership actions in real-world situations ranging from local to global hospitality environments.

HRM-280   **Management Problems-Hospitality**   3 0 0 3
Requisites: Take HRM-110(S10998); Take previously. Required. Take HRM-110(S22898); Take previously. Required.
This course is designed to introduce students to timely issues within the hospitality industry and is intended to move students into a managerial mindset. Emphasis is placed on problem-solving skills using currently available resources. Upon completion, students should be able to demonstrate knowledge of how hospitality management principles may be applied to real challenges facing industry managers.

HUMAN SERVICES (HSE PREFIX)

HSE-110   **Introduction to Human Services**   2 2 0 3
Requisites: Take HSE-135; Take either previously or concurrently. Recommended.
This course introduces the human services field, including the history, agencies, roles, and careers. Topics include personal/professional characteristics, diverse populations, community resources, disciplines in the field, systems, ethical standards, and major theoretical and treatment approaches. Upon completion, students should be able to identify the knowledge, skills, and roles of the human services worker.

HSE-112   **Group Process I**   1 2 0 2
Requisites: Take DRE-098(S23643) or Take ENG-002; Take previously. Required.
This course introduces interpersonal concepts and group dynamics. Emphasis is placed on self-awareness facilitated by experiential learning in small groups with analysis of personal experiences and the behavior of others. Upon completion, students should be able to show competence in identifying and explaining how people are influenced by their interactions in group settings.

HSE-123   **Interviewing Techniques**   2 2 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required. Take HSE-110; Take previously. Required.
This course covers the purpose, structure, focus, and techniques employed in effective interviewing. Emphasis is placed on observing, attending, listening, responding, recording, and summarizing of personal histories with instructor supervision. Upon completion, students should be able to perform the basic interviewing skills needed to function in the helping relationship.

HSE-125   **Counseling**   2 2 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required. Take HSE-110; Take previously. Required.
This course covers the major approaches to psychotherapy and counseling, including theory, characteristics, and techniques. Emphasis is placed on facilitation of self-exploration, problem solving, decision making, and personal growth. Upon completion, students should be able to understand various theories of counseling and demonstrate counseling techniques.

HSE-127   **Conflict Resolution**   2 2 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course introduces conflict resolution and mediation theory and practice. Emphasis is placed on achieving compromise and a win/win perception. Upon completion, students should be able to demonstrate competence in identifying seemingly dissimilar positions and facilitating agreement.

HSE-145   **Child Abuse & Neglect**   3 0 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course explores the abused and neglected child, including the nature and dimension of the problem. Emphasis is placed on various types of abuse and neglect, their causes, proper treatment, and reporting laws and procedures. Upon completion, students should be able to identify family intervention and counseling techniques to help parents effectively cope in parent-child conflicts.

HSE-210   **Human Services Issues**   2 0 0 2
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course covers current issues and trends in the field of human services. Emphasis is placed on contemporary topics with relevance to special issues in a multi-faceted field. Upon completion, students should be able to integrate the knowledge, skills, and experiences gained in classroom and clinical experiences with emerging trends in the field.

HSE-220   **Case Management**   2 2 0 3
Requisites: Take HSE-110; Take previously. Required.
This course covers the variety of tasks associated with professional case management. Topics include treatment planning, needs assessment, referral procedures, and follow-up and integration of services. Upon completion, students should be able to effectively manage the care of the whole person from initial contact through termination of services.

HSE-225   **Crisis Intervention**   3 0 0 3
Requisites: Take DRE-098(S23643) or Take ENG-002; Take previously. Required.
This course introduces the basic theories and principles of crisis intervention. Emphasis is placed on identifying and demonstrating appropriate and differential techniques for intervening in various crisis situations. Upon completion, students should be able to assess crisis situations and respond appropriately.

HSE-226   **Intellectual Disabilities**   3 0 0 3
Requisites:
This course covers intellectual disabilities and related issues. Emphasis is placed on the theoretical perspectives, causes, prevention, and treatment of intellectual disabilities. Upon completion, students should be able to demonstrate a general knowledge of individuals with intellectual disabilities.

HSE-227   **Children & Adolescents in Crisis**   3 0 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course covers the crises affecting children and adolescents in contemporary society. Emphasis is placed on abuse and neglect, suicide and murder, dysfunctional family living, poverty, and violence. Upon completion, students should be able to identify and discuss intervention strategies and available services for the major contemporary crises affecting children and adolescents.

HSE-251   **Activities Planning**   2 2 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course introduces skills and techniques used in recreation and leisure activities to enhance the lives of special populations. Emphasis is placed on music, art, and recreational activities. Upon completion, students should be able to define, plan, and adapt recreational activities for selected groups and individuals to maintain quality of life.

HUMANITIES (HUM PREFIX)

HUM-110   **Technology and Society**   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-098(S23643);
Take ENG-002; Take previously. Required.
This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology.

HUM-115   **Critical Thinking**   3 0 0 3
Requisites: Take DRE-098(S23643) ENG-002 BSP-4002 or ENG-111(S25433); Take previously. Required.
This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on evaluating information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts. Students will also explore the parameters of selected ethical issues.

HUM-121   **The Nature of America**   3 0 0 3
Requisites:
This course provides an interdisciplinary survey of the American cultural, social, and political experience. Emphasis is placed on the multicultural character of American society, distinctive qualities of various regions, and the American political system. Upon completion, students should be able to analyze significant cultural, social, and political aspects of American life.

HUM-130   Myth in Human Culture   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S13673); Take DRE-098(S23643);
Take ENG-002; Take previously. Required.
This course provides an in-depth study of myths and legends. Topics include the varied sources of myths and their
influence on the individual and society within diverse cultural contexts. Upon completion, students should be able to
demonstrate a general familiarity with myths and a broad-based understanding of the influence of myths and legends
on modern culture.

HUM-160   Introduction to Film   2 2 0 3
Requisites: Take ENG-111(S13673); Take previously. Required.
This course introduces the fundamental elements of film artistry and production. Topics include film styles, history,
and production techniques, as well as the social values reflected in film art. Upon completion, students should be able
to critically analyze the elements covered in relation to selected films.

HUM-161   Advanced Film Studies   2 2 0 3
Requisites: Take HUM-160(S16395); Take previously. Required.
This course provides an advanced study of film art and production, building on skills learned in HUM 160. Topics
include advanced film production techniques, film genres, examination of master directors' styles, and the relation of
film to culture. Upon completion, students should be able to recognize and critically analyze advanced elements of
film production.

HYDRAULICS AND PNEUMATICS (HYD PREFIX)

HYD-112   Hydraulics-Medium and Heavy Duty   1 2 0 2
Requisites:
This course introduces hydraulic theory and applications as applied to mobile equipment. Topics include component
studies such as pumps, motors, valves, cylinders, filters, reservoirs, lines, and fittings. Upon completion, students
should be able to identify, diagnose, test, and repair hydraulic systems using schematics and technical manuals.

HYD-134   Hydraulic/Hydrostatic Construction   2 4 0 4
Requisites:
This course covers the hydraulic/hydrostatic components of construction equipment hydraulics and power trains.
Topics include testing, adjusting, repair, and replacement of components that are applied to construction equipment
hydraulics and transmissions along with other related topics. Upon completion, students should be able to use
proper diagnostic procedures and identify, repair, and replace hydraulic and hydrostatic systems on construction
equipment.

HYD-180   Fluid Power in Automation   2 3 0 3
Requisites: Take MAT-121(S25429) MAT-171(S25432) or MAT-271(S23939); Take previously. Required.
This course introduces the basic components and functions of hydraulic and pneumatic systems and their application
to automated machinery. Topics include standard symbols, compressors, control valves, control circuits, actuators,
maintenance procedures, switching and control devices as applied to automated machinery. Upon completion,
students should be able to demonstrate an understanding of the operation of hydraulic fluid and compressed air and
vacuum systems including design, troubleshooting, and applications.

HYD-191A   Selected Topics in Fluid Power Lab   0 2 0 1
Requisites: Take HYD-180(S23491); Take concurrently. Required.
This course provides a hands-on component for HYD-180. Students will build and analyze pneumatic circuits. Upon
completion, students should be able to demonstrate an understanding of the function of pneumatic components and
pneumatic circuits.

IMAGING (IMG PREFIX)

IMG-110   Fundamentals of Imaging I   2 0 6 4
Requisites:
This course provides an overview of the principles of imaging for radiography, nuclear medicine, ultrasound, and
radiation therapy. Emphasis is placed on image production and anatomical relationships in radiography, nuclear
medicine, ultrasound, and radiation therapy. Upon completion, students should be able to identify basic anatomy on,
and differentiate between, radiography, nuclear medicine, radiation therapy, and ultrasound images.

IMG-111   **Fundamentals of Imaging II**   2 0 6 4
Requisites: Take IMG-110; Take previously. Required.
This course provides an overview of the principles of imaging for CT, PET, CT/PET and MRI. Emphasis is placed on image production and anatomical relationships in CT, PET, CT/PET, and MRI. Upon completion, students should be able to identify basic anatomy on, and differentiate between, CT, PET, CT/PET, and MRI images.

IMG-120   **Patient Care Medical Imaging**   1 2 0 2
Requisites:
This course is designed to provide the basic concepts of patient care in a healthcare facility. Topics include routine and emergent patient care procedures, infection control procedures, and usage of universal precautions. Upon completion, students should be able to demonstrate competence in these areas.

INTERNATIONAL BUSINESS (INT PREFIX)

INT-110   **International Business**   3 0 0 3
Requisites:
This course provides an overview of the environment, concepts, and basic differences involved in international business. Topics include forms of foreign involvement, international trade theory, governmental influences on trade and strategies, international organizations, multinational corporations, personnel management, and international marketing. Upon completion, students should be able to describe the foundation of international business.

INT-210   **International Trade**   3 0 0 3
Requisites:
This course covers international business trade practices and foreign market research. Emphasis is placed on current trends of US trade practices in foreign countries and how to engage in international trade and acquire foreign marketing information. Upon completion, students should be able to formulate an overall product policy for the international marketplace.

INT-220   **International Economics**   3 0 0 3
Requisites: Take ECO-151 ECO-251 or ECO-252; Take previously. Required.
This course introduces the forces and criteria for the development of a new international economic order. Emphasis is placed on balance of payments, foreign exchange rates and their determination, International Monetary System, and arguments for and against free trade and protectionism. Upon completion, students should be able to describe economic principles and concepts of international trade.

INT-230   **International Law**   3 0 0 3
Requisites: Take BUS-115(S11427); Take previously. Required.
This course is designed to develop an understanding of the different theories on international law and their effect on international trade. Emphasis is placed on concepts of contracts, international transactions, major organizations in international trade, establishment of treaties, economic areas, and US laws affecting international trade. Upon completion, students should be able to apply theories and concepts to international trade and transactions.

INDUSTRIAL SCIENCE (ISC PREFIX)

ISC-112   **Industrial Safety**   2 0 0 2
Requisites:
This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment and OSHA compliance.

ISC-115   **Construction Safety**   2 0 0 2
Requisites:
This course introduces the basic concepts of construction site safety. Topics include ladders, lifting, lock-out/tag-out, personal protective devices, scaffolds, and above/below ground work based on OSHA regulations. Upon completion, students should be able to demonstrate knowledge of applicable safety regulations and safely participate in construction projects.

ISC-121 **Environmental Health & Safety** 3 0 0 3
Requisites:
This course covers workplace environmental, health, and safety concepts. Emphasis is placed on managing the implementation and enforcement of environmental health and safety regulations and on preventing accidents, injuries, and illnesses. Upon completion, students should be able to demonstrate an understanding of basic concepts of environmental health and safety.

ISC-135 **Principles of Industrial Management** 4 0 0 4
Requisites:
This course covers the managerial principles and practices required for organizations to succeed in modern industry, including quality and productivity improvement. Topics include the functions and roles of all levels of the management, organization design, planning and control of manufacturing operation, managing conflict, group dynamics, and problem solving skills. Upon completion, students should be able to demonstrate an understanding of management principles and integrate these principles into job situations.

ISC-210 **Operation and Production Planning** 3 0 0 3
Requisites:
This course includes the fundamentals of operations and production planning, forecasting, and scheduling. Topics include demand management, production planning and control, scheduling, and budgeting. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques involved in operations and production planning.

ISC-222 **Project Planning/Control** 1 2 0 2
Requisites:
This course covers how to plan, schedule and control projects typical in manufacturing and service industries. Topics include fundamental project management concepts and hands-on computer application experience with process flow charting and PERT/CPM project managers. Upon completion, students should be able to plan, schedule and control projects using state-of-the-art computer application programs.

ISC-278 **cGMP Quality Systems** 2 0 0 2
Requisites:
This course focuses on the development, implementation, and ongoing maintenance of a quality system in a cGMP environment. Topics include the cGMP standard, components of cGMP quality systems, quality function roles and training, development of documentation such as SOPs, and system review procedures. Upon completion, students should be able to identify the components of a quality system and develop a quality system manual utilizing the cGMP standard.

ISC-280 **Validation Fundamentals** 1 2 0 2
Requisites:
This course covers the fundamental concepts of components of a validation program in a cGMP environment. Emphasis is placed on FDA requirements concerning validation, types of validation, documentation, procedures, and the QA role. Upon completion, students should be able to discuss the purpose of validation, identify the steps in the validation process, and effectively utilize sample documentation.

LANDSCAPE ARCHITECTURE (LAR PREFIX)

LAR-113 **Residential Landscape Design** 1 6 0 3
Requisites: Take LAR-111(S10088); Take previously. Required. Take LAR-111(S23291) or ARC-111; Take previously. Required.
The course covers the creation of residential landscape design working drawings. Topics include residential plans, elevation, sections, plant selection/lists, and other related topics. Upon completion, students should be able to prepare a set of residential landscape working drawings which are within accepted architectural standards.

LAR-120 **Sustainable Development** 2 2 0 3
Requisites:
This course introduces students to sustainable practices in site design and land development. Topics include conservation subdivision design, transportation issues, urban planning, water conservation, rain gardens, alternative technologies, permaculture design, low impact design, and grey water systems. Upon completion, students should be able to demonstrate techniques and procedures used for mitigating the impact of development on the environment.

LAR-231   Principles of Interior Planting   2 3 0 3
Requisites:
This course covers the identification, selection, and installation of interior landscape plants. Topics include interior plant selection, fertilization, pruning, pest and disease identification and control, and other related topics. Upon completion, students should be able to select plants for interior settings.

LAR-235   Landscape Architectural Presentation Techniques   2 3 0 3
Requisites:
This course covers landscape architectural presentation techniques. Topics include perspective drawing, shadow projection, texturization, rendered landscape architecture plans, and other related topics. Upon completion, students should be able to present ideas graphically and render landscape presentation drawings.

LAR-241   Advanced Site Planning   2 3 0 3
Requisites: Take ARC-240(S21519); Take previously. Required.
This course covers advanced site planning. Topics include grading complex sites, erosion control, soil volume calculations, storm water volume calculations, channel sizing and other related topics. Upon completion, students should be able to perform advanced grading and site planning calculations.

LAR-242   Planning & Environment   2 2 0 3
Requisites:
This course covers the historical development of urban and rural environmental problems and issues. Emphasis is placed on governmental response to environmental issues, built and natural environments, historical conflicts, and attempts to produce planning compatibility. Upon completion, students should be able to demonstrate an understanding of the importance of considering natural resources when making political and planning decisions.

LAR-250   Survey of LAR   3 0 0 3
Requisites:
This course introduces the historical trends in landscape architectural forms. Emphasis is placed on landscape architectural history and current trends. Upon completion, students should be able to demonstrate an understanding of significant historical and current landscape architectural styles.

LOGISTICS MANAGEMENT (LOG PREFIX)

LOG-110   Introduction to Logistics   3 0 0 3
Requisites:
This course provides an overview of logistics. Topics include traffic management, warehousing, inventory control, material handling, global logistics, and the movement and storage of goods from raw materials sources to end consumers. Upon completion, students should be able to identify the different segments of logistics and use the terminology of the industry.

LOG-120   Global Logistics   3 0 0 3
Requisites: Take LOG-110; Take previously. Required.
This course examines logistics operations, processes, and modes of transportation in an interdependent world economy. Emphasis is placed on freight forwarding operations, analyzing and selecting transportation modes, and processing of import/export documentation. Upon completion, students should be able to arrange and coordinate the transportation of products globally.

LOG-125   Transportation Logistics   3 0 0 3
Requisites:
This course covers the role and importance of the transportation industry. This is an overview of transportation emphasizing its environmental and sociological aspects, economic impact, services, regulatory guidelines, policies, and its future. Upon completion, students should be able to identify modes of transportation, interpret governing regulations, and describe the principles and terminology used in the transportation industry.

LOG-210   Fleet Management   3 0 0 3
Requisites: Take LOG-110; Take previously. Required.
This course covers the management of transportation, fleet operations, and safety. Emphasis is placed on DOT safety regulations in the hiring, training, and supervision of drivers in transportation. Upon completion, students should be able to write a safety program for drivers involved in interstate commerce following DOT regulations.

LOG-211   Distribution Management   2 2 0 3
Requisites: Take LOG-110; Take previously. Required.
This course covers the functions, techniques, and tools utilized in warehousing and distribution centers and their role in business and logistics. Emphasis is placed on warehouse and distribution center management, operations, productivity, software systems, picking, automation, cross docking, safety, security, material handling, benchmarking, and cost. Upon completion, students should be able to describe the role of warehouses and distribution centers, apply industry principles and terminology, and understand distribution productivity measures.

LOG-215   Supply Chain Management   3 0 0 3
Requisites: Take LOG-110; Take previously. Required.
This course covers all activities involved in the flow of products and information between the suppliers, customers, producers, and service providers. Topics include acquiring, purchasing, manufacturing, assembling, and distributing goods and services throughout the supply chain organizations. Upon completion, students should be able to identify the supply chain units and describe the materials management processes.

LOG-220   Logistics Management   3 0 0 3
Requisites: Take LOG-110; Take previously. Required.
This course covers the management of the movement and storage of goods and analysis of total costs involved. Emphasis is placed on the monitoring of inventory using automated systems, managing the storage function, warehousing, and distribution. Upon completion, students should be able to describe warehousing and facility layouts, identify material handling methods, and apply inventory control procedures.

LOG-225   Logistics Systems   3 2 0 4
Requisites: Take LOG-215(S13965); Take previously. Required.
This course covers the design, implementation, and application of logistics software systems utilized by businesses to improve accountability, and capabilities of their logistics processes. Emphasis is placed on an in-depth understanding of logistical software applications, optimization models, automated data collection, electronic data interchange, and other logistics software tools. Upon completion, students should be able to identify the various logistics software applications and explain how they are utilized to improve business and logistics processes.

LOG-230   Transportation Management   3 0 0 3
Requisites: Take LOG-110; Take previously. Required.
This course covers the function of shippers and carriers in the transportation industry. Emphasis is placed on negotiating price and service requirements in the movement of goods, identifying areas of carrier liability, and the methods for processing claims. Upon completion, students should be able to compare common carriers and company operated transportation for service and cost, interpret pricing structures, and determine carrier liability.

LOG-235   Import/Export Management   3 0 0 3
Requisites: Take LOG-125(S21720); Take previously. Required.
This course introduces the elements of import and export operations, from transportation to documentation, finance, and security and the effects on the global supply chain. Emphasis is placed on existing import/export regulations, customs documentation, intermodal transportation, foreign freight forwarders, global technology, and homeland security initiatives. Upon completion, students should be able to perform import/export operations, channels of distribution, implemented technologies, and associate with operating a secure supply chain.

LOG-240   Purchasing Logistics   3 0 0 3
Requisites: Take LOG-110; Take previously. Required.
This course introduces the various aspects of purchasing, and their impact on materials management, supply chain, transportation, and global logistics processes. Emphasis is placed on the different methods of electronic sourcing, negotiating and pricing principles, and on the internal and external considerations associated with international logistics. Upon completion, students should be able to describe and apply the principles and terminology used in procurement including electronic data interchange services, purchasing and logistics systems.

LOG-245   Logistics Security   3 0 0 3
Requisites: Take LOG-110; Take previously. Required.
This course covers the role and importance of securing the domestic and global transportation and supply chain networks. Emphasis is placed on Customs and Border Protection, Department of Homeland Security, the Transportation Security Agency and how they affect businesses, logistics and transportation processes. Upon completion, students should be able to apply the principles and terminologies used in securing the logistics and transportation networks and identify potential threats.

LOG-250   **Advanced Global Logistics**   3 2 0 4
Requisites: Take LOG-125(S13306); Take previously. Required.
This course covers the advanced application of global operations and logistics strategies, planning, technology, risk, and management necessary to cope with the global business environment. Emphasis is placed on an in-depth understanding of global sourcing, shipping, tracking, and e-logistics systems necessary to operate inbound/outbound logistics in a global market. Upon completion, students should be able to identify the different global markets and logistics technology available to process international inbound/outbound logistics transactions.

MAMMOGRAPHY (MAM PREFIX)

MAM-101   **Mammography Procedures and Image Analysis**   3 3 0 4
Requisites:
This course provides the fundamentals of mammography positioning, patient care, and image analysis. Topics include breast anatomy/physiology, pathology and treatment of breast disease, patient preparation/education, mammographic procedures, and interventional procedures. Upon completion, students should be able to demonstrate competence in these areas.

MAM-102   **Mammography Instrumentation and Quality Assurance**   3 0 0 3
Requisites:
This course is a comprehensive study of physics, instrumentation, quality assurance, and quality control for digital mammography imaging systems. Topics include system components, imaging principles, and guidelines for selecting exposure factors. Upon completion, students should be able to demonstrate an understanding of mammographic equipment, quality assurance, and quality control.

MAM-103   **Digital Mammography**   1 0 0 1
Requisites:
This course is a comprehensive study of digital mammography. Topics include producing digital mammograms, understanding image processing, display, archive, and communication techniques, and determining proper image quality, radiation dose, and quality control procedures.   Upon completion, students should be able to demonstrate the concepts of digital imaging, the process to produce digital mammograms, and the establishment of QC procedures.

MAM-104   **Digital Breast Tomosynthesis**   1 0 0 1
Requisites:
This course is a comprehensive study of digital breast tomosynthesis (DBT). Topics include the technology of DBT, application of DBT in the clinic setting, digital detector technology, the role of DBT in detecting breast cancer, and performing quality control procedures. Upon completion, students should be able to demonstrate the concepts of digital breast tomosynthesis, understand the application and role of DBT in the clinic setting, and perform quality control procedures.

MAM-105   **Mammography Clinical Education**   0 0 15 5
Requisites: Take MAM-101 MAM-102(S24285) MAM-103 MAM-104; Take previously. Required.
This course provides the opportunity to apply knowledge gained from classroom instruction to the mammography clinical setting.   Emphasis is placed on patient care and positioning, mammographic procedures, interventional/special examinations, image analysis, and quality control testing. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

MAM-109   **Mammography Capstone**   3 0 0 3
Requisites: Take MAM-101 MAM-102(S24285) MAM-103 MAM-104; Take previously. Required.
This course provides an overview of mammographic topics as practiced in the didactic and clinical settings. Emphasis is placed on critical thinking and integration of didactic and clinical components. Upon completion, students should be able to demonstrate the comprehensive knowledge required of an entry-level mammographer.

CURRICULUM COURSE DESCRIPTIONS

MASONRY (MAS PREFIX)

MAS-140   Introduction to Masonry   1 2 0 2
Requisites:
This course introduces basic principles and practices of masonry. Topics include standard tools, materials, and practices used in basic masonry and other related topics. Upon completion, students should be able to demonstrate an understanding of masonry and be able to use basic masonry techniques.

MATHEMATICS (MAT PREFIX)

MAT-003   Transition Math   0 6 0 3
Requisites:
This course provides an opportunity to customize foundational math content in specific math areas and will include developing a growth mindset. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in their gateway level math courses by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

MAT-010   Math Measurement & Literacy Su   0 2 0 1
Requisites:
This course provides an opportunity to customize foundational math content specific to Math Measurement & Literacy. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Math Measurement & Literacy by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

MAT-021   Algebra/Trigonometry I Support   1 2 0 2
Requisites:
This course provides an opportunity to customize foundational math content specific to Algebra and Trigonometry I. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Algebra/Trigonometry I by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

MAT-043   Quantitative Literacy Support Class   1 2 0 2
Requisites:
This course provides an opportunity to customize foundational math content specific to Quantitative Literacy. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Quantitative Literacy by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

MAT-052   Statistical Methods I Support   1 2 0 2
Requisites:
This course provides an opportunity to customize foundational math content specific to Statistical Methods I. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Statistical Methods I by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

MAT-071   071 Precalculus Algebra Support   0 4 0 2
Requisites:
This course provides an opportunity to customize foundational math content specific to Precalculus Algebra. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Precalculus Algebra by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

MAT-121 **Algebra/Trigonometry I** 2 2 0 3

Requisites: Take 1 group; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984); Take DMA-025 DMA-040(S24983) DMA-050(S24984); Take DMA-025 DMA-045; Take DMA-010 DMA-020 DMA-030 DMA-045; Take MAT-003; From rule RMINP2M; Take BSP-4003; From rule BSPMINP2; Take previously. Required. Take 1 group; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984) DMA-060(S24985); Take DMA-010 DMA-020 DMA-030 DMA-045 DMA-060(S24985); Take DMA-025 DMA-040(S24983) DMA-050(S24984) DMA-060(S24985); Take DMA-025 DMA-045 DMA-060(S24985); Take 1 courses; From rule RMINP3; Take BSP-4003; From rule BSPMINP3; Take MAT-071(S25141); Take MAT-021; Take either previously or concurrently. Required.

This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include the properties of plane and solid geometry, area and volume, and basic proportion applications; simplification, evaluation, and solving of algebraic equations and inequalities and radical functions; complex numbers; right triangle trigonometry; and systems of equations. Upon completion, students will be able to demonstrate the ability to use mathematics and technology for problem-solving, analyzing and communicating results.

MAT-143 **Quantitative Literacy** 2 2 0 3

Requisites: Take 1 group; Take DMA-010 DMA-020 DMA-030 DRE-098(S23643); Take DMA-010 DMA-020 DMA-030 ENG-002; Take DMA-010 DMA-020 DMA-030 BSP-4002; Take DMA-025 DRE-098(S23643); Take DMA-025 ENG-002; Take DMA-025 BSP-4002; Take MAT-003 DRE-098(S23643); Take MAT-003 ENG-002; Take MAT-003 BSP-4002; Take BSP-4003 DRE-098(S23643); Take BSP-4003 ENG-002; Take BSP-4003 BSP-4002; Take previously. Required. Take 1 group; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984); Take DMA-010 DMA-020 DMA-030 DMA-045; Take DMA-025 DMA-040(S24983) DMA-050(S24984); Take DMA-025 DMA-045; Take MAT-003; From rule RMINP2; Take BSP-4003; From rule BSPMINP2; Take MAT-043; Take MAT-052; Take either previously or concurrently. Required. Take 1 group; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984) DRE-098(S23643); Take DMA-010 DMA-020 DMA-030 DMA-045 ENG-002; Take DMA-025 DMA-040(S24983) DMA-050(S24984) DRE-098(S23643); Take DMA-025 DMA-045 DRE-098(S23643); Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984) ENG-002; Take DMA-025 DMA-040(S24983) DMA-050(S24984) ENG-002; Take DMA-025 DMA-045 ENG-002; Take BSP-4003 ENG-111(S25433); Take DMA-010 DMA-020 DMA-030 DMA-045 BSP-4002; Take DMA-025 DMA-040(S24983) DMA-050(S24984) BSP-4002; Take DMA-010 DMA-020 DMA-030 DMA-045 DRE-098(S23643); Take MAT-003 ENG-111(S25433); Take MAT-003 ENG-002; Take MAT-003 BSP-4002; Take MAT-003 DRE-098(S23643); Take BSP-4003 DRE-098(S23643); Take BSP-4003 ENG-002; Take BSP-4002 BSP-4003; Take previously. Required.

This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project- and activity-based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students should be able to utilize quantitative information as consumers and to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life.

MAT-152   **Statistical Methods I**   3 2 0 4

Requisites: Take 1 group; Take DMA-010 DMA-020 DMA-030 DRE-098(S23643); Take DMA-010 DMA-020 DMA-030 ENG-002; Take DMA-010 DMA-020 DMA-030 BSP-4002; Take DMA-025 DRE-098(S23643); Take DMA-025 ENG-002; Take DMA-025 BSP-4002; Take MAT-003 DRE-098(S23643); Take MAT-003 ENG-002; Take MAT-003 BSP-4002; Take BSP-4003 DRE-098(S23643); Take BSP-4003 ENG-002; Take BSP-4003 BSP-4002; Take previously. Required. Take 1 group; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984); Take DMA-010 DMA-020 DMA-030 DMA-045; Take DMA-025 DMA-040(S24983) DMA-050(S24984); Take DMA-025 DMA-045; Take MAT-003; From rule RMINP2; Take BSP-4003; From rule BSPMINP2; Take MAT-043; Take MAT-052; Take either previously or concurrently. Required. Take 1 group; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984) DRE-098(S23643); Take DMA-010 DMA-020 DMA-030 DMA-045 DRE-098(S23643); Take DMA-025 DMA-040(S24983) DMA-050(S24984) DRE-098(S23643); Take DMA-025 DMA-045 DRE-098(S23643); Take MAT-003 ENG-002; Take MAT-003 ENG-111(S25433); Take MAT-003 DRE-098(S23643); Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984) ENG-002; Take DMA-010 DMA-020 DMA-030 DMA-045 ENG-002; Take DMA-025 DMA-040(S24983) DMA-050(S24984) ENG-002; Take DMA-025 DMA-045 ENG-002; Take BSP-4003 BSP-4002; Take BSP-4003 ENG-111(S25433); Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984) BSP-4002; Take DMA-025 DMA-040(S24983) DMA-050(S24984) BSP-4002; Take MAT-003 BSP-4002; Take BSP-4003 DRE-098(S23643); Take BSP-4003 ENG-002; Take DMA-010 DMA-020 DMA-030 DMA-045 ENG-002; Take DRE-098(S23643) ENG-002 or ENG-111(S25433); Take previously. Required.

This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon completion, students should be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population from sample data, and interpret and communicate results.

MAT-171   **Precalculus Algebra**   3 2 0 4

Requisites: Take 1 group; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984); Take DMA-010 DMA-020 DMA-030 DMA-045; Take DMA-025 DMA-045; Take DMA-025 DMA-040(S24983) DMA-050(S24984); Take MAT-121(S25429); Take MAT-003; From rule RMINP2M; Take BSP-4003; From rule BSPMINP2; Take previously. Required. Take 1 group; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984) DMA-060(S24985) DMA-070(S24987) DMA-080(S24988); Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984) DMA-065(S25064); Take DMA-025 DMA-040(S24983) DMA-050(S24984) DMA-060(S24985) DMA-070(S24987) DMA-080(S24988); Take DMA-025 DMA-040(S24983) DMA-050(S24984) DMA-065(S25064); Take DMA-025 DMA-045 DMA-060(S24985) DMA-070(S24987) DMA-080(S24988); Take DMA-025 DMA-045 DMA-065(S25064); Take 1 courses; From rule RMINP3; Take BSP-4003; From rule BSPMINP3; Take MAT-021; Take MAT-071(S25141); Take either previously or concurrently. Required. Take 1 group; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984) DMA-060(S24985) DMA-070(S24987) DMA-080(S24988); Take MAT-121(S25429); Minimum grade C; Take DMA-010 DMA-020 DMA-030 DMA-040(S24983) DMA-050(S24984) DMA-065(S25064); Take DMA-025 DMA-040(S24983) DMA-050(S24984) DMA-060(S24985) DMA-070(S24987) DMA-080(S24988); Take DMA-025 DMA-045 DMA-060(S24985) DMA-070(S24987) DMA-080(S24988); Take DMA-010 DMA-020 DMA-030 DMA-045 DMA-060(S24985) DMA-070(S24987) DMA-080(S24988); Take DMA-025 DMA-040(S24983) DMA-050(S24984) DMA-065(S25064); Take DMA-010 DMA-020 DMA-030 DMA-045 DMA-065(S25064); Take DMA-025 DMA-045 DMA-065(S25064); Take MAT-003; Take MAT-121(S25429); Minimum grade C; Take BSP-4003; Take previously. Required. Take DRE-098(S23643) ENG-002 or ENG-111(S25433); Take previously. Required.

This course is designed to develop topics which are fundamental to the study of Calculus. Emphasis is placed on solving equations and inequalities, solving systems of equations and inequalities, and analysis of functions (absolute value, radical, polynomial, rational, exponential, and logarithmic) in multiple representations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to algebra-related problems with and without technology.

MAT-172   **Precalculus Trigonometry**   3 2 0 4

Requisites: Take MAT-171(S25432); Take previously. Required. Take MAT-171(S25432); Minimum grade C; Take previously. Required.

This course is designed to develop an understanding of topics which are fundamental to the study of Calculus. Emphasis is placed on the analysis of trigonometric functions in multiple representations, right and oblique triangles, vectors, polar coordinates, conic sections, and parametric equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to trigonometry-related problems with and without technology.

MAT-252   Statistical Methods II   3 2 0 4
Requisites: Take MAT-152(S24996); Take previously. Required. Take MAT-152(S25431); Minimum grade C;
Take previously. Required.
This course is designed to provide a technology-based treatment of multiple sample inferential statistics. Emphasis is
placed on two sample hypothesis tests and confidence intervals, linear and multiple regression, analysis of variance,
experimental design, and non-parametric techniques. Upon completion, students should be able to draw statistical
inferences and communicate results on multiple sample data taken from business and health, social, natural, and
applied sciences.

MAT-263   Brief Calculus   3 2 0 4
Requisites: Take MAT-171(S23934); Take previously. Required. Take MAT-171(S25432); Minimum grade C;
Take previously. Required.
This course is designed to introduce concepts of differentiation and integration and their applications to solving
problems. Topics include graphing, differentiation, and integration with emphasis on applications drawn from
business, economics, and biological and behavioral sciences. Upon completion, students should be able to
demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and
communicate results.

MAT-272   Calculus II   3 2 0 4
Requisites: Take MAT-271(S23939); Take previously. Required. Take MAT-271(S23939); Minimum grade C;
Take previously. Required.
This course is designed to develop advanced topics of differential and integral calculus. Emphasis is placed on the
applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series,
conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students
should be able to select and use appropriate models and techniques for finding solutions to integral-related problems
with and without technology.

MAT-273   Calculus III   3 2 0 4
Requisites: Take MAT-272(S23940); Take previously. Required. Take MAT-272(S23940); Minimum grade C;
Take previously. Required.
This course is designed to develop the topics of multivariate calculus. Emphasis is placed on multivariate functions,
partial derivatives, multiple integration, solid analytical geometry, vector valued functions, and line and surface
integrals. Upon completion, students should be able to select and use appropriate models and techniques for finding
the solution to multivariate-related problems with and without technology.

MAT-280   Linear Algebra   2 2 0 3
Requisites: Take MAT-271(S23939); Take previously. Required. Take MAT-271(S23939); Minimum grade C;
Take previously. Required.
This course provides an introduction to linear algebra topics. Emphasis is placed on the development of abstract
concepts and applications for vectors, systems of equations, matrices, determinants, vector spaces, multi-
dimensional linear transformations, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion,
students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate
models and techniques for finding solutions to linear algebra-related problems with and without technology.

MAT-285   Differential Equations   2 2 0 3
Requisites: Take MAT-272(S13612); Take previously. Required. Take MAT-272(S23940); Minimum grade C;
Take previously. Required.
This course provides an introduction to topics involving ordinary differential equations. Emphasis is placed on the
development of abstract concepts and applications for first-order and linear higher-order differential equations,
systems of differential equations, numerical methods, series solutions, eigenvalues and eigenvectors, and LaPlace
transforms. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and
select and use appropriate models and techniques for finding solutions to differential equations-related problems with
and without technology.

MISSION CRITICAL OPERATIONS (MCO PREFIX)

MCO-110   **Introduction to Mission Critical Operations**   2 2 0 3
Requisites:
This course introduces the fundamental aspects of mission critical operations and describes the skills that technicians perform on the job and the environments in which they work. Topics include terminology, challenges in maintaining mission critical operations, mission critical operations technology, mission critical information technology, technology management and the mission critical mindset. Upon completion, students should be able to distinguish between mission critical and non-mission critical scenarios, describe mission critical applications in both operations technology and information technology, demonstrate an awareness of the threats to mission critical operations, and define key mission critical operations terminology.

MECHANICAL (MEC PREFIX)

MEC-130   **Mechanisms**   2 2 0 3
Requisites:
This course introduces the purpose and action of various mechanical devices. Topics include cams, cables, gear trains, differentials, screws, belts, pulleys, shafts, levers, lubricants, and other devices. Upon completion, students should be able to analyze, maintain, and troubleshoot the components of mechanical systems.

MEC-161   **Manufacturing Processes I**   3 0 0 3
Requisites:
This course provides the fundamental principles of value-added processing of materials into usable forms for the customer. Topics include material properties and traditional and non-traditional manufacturing processes. Upon completion, students should be able to specify appropriate manufacturing processing for common engineering materials.

MEC-180   **Engineering Materials**   2 3 0 3
Requisites:
This course introduces the physical and mechanical properties of materials. Topics include materials testing, pre- and post-manufacturing processes, and material selection of ferrous and non-ferrous metals, plastics, composites, and non-conventional materials. Upon completion, students should be able to utilize basic material property tests and select appropriate materials for applications.

MEC-265   **Fluid Mechanics**   2 2 0 3
Requisites: Take MAT-121(S23927) or MAT-171(S23934); Take previously. Required.
This course covers the physical behavior of fluids and fluid systems. Topics include fluid statics and dynamics, laminar and turbulent flow, Bernoulli's Equation, components, applications, and other related topics. Upon completion, students should be able to apply fluid power principles to practical applications.

MEC-267   **Thermal Systems**   2 2 0 3
Requisites: Take PHY-131(S13319) or PHY-151(S16517); Take previously. Required. Take 1 group; Take MAT-121(S20804) PHY-131(S20809); Take MAT-121(S20804) PHY-151(S20924); Take MAT-161(S20916) PHY-131(S20809); Take MAT-161(S20916) PHY-151(S20924); Take MAT-171(S20807) PHY-131(S20809); Take MAT-171(S20807) PHY-151(S20924); Take previously. Required.
This course introduces the fundamental laws of thermodynamics. Topics include work and energy, open and closed systems, and heat engines. Upon completion, students should be able to demonstrate a knowledge of the laws and principles that apply to thermal power.

CURRICULUM COURSE DESCRIPTIONS

MEDICAL ASSISTING (MED PREFIX)

MED-110   **Orientation to Medical Assisting**   1 0 0 1
Requisites:
This course covers the history of medicine and the role of the medical assistant in the health care setting. Emphasis is placed on professionalism, communication, attitude, behaviors, and duties in the medical environment. Upon completion, students should be able to project a positive attitude and promote the profession of medical assisting. This course is also available through the Virtual Learning Community (VLC).

MED-118   **Medical Law and Ethics**   2 0 0 2
Requisites:
This course covers legal relationships of physicians and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent, and bioethical issues. Emphasis is placed on legal terms, professional attitudes, and the principles and basic concepts of ethics and laws involved in providing medical services. Upon completion, students should be able to meet the legal and ethical responsibilities of a multi-skilled health professional.

MED-120   **Survey of Medical Terminology**   2 0 0 2
Requisites:
This course introduces the vocabulary, abbreviations, and symbols used in the language of medicine. Emphasis is placed on building medical terms using prefixes, suffixes, and word roots. Upon completion, students should be able to pronounce, spell, and define accepted medical terms.

MED-121   **Medical Terminology I**   3 0 0 3
Requisites:
This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MED-122   **Medical Terminology II**   3 0 0 3
Requisites: Take MED 121; Take previously   Required.
This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

MED-130   **Administrative Office Procedures I**   1 2 0 2
Requisites:
This course introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment.

MED-131   **Administrative Office Procedures II**   1 2 0 2
Requisites: Take MED-130; Take previously. Required.
This course provides medical office procedures in both economic and management skills. Topics include physical plant maintenance, equipment and supplies, liability coverage, medical economics, and introductory insurance procedures. Upon completion, students should be able to manage the economics of the medical office and supervise personnel.

MED-138   **Infection/Hazard Control**   2 0 0 2
Requisites:
This course introduces the student to infection and hazard control procedures necessary for the healthcare worker. Topics include introduction to Microbiology, Practical Infection Control, Sterilization and Monitoring, Chemical Disinfectants, Aseptic Technique, Infectious diseases, and applicable North Carolina laws. Upon completion, students should be able to demonstrate an understanding of infectious diseases, disease transmission, infection control procedures, biohazard management, OSH standards, and applicable North Carolina laws.

MED-140   Examining Room Procedures I   3 4 0 5
Requisites: Take MAT-110(S25428) MED-110 MED-121 MED-130 MED-138; Take previously. Required. Take MED-150; Take concurrently. Required.
This course provides instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with exams and treatment, patient education, preparation and administration of medications, EKG, vital signs, and medical emergencies. Upon completion, students should be able to demonstrate competence in exam room procedures.

MED-150   Laboratory Procedures I   3 4 0 5
Requisites: Take MED-110 MED-121 MED-130 MED-138; Take previously. Required. Take MED-140; Take concurrently. Required.
This course provides instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collecting and processing specimens, performing selective tests, phlebotomy, screening and follow-up of test results, and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics.

MED-232   Medical Insurance Coding   1 3 0 2
Requisites: Take MED-131(S16431); Take previously. Required.
This course is designed to develop coding skills. Emphasis is placed on advanced diagnostic and procedural coding in the outpatient facility. Upon completion, students should be able to demonstrate proficiency in coding for reimbursement.

MED-260   MED Clinical Practicum   0 0 15 5
Requisites: Take MED-122 MED-140 MED-150; Take either previously or concurrently. Required. Take MED-264; Take concurrently. Required.
This course provides the opportunity to apply clinical, laboratory, and administrative skills in a medical facility. Emphasis is placed on enhancing competence in clinical and administrative skills necessary for comprehensive patient care and strengthening professional communications and interactions. Upon completion, students should be able to function as an entry-level health care professional.

MED-264   MED: Medical Assisting Overview   2 0 0 2
Requisites: Take MED-122 MED-140 MED-150; Take either previously or concurrently. Required. Take MED-260. Take concurrently. Required.
This course provides an overview of the complete medical assisting curriculum. Emphasis is placed on all facets of medical assisting pertinent to administrative, laboratory, and clinical procedures performed in the medical environment. Upon completion, students should be able to demonstrate competence in the areas covered on the national certification examination for medical assistants.

MED-270   Symptomatology   2 2 0 3
Requisites: Take BIO-161; Take either previously or concurrently. Required.
This course covers the study of disease symptoms and the appropriate actions taken by medical assistants in a medical facility in relation to these symptoms. Emphasis is placed on interviewing skills and appropriate triage, preparing patients for procedures, and screening test results. Upon completion, students should be able to recognize how certain symptoms relate to specific diseases, recognize emergency situations, and take appropriate actions.

MED-272   Drug Therapy   3 0 0 3
Requisites: Take MED-140 MED-150; Take previously. Required.
This course focuses on major drug groups, including their side effects, interactions, methods of administration, and proper documentation. Emphasis is placed on the theory of drug administration. Upon completion, students should be able to identify, spell, recognize side effects of, and document the most commonly used medications in a physician's office.

MED-274   Diet Therapy/Nutrition   3 0 0 3
Requisites: Take BIO-161; Take previously. Required.
This course introduces the basic principles of nutrition as they relate to health and disease. Topics include basic nutrients, physiology, dietary deficiencies, weight management, and therapeutic nutrition in wellness and disease. Upon completion, students should be able to interpret clinical and dietary data and provide patient counseling and education.

CURRICULUM COURSE DESCRIPTIONS

MENTAL HEALTH (MHA PREFIX)

MHA-150   **Mental Health Systems**   3 0 0 3
Requisites: Take HSE-110; Take previously. Required. Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course introduces the treatment and services available at both public and private mental health facilities. Topics include intake procedures, admission criteria, history, and structure of mental health facilities. Upon completion, students should be able to demonstrate competence in articulating both the theory and practice of mental health services delivery.

MHA-155   **Psychological Assessment**   3 0 0 3
Requisites: Take PSY-150; Take previously. Required. Take DRE-098(S23643) or ENG-002; Take previously. Required. Take DMA-010 DMA-020 DMA-030 or MAT-003; Take previously. Required.
This course covers psychological assessment. Emphasis is placed on different types of psychological tests. Upon completion, students should be able to recognize and understand the purpose of various psychological tests.

MHA-240   **Advocacy**   2 0 0 2
Requisites: Take HSE-110; Take previously. Required. Take DRE-098(S23643) or ENG-002; Take previously. Required. Take DMA-010 DMA-020 DMA-030 or MAT-003; Take previously. Required.
This course covers the roles and duties of the client advocate. Topics include treatment planning, needs assessment, referral procedures, and follow-up and integration of services. Upon completion, students should be able to effectively manage the care of the whole person from contact initiation to termination.

MARKETING AND RETAILING (MKT PREFIX)

MKT-120   **Principles of Marketing**   3 0 0 3
Requisites:
This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

MKT-220   **Advertising and Sales Promotion**   3 0 0 3
Requisites: Take MKT-120(S24159); Take previously. Required.
This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

MKT-221   **Consumer Behavior**   3 0 0 3
Requisites:
This course is designed to describe consumer behavior as applied to the exchange processes involved in acquiring, consuming, and disposing of goods and services. Topics include an analysis of basic and environmental determinants of consumer behavior with emphasis on the decision-making process. Upon completion, students should be able to analyze concepts related to the study of the individual consumer.

MKT-223   **Customer Service**   3 0 0 3
Requisites:
This course stresses the importance of customer relations in the business world. Emphasis is placed on learning how to respond to complex customer requirements and to efficiently handle stressful situations. Upon completion, students should be able to demonstrate the ability to handle customer relations.

MKT-225   **Marketing Research**   3 0 0 3
Requisites: Take MKT-120(S24159); Take previously. Required.
This course provides information for decision making by providing guidance in developing, analyzing, and using data. Emphasis is placed on marketing research as a tool in decision making. Upon completion, students should be able to design and conduct a marketing research project and interpret the results.

CURRICULUM COURSE DESCRIPTIONS

MKT-227   **Marketing Applications**   3 0 0 3
Requisites: Take MKT-220(S24161) MKT-225(S24162); Take previously. Required.
This course extends the study of diverse marketing strategies. Emphasis is placed on case studies and small-group projects involving research or planning. Upon completion, students should be able to effectively participate in the formulation of a marketing strategy.

MKT-228   **Service Marketing**   3 0 0 3
Requisites:
This course is designed to define service marketing, demonstrate its importance, and note its special characteristics. Topics include basic building blocks of service marketing, distinctive aspects of services, and applications of service marketing mix. Upon completion, students should be able to demonstrate a basic understanding of the marketing mix as it applies to the service industry.

MKT-232   **Social Media Marketing**   3 2 0 4
Requisites:
This course is designed to build students' social media marketing skills by utilizing projects that give students hands on experience implementing social media marketing strategies. Topics include integrating different social media technologies into a marketing plan, creating social media marketing campaigns, and applying appropriate social media tools. Upon completion, students should be able to use social media technologies to create and improve marketing efforts for businesses.

MEDICAL LABORATORY TECHNOLOGY (MLT PREFIX)

MLT-111   **Urinalysis & Body Fluids**   1 3 0 2
Requisites:
This course introduces the laboratory analysis of urine and body fluids. Topics include physical, chemical, and microscopic examination of the urine and body fluids. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting urinalysis and body fluid tests.

MLT-115   **Laboratory Calculations**   2 0 0 2
Requisites:
This course is designed to present mathematical operations used in the medical laboratory. Topics include use of basic math processes, systems of measurement, conversion factors, solutions, and dilutions. Upon completion, students should be able to solve practical problems in the context of the medical laboratory.

MLT-118   **Medical Lab Chemistry**   3 0 0 3
Requisites: Take CHM-090; Take previously. Required.
This course introduces the basic laboratory chemical principles. Emphasis is placed on selected topics from inorganic, organic, and biological chemistry. Upon completion, students should be able to demonstrate an understanding of the relationship between chemical principles and the medical laboratory function.

MLT-120   **Hematology/Hemostasis I**   3 3 0 4
Requisites: Take BIO-163 MLT-110 MLT-111 MLT-115 MLT-118 MLT-140; Take previously. Required.
This course introduces the theory and technology used in analyzing blood cells and the study of hemostasis. Topics include hematology, hemostasis, and related laboratory testing. Upon completion, students should be able to demonstrate theoretical comprehension of hematology/hemostasis, perform diagnostic techniques, and correlate laboratory findings with disorders.

MLT-125   **Immunohematology I**   4 3 0 5
Requisites: Take BIO-163 MLT-110 MLT-111 MLT-115 MLT-118 MLT-140; Take previously. Required.
This course introduces the immune system and response; basic concepts of antigens, antibodies, and their reactions; and applications in transfusion medicine and serodiagnostic testing. Emphasis is placed on immunological and blood banking techniques including concepts of cellular and humoral immunity and pretransfusion testing. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting routine immunological and blood bank procedures.

MLT-130   **Clinical Chemistry I**

3 3 0 4

Requisites: Take BIO-163 MLT-110 MLT-111 MLT-115 MLT-118 MLT-140; Take previously. Required.
This course introduces the quantitative analysis of blood and body fluids and their variations in health and disease.
Topics include clinical biochemistry, methodologies, instrumentation, and quality control. Upon completion, students
should be able to demonstrate theoretical comprehension of clinical chemistry, perform diagnostic techniques, and
correlate laboratory findings with disorders.

MLT-140   **Introduction to Microbiology**   2 3 0 3
Requisites:
This course introduces basic techniques and safety procedures in clinical microbiology. Emphasis is placed on the
morphology and identification of common pathogenic organisms, aseptic technique, staining techniques, and usage
of common media. Upon completion, students should be able to demonstrate theoretical comprehension in
performing and interpreting basic clinical microbiology procedures.

MLT-217: Professional Issues

0 3 0 1

Requisites: Take MLT-230 MLT-266 MLT-280; Take previously. Required.
This course surveys professional issues in preparation for career entry. Emphasis is placed on work readiness and
theoretical concepts in microbiology, immunohematology, hematology, and clinical chemistry. Upon completion,
students should be able to demonstrate competence in career entry-level areas and be prepared for the national
certification examination.

MLT-220   **Hematology/Hemostasis II**   2 3 0 3
Requisites: Take MLT-120 MLT-125 MLT-130 MLT-240; Take previously. Required.
This course covers the theories and techniques used in the advanced analysis of human blood cells and hemostasis.
Emphasis is placed on the study of hematologic disorders, abnormal cell development and morphology, and related
testing. Upon completion, students should be able to demonstrate a theoretical comprehension and application of
abnormal hematology and normal and abnormal hemostasis.

MLT-230   **Clinical Chemistry II**   2 3 0 3
Requisites: Take MLT-130; Take previously. Required. Take MLT-220 MLT-254 MLT-130; Take previously.
Required.
This course is designed to supplement the biochemical and physiologic theory presented in MLT 130. Emphasis is
placed on special chemistry techniques and methodologies. Upon completion, students should be able to recognize
and differentiate technical and physiological causes of unexpected test results.

MLT-240   **Special Clinical Microbiology**   2 3 0 3
Requisites: Take MLT-140; Take previously. Required. Take BIO-163 MLT-110 MLT-111 MLT-115 MLT-118
MLT-140; Take previously. Required.
This course is designed to introduce special techniques in clinical microbiology. Emphasis is placed on advanced
areas in microbiology. Upon completion, students should be able to demonstrate theoretical comprehension in
performing and interpreting specialized clinical microbiology procedures.

MLT-254   **MLT Practicum I**   0 0 12 4
Requisites: Take MLT-120 MLT-125 MLT-130 MLT-240; Take previously. Required.
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and
precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical
evaluations.

MLT-266   **MLT Practicum II**   0 0 18 6
Requisites: Take MLT-220 MLT-254; Take previously. Required.
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and
precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical
evaluations.

MLT-276   **MLT Practicum III**   0   0 18 6
Requisites: Take MLT-230 MLT-266 MLT-280; Take previously. Required.
This course provides entry-level clinical laboratory experience. Emphasis is placed on technique, accuracy, and
precision. Upon completion, students should be able to demonstrate entry-level competence on final clinical
evaluations.

MLT-280 **Special Practice Lab** 0 3 0 1
Requisites: Take MLT-220 MLT-254; Take previously. Required.
This course provides additional medical laboratory experience. Emphasis is placed on laboratory skills and techniques. Upon completion, students should be able to demonstrate proficiency in laboratory skills and techniques.

MAINTENANCE (MNT PREFIX)

MNT-110 **Introduction to Maintenance Procedures** 1 3 0 2
Requisites:
This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures and practices according to current industry standards.

MNT-222 **Industrial Systems Schematics** 1 2 0 2
Requisites:
This course covers the reading and drawing of schematics and diagrams. Emphasis is placed on water and gas plumbing, hydraulic and pneumatic circuits, electrical circuits, and welding diagrams. Upon completion, students should be able to interpret and construct industrial schematics and diagrams.

MNT-270 **Bioprocess Equipment Maintenance** 1 3 0 2
Requisites: Take MNT-110(S10522); Take previously. Required.
This course covers the equipment used in a bioprocess manufacturing facility and the techniques used to maintain and troubleshoot it. Topics include types of equipment, the role of equipment in the bioprocess manufacturing facility, troubleshooting bioprocess equipment, and the role of a bioprocess maintenance technician. Upon completion, students should be able to maintain and troubleshoot bioprocess equipment in a biotechnology manufacturing facility using work techniques appropriate for the biotechnology industry.

MAGNETIC RESONANCE IMAGING (MRI PREFIX)

MRI-210 **MRI Physics and Equipment** 3 0 0 3
Requisites:
This course covers the physical principles of image formation, data acquisition, and image processing in magnetic resonance imaging. Emphasis is placed on instrumentation, fundamentals, pulse sequences, data manipulation, imaging parameters, options, and their effects on image quality. Upon completion, students should be able to understand the principles behind image formation, data acquisition, and image processing in magnetic resonance imaging.

MRI-213 **MR Patient Care & Safety** 2 0 0 2
Requisites: Take MRI-216 MRI-250; Take either previously or concurrently. Required.
This course covers magnetic field safety issues concerning patients and other healthcare personnel. Emphasis is placed on screening skills, biological magnetic field effects, and the management of an MR facility. Upon completion, the student should be able to demonstrate a safe MR environment for patients and all personnel.

MRI-214 **MRI Procedures I** 2 0 0 2
Requisites: Take MRI-217 MRI-241 MRI-260; Take either previously or concurrently. Required.
This course introduces scan procedures for the central nervous and musculoskeletal systems with MRI imaging. Emphasis is placed on patient set-up, scan parameters, methods of data acquisition, and contrast administration with each of these types of procedures. Upon completion, students should be able to demonstrate all aspects of MR imaging to successfully scan the central nervous and musculoskeletal systems.

MRI-215 **MRI Procedures II** 2 0 0 2
Requisites: Take MRI-214; Take previously. Required. Take MRI-218 MRI-242 MRI-270; Take either previously or concurrently. Required.
This course provides advanced scan procedures for the neck, chest, abdomen, and pelvic systems with MR imaging. Emphasis is placed on patient set-up, scan parameters, methods of data acquisition, and contrast administration with each of these types of procedures. Upon completion, students should be able to demonstrate all aspects of MR imaging to successfully scan the chest, abdomen, and pelvic systems.

MRI-216   **MRI Instrumentation**   2 0 0 2
Requistes: Take MRI-213 MRI-250; Take either previously or concurrently. Required.
This course covers instrumentation utilized to produce the magnetic fields allowing MRI imaging to take place. Emphasis will be placed on equipment operations and use, inclusive of the static field, gradient fields, and the radiofrequency fields. Upon completion, the student should be able to demonstrate an understanding of the utilization of all MRI equipment in an MRI facility

MRI-217   **MRI Physics I**   2 0 0 2
Requisites: Take MRI-216; Take previously. Required. Take MRI-214 MRI-241 MRI-260; Take either previously or concurrently. Required.
This course is designed to cover the basic physics fundamentals of magnetic resonance imaging. Emphasis is placed on the historical development, basic imaging principles, and use of basic scan parameters and pulse sequences. Upon completion, the student should be able to demonstrate an understanding of the basic fundamentals of magnetic resonance.

MRI-218   **MRI Physics II**   2 0 0 2
Requisites: Take MRI-217; Take previously. Required. Take MRI-215 MRI-242 MRI-270; Take either previously or concurrently. Required.
This course is designed to cover the advanced physics concepts of magnetic resonance imaging. Emphasis is placed on advanced imaging parameters and techniques, angiography methods, image artifacts, and quality control. Upon completion, the student should be able to demonstrate an understanding of the advanced physics concepts of magnetic resonance imaging.

MRI-241   **MRI Anatomy & Pathology I**   2 0 0 2
Requisites: Take MRI-214 MRI-217 MRI-260; Take either previously or concurrently. Required.
This course covers anatomical and pathological information about the components of the central nervous and musculoskeletal system. Emphasis is placed upon identification of anatomy and pathology on MRI images of the central nervous and musculoskeletal systems. Upon completion, the student should be able to identify anatomy and pathology of the central nervous and musculoskeletal systems.

MRI-242   **MRI Anatomy & Pathology II**   2 0 0 2
Requisites: Take MRI-241; Take previously. Required. Take MRI-215 MRI-218 MRI-270; Take either previously or concurrently. Required.
This course covers anatomical and pathological information about the components of the neck, chest, abdomen, and pelvic systems. Emphasis is placed upon identification of anatomy and pathology on MRI images of the neck, chest, abdomen, and pelvic systems. Upon completion, the student should be able to identify anatomy and pathology of the neck, chest, abdomen, and pelvic systems.

MRI-250   **MRI Clinical Ed I**   0 0 12 4
Requisites: Take MRI-213 MRI-216; Take either previously or concurrently. Required.
This course provides experience in the MR clinical setting with attention to basic MR scan procedures. Emphasis is placed on patient care, screening, contrast administration, and manipulation of MR equipment. Upon completion, students should be able to demonstrate selected MR procedures/techniques in the areas of patient screening, contrast administration, and manipulation of MR equipment.

MRI-260   **MRI Clinical Ed II**   0 0 21 7
Requisites: Take MRI-250; Take previously. Required. Take MRI-214 MRI-217 MRI-241; Take either previously or concurrently. Required.
This course provides advanced experience in the MR clinical setting with attention to central nervous and musculoskeletal system imaging. Emphasis is placed on demonstration of methods of data acquisition with respect to central nervous and musculoskeletal system imaging. Upon completion, students should be able to demonstrate selected MR procedures/techniques as they relate to the central nervous system and musculoskeletal imaging.

MRI-270   **MRI Clinical Ed III**   0 0 24 8
Requisites: Take MRI-260; Take previously. Required. Take MRI-215 MRI-218 MRI-242; Take either previously or concurrently. Required.
This course provides additional advanced experience in the MR clinical setting with attention to neck, chest, abdomen, and pelvic system imaging. Emphasis is placed on demonstration of methods of data acquisition with respect to neck, chest, abdomen, and pelvic system imaging. Upon completion, students should be able to selected MR procedures/techniques that are used in neck, chest, abdomen, and pelvic system imaging.

MRI-271   **MRI Capstone**   1 0 0 1
Requisites:
This course provides experience using problem solving skills required for certification. Emphasis is placed on critical thinking and integration of didactic and clinical components. Upon completion, students should be able to demonstrate knowledge required of any entry level MR technologist.

THERAPEUTIC MASSAGE (MTH PREFIX)

MTH-110   **Fundamentals of Massage**   6 9 3 10
Requisites: Take BIO-163 ACA-111; Take either previously or concurrently. Required.
This course introduces concepts basic to the role of the massage therapist in a variety of clinical settings. Emphasis is placed on beginning theory and techniques of body work as well as skill in therapeutic touch. Upon completion of the course, the student should be able to apply basic practical massage therapy skills.

MTH-120   **Therapeutic Massage Applications**   6 9 3 10
Requisites: Take MTH-110(S22033); Take previously. Required. Take BIO-163 MTH-110(S22033); Take previously. Required.
This course provides an expanded knowledge and skill base for the massage therapist in a variety of clinical settings. Emphasis is placed on selected therapeutic approaches throughout the lifespan. Upon completion, students should be able to perform entry level therapeutic massage on various populations.

MTH-121   **Clinical Supplement I**   0 0 3 1
Requisites: Take MTH-110(S22033) MTH-120(S22036) MTH-125(S20862) MTH-210(S22034) or MTH-220(S22035); Take either previously or concurrently. Required. Take MTH-125(S20862) MTH-210(S22034) MTH-220(S22035) MTH-110(S22033) or MTH-120(S22036); Take either previously or concurrently. Recommended.
This course is designed to introduce the student to a variety of clinical experiences. Emphasis is placed on applying the therapeutic massage process across the lifespan. Upon completion, students should be able to demonstrate delivery of massage techniques in a clinical setting.

MTH-125   **Ethics of Massage**   2 0 0 2
Requisites: Take MTH-120(S20861); Take previously. Required.
This course is designed to explore issues related to the practice of massage therapy. Emphasis is placed on ethical, legal, professional, and political issues. Upon completion of this course the student should be able to discuss issues relating to the practice of massage therapy, client/therapist relationships as well as ethical issues.

MTH-130   **Therapeutic Massage Management**   2 0 0 2
Requisites: Take MTH-110(S22033); Take previously. Required.
This course introduces the basic responsibilities in the development and administration of a professional massage therapy practice. Emphasis is placed on identifying successful practice management methods such as selecting a business structure, negotiating a contract/lease, developing a business/marketing plan, designing a massage space, differentiating spa from clinical practice, management of client/financial records and physician referral. Upon completion, students should be able to demonstrate the knowledge and skills necessary to develop and manage a massage therapy practice.

MTH-210   **Advanced Skills of Massage**   4 9 3 8
Requisites: Take MTH-120(S22036) or MTH-121; Take previously. Required.
This course provides knowledge and skills in diverse body work modalities in a variety of clinical settings. Emphasis is placed on selected techniques such as Neuromuscular Therapy, Sports Massage, Soft Tissue Release, Spa Approaches, Oriental Therapies, and energy techniques. Upon completion, students should be able to perform basic skills in techniques covered.

MTH-220   **Outcome-Based Massage**   4 6 3 7
Requisites: Take MTH-120(S22036) MTH-121 or MTH-221; Take previously. Required.
This course provides knowledge and skills in more complex body works modalities in a variety of clinical settings. Emphasis is placed on developing advanced skills in outcome-based Massage. Upon completion, students should be able to perform basic skills in techniques covered.

CURRICULUM COURSE DESCRIPTIONS

MUSIC (MUS PREFIX)

MUS-110   Music Appreciation   3 0 0 3
Requisites: Take 1 group; Take RED-080 ENG-080; Take DRE-097(S23642); Take ENG-002; Take previously. Required.
This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music.

MUS-112   Introduction to Jazz   3 0 0 3
Requisites: Take 1 group; Take RED-080 ENG-080; Take DRE-097(S23642); Take ENG-002; Take previously. Required.
This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music.

MUS-131   Chorus I   0 2 0 1
Requisites:
This course provides an opportunity to gain experience singing in a chorus. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

MUS-132   Chorus II   0 2 0 1
Requisites: Take MUS-131; Take previously. Required.
This course provides a continuation of studies begun in MUS 131. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

MUS-231   Chorus III   0 2 0 1
Requisites: Take MUS-132; Take previously. Required.
This course is a continuation of MUS 132. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

MUS-232   Chorus IV   0 2 0 1
Requisites: Take MUS-231; Take previously. Required.
This course is a continuation of MUS 231. Emphasis is placed on vocal techniques and the study of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

NURSING ASSISTANT (NAS PREFIX)

NAS-101   Nurse Aide I   3 4 3 6
Requisites:
This course includes basic nursing skills required to provide safe, competent personal care for individuals. Emphasis is placed on person-centered care, the aging process, communication, safety/emergencies, infection prevention, legal and ethical issues, vital signs, height and weight measurements, elimination, nutrition, basic restorative care/rehabilitation, dementia, mental health and end-of-life care. Upon completion, students should be able to demonstrate knowledge and skills and be eligible to test for listing on the North Carolina Nurse Aide I Registry.

NAS-102   Nurse Aide II   3 2 6 6
Requisites: Take NAS-101 previously. Required.
This course provides training in Nurse Aide II tasks. Emphasis is placed on the role of the Nurse Aide II, sterile technique and specific tasks such as urinary catheterization, wound care, respiratory procedures, ostomy care, peripheral IV assistive activities, and alternative feeding methods. Upon completion, students should be able to demonstrate knowledge and skills and safe performance of skills necessary to be eligible for listing on the North Carolina Nurse Aide II Registry.

CURRICULUM COURSE DESCRIPTIONS

NETWORKING TECHNOLOGY (NET PREFIX)

NET-110   **Networking Concepts**   2 2 0 3
Requisites:
This course introduces students to the networking field. Topics include network terminology and protocols, local-area networks, wide-area networks, OSI model, cabling, router programming, Ethernet, IP addressing, and network standards. Upon completion, students should be able to perform tasks related to networking mathematics, terminology, and models, media, Ethernet, subnetting, and TCP/IP Protocols.

NET-115   **Telecommunication for Information Technology Professionals**   2 2 0 3
Requisites: Take CTI-120(S22511); Take previously. Required.
This course introduces telecommunications technologies and topics for Information Technology students. Topics include introduction to telecommunications, wide area networking technologies, voice telephony, wireless telephony and telecommunications network management. Upon completion, students should be able to design, implement and test key telecommunications technologies.

NET-125   **Introduction to Networks**   1 4 0 3
Requisites: Take CTI-120(S22511) or NET-110(S21056); Take previously. Required.
This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. Topics include introduction to the principles of IP addressing and fundamentals of Ethernet concepts, media, and operations. Upon completion, students should be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This course introduces the networking field. Emphasis is placed on network terminology and protocols, local-area networks, wide-area networks, OSI model, cabling, router programming, Ethernet, IP addressing, and network standards. Upon completion, students should be able to perform tasks related to networking mathematics, terminology, and models, media, Ethernet, subnetting, and TCP/IP Protocols. The emphasis of this course will be on Cisco Networking Academy CCNA Routing and Switching curriculum-Introduction to Networks.

NET-126   **Routing Basics**   1 4 0 3
Requisites: Take NET-125(S24501); Take previously. Required.
This course focuses on initial router configuration, router software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Emphasis will be placed on the fundamentals of router configuration, managing router software, routing protocol, and access lists. Upon completion, students should have an understanding of routers and their role in WANs, router configuration, routing protocols, TCP/IP, troubleshooting, and ACLs.

NET-135   **Data Center Networking**   2 2 0 3
Requisites: Take NET-126(S24383); Take previously. Required.
This course introduces the field of data center network administration. Emphasis is placed on foundational data center concepts such as designing, implementing and troubleshooting data center technologies. Upon completion, students will be able to enter the field of data center network administration.

NET-175   **Wireless Technology**   2 2 0 3
Requisites: Take CTI-120(S22511); Take previously. Required.
This course introduces the student to wireless technology and interoperability with different communication protocols. Topics include Wireless Application Protocol (WAP), Wireless Mark-up language (WML), link manager, service discovery protocol, transport layer and frequency band. Upon completion, students should be able to discuss in written and oral form protocols and procedures required for different wireless applications.

NET-225   **Routing & Switching I**   1 4 0 3
Requisites: Take NET-126(S24383); Take previously. Required.
This course focuses on advanced IP addressing techniques, intermediate routing protocols, command-line interface configuration of switches, Ethernet switching, VLANs, STP, and VTP. Emphasis will be placed on application and demonstration of skills acquired in pre-requisite courses. Upon completion, students should be able to perform tasks related to VLSM, routing protocols, switching concepts and configuration, STP, VLANs, and VTP.

NET-240   **Network Design**   3 0 0 3
Requisites: Take NET-126(S24383); Take previously. Required.
This course covers the principles of the design of LANs and WANs. Topics include network architecture, transmission systems, traffic management, bandwidth requirements, Internet working devices, redundancy, and broad-band versus base-band systems. Upon completion, students should be able to design a network to meet specified business and technical requirements.

NET-270   Building Scalable Networks   1 4 0 3
Requisites: Take NET-225(S24385); Take previously. Required.
This course covers principles and techniques of scalable networks. Topics include building multi-layer networks, controlling overhead traffic in growing routed networks, and router capabilities used to control traffic over LANs and WANs. Upon completion, students should be able to design; implement; and improve traffic flow, reliability, redundancy, and performance in enterprise networks. This course covers principles and techniques of scalable networks. Topics include building multi-layer networks, controlling overhead traffic in growing routed networks, and router capabilities used to control traffic over LANs and WANs. Upon completion, students should be able to design; implement; and improve traffic flow, reliability, redundancy, and performance in enterprise networks. The emphasis of this course will be on Cisco Networking Academy CCNP Routing and Switching curriculum (ROUTE).

NET-272   Multi-Layer Networks   1 4 0 3
Requisites: Take NET-270(S24391); Take previously. Required.
This course covers building campus networks using multi-layer switching technologies over a high-speed Ethernet. Topics include improving IP routing performance with multi-layer switching, implementing fault tolerance routing, and managing high bandwidth broadcast while controlling IP multi-cast access to networks. Upon completion, students should be able to install and configure multi-layer enterprise networks and determine the required router configurations to support new services and applications.

NET-273   Internetworking Support   1 4 0 3
Requisites: Take NET-270(S24391); Take previously. Required.
This course covers how to baseline and troubleshoot and internetworking environment using routers and switches for multi-protocol client, host and servers. Topics include troubleshooting processes, routing and routed protocols, campus switching; and WAN troubleshooting. Upon completion, students should be able to troubleshoot Ethernet, Fast Ethernet, and Token Ring LANs; and Serial, Frame Relay, and ISDN connections.

NET-289   Networking Project   1 4 0 3
Requisites: Take CTI-110(S22510) CTI-120(S22511) CTS-115(S20996); Take previously. Required. Take NET-225(S24385); Take previously. Required.
This course provides an opportunity to complete a significant networking project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete a project from the definition phase through implementation.

NETWORK OPERATING SYSTEMS (NOS PREFIX)

NOS-110   Operating Systems Concepts   2 3 0 3
Requisites:
This course introduces students to a broad range of operating system concepts, including installation and maintenance. Emphasis is place on operating system concepts, management, maintenance, and resources required. Upon completion of this course, students will have an understanding of OS concepts, installation, management, maintenance, using a variety of operating systems.

NOS-120   Linux/UNIX Single User   2 2 0 3
Requisites: Take CTI-130(S22512) NOS-110(S20980) or CTS-120(S23679); Take previously. Required.
This course develops the necessary skills for students to develop both GUI and command line skills for using and customizing a Linux workstation. Topics include Linux file system and access permissions, GNOME Interface, VI editor, X Window System expression pattern matching, I/O redirection, network and printing utilities. Upon completion, students should be able to customize and use Linux systems for command line requirements and desktop productivity roles.

NOS-130   Windows Single User   2 2 0 3
Requisites: Take CTI-130(S22512) NOS-110(S20980) or CET-111(S21574); Take previously. Required.
This course introduces operating system concepts for single-user Microsoft Windows-based systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment. This course is currently taught using an interactive learning environment and is structured to align with the Microsoft MD-100 certification exam objectives.

NOS-220   **Linux/Unix Administration I**   2 2 0 3
Requisites: Take NOS-120(S24396); Take previously. Required.
This course introduces the Linux file system, group administration, and system hardware controls. Topics include installation, creation and maintaining file systems, NIS client and DHCP client configuration, NFS, SMB/Samba, Configure X, Gnome, KDE, basic memory, processes, and security. Upon completion, students should be able to perform system administration tasks including installation, configuring and attaching a new Linux workstation to an existing network.

NOS-221   **Linux/UNIX Administration II**   2 2 0 3
Requisites: Take NOS-220(S20986); Take previously. Required.
This course includes skill building in configuring common network services and security administration using Linux. Topics include server-side setup, configuration, basic administration of common networking services, and security administration using Linux. Upon completion, students should be able to setup a Linux server and configure common network services including security requirements.

NOS-222   **Linux/UNIX Administration III**   2 2 0 3
Requisites: Take NOS-221; Take previously. Required.
This course includes technical topics in preparing an enterprise Linux system for common uses. Topics include advanced study of hardware, installation, boot process, file system administration, software administration, user administration, system administration, kernel services, configuration, securing services, and troubleshooting. Upon completion, students should be able to administer an enterprise Linux system.

NOS-230   **Windows Administration I**   2 2 0 3
Requisites: Take NOS-130(S24049); Take previously. Required.
This course covers the installation and configuration of a Windows Server operating system. Emphasis is placed on the basic configuration of core network services, Active Directory and group policies. Upon completion, students should be able to install and configure a Windows Server operating system. This course covers the installation and configuration of a Windows Server operating system. Emphasis is placed on the basic configuration of core network services, Active Directory and group policies. Upon completion, students should be able to install and configure a Windows Server operating system. This course is taught within the Microsoft IT Academy as a Microsoft Official Academic Course (MOAC).

NOS-231   **Windows Administration II**   2 2 0 3
Requisites: Take NOS-230(S24041); Take previously. Required.
This course covers the management of a Windows Server operating system. Emphasis is placed on the deployment of print services, network services, Active Directory, group policies and access controls. Upon completion, students should be able to deploy and manage services on a Windows Server operating system.

NOS-232   **Windows Administration III**   2 2 0 3
Requisites: Take NOS-230(S24041); Take previously. Required.
This course covers management and configuration of a highly available Windows Server operating system. Emphasis is placed on the implementation of business continuity and disaster recovery procedures for network services and access controls. Upon completion, students should be able to manage and configure a highly available Windows Server operating system.

NURSING (NUR PREFIX)

NUR-101   Practical Nursing I   7 6 6 11
Requisites:
This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including assessment, clinical decision making, professional behaviors, caring interventions, biophysical and psychosocial concepts, communication, collaboration, teaching/learning, safety, ethical principles, legal issues, informatics, and evidence-based practice. Upon completion, students should be able to provide safe nursing care across the lifespan incorporating the concepts identified in this course.

NUR-102   Practical Nursing II   7 0 9 10
Requisites: Take NUR-101(S24252); Take previously. Required.
This course is designed to further develop the concepts within the three domains of the individual, nursing, and healthcare. Emphasis is placed on the concepts within each domain including clinical decision making, caring interventions, biophysical and psychosocial concepts, communication, collaboration, teaching and learning, accountability, safety, informatics, and evidence-based practice. Upon completion, students should be able to provide safe nursing care across the lifespan incorporating the concepts identified in this course.

NUR-103   Practical Nursing III   6 0 9 9
Requisites: Take NUR-101(S24252); Take previously. Required. Take NUR-102(S24253); Take previously. Required.
This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on biophysical and psychosocial concepts, professional behaviors, healthcare systems, health policy, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide safe, quality, and individualized entry level nursing care.

NUR-111   Introduction to Health Concepts   4 6 6 8
Requisites:
This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR-112   Health-Illness Concepts   3 0 6 5
Requisites: Take NUR-111; Take previously. Required.
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of acid-base, metabolism, cellular regulation, oxygenation, infection, stress/coping, health-wellness-illness, communication, caring interventions, managing care, safety, quality improvement, and informatics. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR-113   Family Health Concepts   3 0 6 5
Requisites: Take NUR-111; Take previously. Required.
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of oxygenation, sexuality, reproduction, grief/loss, mood/affect, behaviors, development, family, health-wellness-illness, communication, caring interventions, managing care, safety, and advocacy. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR-114   Holistic Health Concepts   3 0 6 5
Requisites: Take NUR-111; Take previously. Required.
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, inflammation, sensory perception, stress/coping, mood/affect, cognition, self, violence, health-wellness-illness, professional behaviors, caring interventions, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR-211   **Health Care Concepts**   3 0 6 5
Requisites: Take NUR-111; Take previously. Required.
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, infection, immunity, mobility, comfort, behaviors, health-wellness-illness, clinical decision-making, caring interventions, managing care, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

NUR-213   **Complex Health Concepts**   4 3 15 10
Requisites: Take NUR-111; Take previously. Required. Take NUR-112 NUR-113 NUR-114 NUR-211 NUR-212; Take either previously or concurrently. Required.
This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, perfusion, mobility, stress/coping, violence, health-wellness-illness, professional behaviors, caring interventions, managing care, healthcare systems, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry level nursing care.

NUR-214   **Nsg Transition Concepts**   3 0 3 4
Requisites: Take ENG-111(S13673) PSY-150 PSY-241 BIO-168(S11555) BIO-169(S11629); Take previously. Required.
This course is designed to introduce concepts within the three domains of the individual, healthcare, and nursing as the LPN transitions to the ADN role. Emphasis is placed on the concepts within each domain including evidenced-based practice, quality improvement, communication, safety, interdisciplinary team, clinical decision-making, informatics, assessment, caring, and health-wellness-illness. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

OPERATIONS MANAGEMENT (OMT PREFIX)

OMT-112   **Materials Management**   3 0 0 3
Requisites:
This course covers the basic principles of materials management. Emphasis is placed on the planning, procurement, movement, and storage of materials. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques related to materials management.

OMT-154   **Customer Satisfaction**   2 0 0 2
Requisites:
This course is a study of quality issues relating to customer satisfaction and long-term customer support. Topics include quality through the eyes of the customer, clarifying customer expectations, resolving customer dissatisfaction, and building individual and long-term commitment to quality. Upon completion, students should be able to understand quality issues related to enhancing customer satisfaction (both internal and external) to ensure long-term customer loyalty.

OMT-222   **Project Management**   3 0 0 3
Requisites:
This course covers fundamental concepts associated with multi-task management and coordination. Topics include flow diagrams, process and operations charts, network scheduling, Gantt charts, and PERT and Critical Path Methods as tools in project management. Upon completion, students should be able to understand and apply project management tools and methods.

CURRICULUM COURSE DESCRIPTIONS

OFFICE SYSTEMS TECHNOLOGY (OST PREFIX)

OST-080   Keyboarding Literacy   1 2 0 2
Requisites:
This course is designed to develop elementary keyboarding skills. Emphasis is placed on mastery of the keyboard. Upon completion, students should be able to demonstrate basic proficiency in keyboarding.

OST-122   Office Computations   2 2 0 3
Requisites:
This course covers the keypad touch method using the electronic calculator (10-key) and mathematical functions used in office applications. Topics may include budgets, discounts, purchasing, inventory, and petty cash. Upon completion, students should be able to solve a wide variety of numerical problems commonly encountered in an office setting.

OST-134   Text Entry and Formatting   2 2 0 3
Requisites: Take OST 080, OST 130, OST 131, or OST 132. Required.
This course is designed to provide the skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce documents and key timed writings at speeds commensurate with employability.

OST-135   Advanced Text Entry and Formatting   2 2 0 3
Requisites: Take OST-134(S22142); Take previously. Required.
This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on advanced document production with increased speed and accuracy. Upon completion, students should be able to make independent decisions regarding planning, style, and method of presentation.

OST-136   Word Processing   2 2 0 3
Requisites:
This course is designed to introduce word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment.

OST-137   Office Applications I   2 2 0 3
Requisites:
This course introduces the concepts and functions of software that meets the changing needs of the community. Emphasis is placed on the terminology and use of software through a hands-on approach. Upon completion, students should be able to use software in a business environment.

OST-138   Office Applications II   2 2 0 3
Requisites: Take CIS-110(S21058) CIS-111(S21059) or OST-137(S24689); Take previously. Required.
This course is designed to improve the proficiency in the utilization of software applications used in business offices through a hands-on approach. Emphasis is placed on in-depth usage of software to create a variety of documents applicable to current business environments. Upon completion, students should be able to master the skills required to design documents that can be customized using the latest software applications.

OST-141   Medical Office Terms I   3 0 0 3
Requisites: Take 1 group; Take DRE-097(S23642); Take ENG-002; Take ENG-111(S25433); Take previously. Required.
This course uses a language-structure approach to present the terminology and vocabulary that will be encountered in medical office settings. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in approximately one-half of the systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

OST-142   Medical Office Terms II   3 0 0 3
Requisites: Take MED-121 or OST-141(S24691); Take previously. Required.
This course is a continuation of OST 141 and continues the study, using a language-structure approach, of medical office terminology and vocabulary. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in the remaining systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

OST-145   **Social Media for Office Professionals**   2 2 0 3
Requisites: Take CIS-110(S21058) CIS-111(S21059) or OST-137(S24689); Take previously. Required.
This course is designed to introduce the office professional to the concepts of social media. Topics include goal setting and strategies, identifying target audiences, rules of engagement, blogs, podcasts and webinars, sharing videos, pictures, and images, social networks, mobile computing, and social media monitoring. Upon completion, students should be able to create and utilize social media tools in the workplace setting.

OST 148   **Medical Insurance & Billing**   3 0 0 3
Requisites: Take 1 Group; Take DRE-097(S23642); Take ENG-002; Take ENG-111(S25433): Take previously. Required.
This course introduces fundamentals of medical insurance and billing. Emphasis is placed on the medical billing cycle to include third party payers, coding concepts, and form preparation. Upon completion, students should be able to explain the life cycle of and accurately complete a medical insurance claim.

OST-149   **Medical Legal Issues**   3 0 0 3
Requisites: Take 1 group; Take DRE-097(S23642); Take ENG-002; Take ENG-111(S25433); Take previously. Required.
This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior.

OST-153   **Office Finance Solutions**   2 2 0 3
Requisites: Take CIS-110(S21058) CIS-111(S21059) or OST-137(S24689); Take previously. Required.
This course introduces basic bookkeeping concepts. Topics include entering data in accounts payable and receivable, keeping petty cash records, maintaining inventory, reconciling bank statements, running payroll, and generating simple financial reports. Upon completion, students should be able to demonstrate competence in the entry and manipulation of data to provide financial solutions for the office.

OST-155   **Legal Terminology**   3 0 0 3
Requisites:
This course covers the terminology appropriate to the legal profession. Topics include legal research, court systems, litigation, civil and criminal law, probate, real and personal property, contracts and leases, domestic relations, equity, and corporations. Upon completion, students should be able to spell, pronounce, define, and accurately use legal terms.

OST-156   **Legal Office Procedures**   2 2 0 3
Requisites: Take OST-134(S13818); Take previously. Required. Take OST-136(S22144) OST-155(S22150); Take previously. Required.
This course covers legal office functions involved in the operation of a law office. Emphasis is placed on procedures in the law office involving the court system, legal research, litigation, probate, and real estate, personal injury, criminal, and civil law. Upon completion, students should be able to demonstrate a high level of competence in performing legal office duties. This course focuses on document preparation for legal documents and pleadings in many different fields of law.

OST-164   **Office Editing**   3 0 0 3
Requisites: Take 1 group; Take DRE-097(S23642); Take ENG-002; Take ENG-111(S25433); Take previously. Required.
This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

OST-165   **Advanced Office Editing**   2 2 0 3
Requisites: Take OST-164(S24696); Take previously. Required.
This course is designed to develop proficiency in advanced editing skills needed in the office environment. Emphasis is placed on the application of creating effective electronic office documents. Upon completion, students should be able to apply advanced editing skills to compose text.

OST-181 **Office Procedures** 2 2 0 3
Requisites:
This course introduces the skills and procedures needed in today's office. Topics include effectively interacting with co-workers and the public, processing simple financial and informational documents, and performing functions typical of today's offices. Upon completion, students should be able to display skills and decision-making abilities essential for functioning in the total office context.

OST 184 **Records Management** 2 2 0 3
Requisites:
This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system.

OST-236 **Advanced Word Processing** 2 2 0 3
Requisites: Take OST-136(S22144); Take previously. Required.
This course develops proficiency in the utilization of advanced word processing functions. Emphasis is placed on advanced word processing features. Upon completion, students should be able to produce a variety of complex business documents.

OST-243 **Med Office Simulation** 2 2 0 3
Requisites: Take OST-148(S11620); Take previously. Required.
This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections. This course is a unique concentration requirement in the Medical Office Administration program.

OST-247 **Procedure Coding** 2 2 0 3
Requisites: Take MED-121 or OST-141(S24691); Take previously. Required. Take 1 group; Take OST-141(S24691) OST-148(S24693); Take MED-121 OST-148(S24693); Take OST-141(S24691) HMT-210(S24675); Take MED-121 HMT-210(S24675); Take previously. Required.
This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS coding systems. Upon completion, students should be able to properly code procedures and services performed in a medical facility.

OST-248 **Diagnostic Coding** 2 2 0 3
Requisites: Take MED-121 or OST-141(S24691); Take previously. Required. Take 1 group; Take OST-141(S24691) OST-148(S24693); Take MED-121 OST-148(S24693); Take OST-141(S24691) HMT-210(S24675); Take MED-121 HMT-210(S24675); Take previously. Required.
This course provides an in-depth study of diagnostic coding. Emphasis is placed on ICD coding system. Upon completion, students should be able to properly code diagnoses in a medical facility.

OST-249 **Medical Coding Certification Preparation** 2 3 0 3
Requisites: Take OST-247(S24704) OST-248(S24705); Take previously. Required.
This course provides instruction that will prepare students to sit for a national coding certification exam. Topics include diagnostic and procedural coding. Upon completion, students should be able to sit for various medical coding certification exams.

OST-260 **Advanced Coding Methodologies** 2 2 0 3
Requisites: Take OST-247(S24704) OST-248(S24705); Take previously. Required. Take OST-247(S24704) OST-248(S24705); Take previously. Required.
This course provides advanced instruction in a variety of emergent methodologies in medical coding. Topics include advanced outpatient coding, inpatient coding, risk adjustment coding, online encoder software, Correct Coding Initiatives (CCI), and advanced record abstraction. Upon completion, students should be able to perform advanced coding in a healthcare facility.

OST-286 **Professional Development** 3 0 0 3
Requisites: Take OST-134(S22142) or OST-136(S22144); Take previously. Required.
This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, health lifestyles, appearance, attitude, personal and professional growth, multicultural awareness, and professional etiquette. Upon completion, students should be able to demonstrate these attributes in the classroom, office, and society.

OST 288:   **Medical Office Administration Capstone**   2 2 0 3
Requisites: Take 1 group; Take OST 148(S24693) or HMT 210(S24675); Take OST 137(S24689); Take OST 164(S24696). Take previosly. Required.
This course is designed to be a capstone course for the medical office professional and provides a working knowledge of medical office procedures. Emphasis placed on written and oral communication skills, practice management, electronic health records, medical office procedures, ethics, and professional development. Upon completion, students should be able to demonstrate the skills necessary to manage a medical office. Students participate in collaborative discussion assignments and a group capstone project to apply knowledge and skills learned throughout MOA coursework.

OST-289   **Office Administration Capstone**   2 2 0 3
Requisites: Take 1 group; Take OST-134(S22142) OST-164(S24696); Take OST-136(S22144) OST-164(S24696); Take previously. Required. Take 1 group; Take OST-134(S22142) OST-164(S24696) OST-138(S24690) CTS-130(S24366); Take OST-136(S22144) OST-164(S24696) OST-138(S24690) CTS-130(S24366); Take previously. Required.
This course is designed to be a capstone course for the office professional and provides a working knowledge of administrative office procedures. Emphasis is placed on written and oral communication skills, office software applications, office procedures, ethics, and professional development. Upon completion, students should be able to adapt in an office environment.

PUBLIC ADMINISTRATION (PAD PREFIX)

PAD-151   **Introduction to Public Administration**   3 0 0 3
Requisites:
This course includes an overview of the role of the public administrator in government and an examination of the development and implementation of public policy. Topics include public personnel administration and management, decision making, public affairs, ethics, organizational theories, budgetary functions within governmental agencies, and other governmental issues. Upon completion, students should be able to explain the functions of government in society and in the lives of people composing that society.

PAD-152   **Ethics in Government**   3 0 0 3
Requisites:
This course introduces the ethical issues and problems within the public administration field. Emphasis is placed on building analytical skills, stimulating moral imagination, and recognizing the discretionary power of the administrator's role. Upon completion, students should be able to understand the moral dimensions of public administrative decision making.

PAD-251   **Public Finance & Budgeting**   3 0 0 3
Requisites:
This course provides an overview of the public finance and budgeting processes used in the allocation of public resources to meet differing public interests. Topics include the political environment, government expenditures, revenues, taxation, budgetary process theories and techniques, and the relation of government finance to the economy. Upon completion, students should be able to recognize impacts of government revenue and expenditure policies and understand the role of budgeting in executing governmental policy.

PAD-252   **Public Policy Analysis**   3 0 0 3
Requisites:
This course is a study of methods and techniques used to determine the effectiveness of public programs. Emphasis is placed on the concept of ecology and environmental impact, informal groups and information networks, and the relationship between public and private sectors. Upon completion, students should be able to analyze case studies with the use of political analysis techniques.

PAD-254   **Grant Writing**   3 0 0 3
Requisites:
This course covers the basic techniques of successful grant writing. Topics include concept development, funding sources research, and writing skills relevant to the grants process. Upon completion, students should be able to demonstrate a basic understanding of the grants process.

PHLEBOTOMY (PBT PREFIX)

PBT-100   Phlebotomy Technology   5 2 0 6
Requisites: Take PBT-101; Take either previously or concurrently. Required.
This course provides instruction in the skills needed for the proper collection of blood and other specimens used for diagnostic testing. Emphasis is placed on ethics, legalities, medical terminology, safety and universal precautions, health care delivery systems, patient relations, anatomy and physiology, and specimen collection. Upon completion, students should be able to demonstrate competence in the theoretical comprehension of phlebotomy techniques.

PBT-101: Phlebotomy Practicum   0 0 9 3
Requisites: Take PBT-100; Take either previously or concurrently. Required.
This course provides supervised experience in the performance of venipuncture and microcollection techniques in a clinical facility. Emphasis is placed on patient interaction and application of universal precautions, proper collection techniques, special procedures, specimen handling, and data management. Upon completion, students should be able to safely perform procedures necessary for specimen collections on patients in various health care settings.

PROCESS CONTROL INSTRUMENTATION (PCI PREFIX)

PCI-170   DAQ and Control   3 3 0 4
Requisites: Take ELC-112(S23481) or ELC-131(S23482); Take previously. Required.
This course is a survey of data acquisition and control applications in an industrial setting. Topics include remote I/O systems, PC-based data acquisition, real-time monitoring, and other related topics. Upon completion, students should be able to demonstrate an understanding of data acquisition circuits. The LabVIEW programming package is the vehicle used to teach these concepts.

PCI-172   SCADA Systems   3 3 0 4
Requisites:
This course is a survey of SCADA systems found in the industrial setting. Topics include single and/or multiple machine operator interfaces utilizing hardware and software systems running SCADA or HMI software for system monitoring and control. Upon completion, students should be able to demonstrate an understanding of the utilization and implementation of custom and commercial SCADA or HMI software.

PCI-262   Intro to Process Control   3 3 0 4
Requisites: Take PCI-170; Take previously. Required.
This course introduces process control and related instrumentation devices. Topics include basic process control theory, P&ID diagrams, and calibration methods associated with transducers, transmitters, control valves, and related process devices. Upon completion, students should be able to understand and troubleshoot basic process control devices and systems.

PHYSICAL EDUCATION (PED PREFIX)

PED-110   Fit and Well for Life   1 2 0 2
Requisites:
This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests. Classes will be individually structured to accommodate and enhance various levels of fitness.

PED-111   Physical Fitness I   0 3 0 1
Requisites:
This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program.

PED-113   Aerobics I   0 3 0 1
Requisites:
This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program.

PED-117   Weight Training I   0 3 0 1
Requisites:
This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program.

PED-118   Weight Training II   0 3 0 1
Requisites: Take PED-117; Take previously. Required
This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program.

PED-119   Circuit Training   0 3 0 1
Requisites:
This course covers the skills necessary to participate in a developmental fitness program. Emphasis is placed on the circuit training method which involves a series of conditioning timed stations arranged for maximum benefit and variety. Upon completion, students should be able to understand and appreciate the role of circuit training as a means to develop fitness.

PED-121   Walk, Jog, Run   0 3 0 1
Requisites:
This course covers the basic concepts involved in safely and effectively improving cardiovascular fitness. Emphasis is placed on walking, jogging, or running as a means of achieving fitness. Upon completion, students should be able to understand and appreciate the benefits derived from these activities.

PED-122   Yoga I   0 2 0 1
Requisites:
This course introduces the basic discipline of yoga. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedures of yoga.

PED-123   Yoga II   0 2 0 1
Requisites: Take PED-122; Take previously. Required.
This course introduces more detailed aspects of the discipline of yoga. Topics include breathing and physical postures, relaxation, and mental concentration. Upon completion, students should be able to demonstrate advanced procedures of yoga.

PED-125   Self-Defense: Beginning   0 2 0 1
Requisites:
This course is designed to aid students in developing rudimentary skills in self-defense. Emphasis is placed on stances, blocks, punches, and kicks as well as non-physical means of self-defense. Upon completion, students should be able to demonstrate basic self-defense techniques of a physical and non-physical nature.

PED-128   Golf-Beginning   0 2 0 1
Requisites:
This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf. Individualized corrections of fundamental skills is stressed along with their use during course play.

PED-130   Tennis-Beginning   0 2 0 1
Requisites:
This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis. Individualized instruction along with group drills promote stroke development and basic strategy for in class play.

PED-143   Beginning Volleyball   0 2 0 1
Requisites:
This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball. Individualized instruction enhances fundamental skills along with their use in drills and class play.

PED-145   Basketball-Beginning   0 2 0 1
Requisites:
This course covers the fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational basketball.

PED-186   Dancing for Fitness   0 2 0 1
Requisites:
This course is designed to develop movement and recreational dance skills, safety, fitness, coordination, and techniques used to teach various groups. Emphasis is placed on participation and practice with adapting dances for ages and ability levels. Upon completion, students should be able to demonstrate knowledge of fitness through social, folk, and square dance participation and instruction.

PED-217   Pilates I   0 2 0 1
Requisites:
This course provides an introduction to the pilates method of body conditioning exercise. Topics include instruction in beginning and intermediate pilates exercises using a mat or equipment, history of pilates method, and relevant anatomy and physiology. Upon completion, students should be able to perform beginning and intermediate exercises, and possess an understanding of the benefits of conditioning the body's core muscles.

PHILOSOPHY (PHI PREFIX)

PHI-215   Philosophical Issues   3 0 0 3
Requisites: Take ENG-111(S25433); Take previously. Required. Take ENG-111(S24022); Minimum grade C; Take previously. Required.
This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critically evaluate the philosophical components of an issue.

PHI-240   Introduction to Ethics   3 0 0 3
Requisites: Take ENG-111(S25433); Take previously. Required. Take ENG-111(S24022); Minimum grade C; Take previously. Required.
This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on moral theories such as consequentialism, deontology, and virtue ethics. Upon completion, students should be able to apply various ethical theories to moral issues such as abortion, capital punishment, poverty, war, terrorism, the treatment of animals, and issues arising from new technologies.

PHARMACY (PHM PREFIX)

PHM-110   **Introduction to Pharmacy**   3 0 0 3
Requisites:
This course introduces pharmacy practice and the technician's role in a variety of pharmacy settings. Topics include medical terminology and abbreviations, drug delivery systems, law and ethics, prescription and medication orders, and the health care system. Upon completion, students should be able to explain the role of pharmacy technicians, read and interpret drug orders, describe quality assurance, and utilize pharmacy references.

PHM-111   **Pharmacy Practice I**   3 3 0 4
Requisites: Take PHM-110(S12770) PHM-115(S12800); Take either previously or concurrently. Required.
This course provides instruction in the technical procedures for preparing and dispensing drugs in the hospital and retail settings under supervision of a registered pharmacist. Topics include drug packaging and labeling, out-patient dispensing, hospital dispensing procedures, controlled substance procedures, inventory control, and non-sterile compounding. Upon completion, students should be able to perform basic supervised dispensing techniques in a variety of pharmacy settings.

PHM-115   **Pharmacy Calculations**   3 0 0 1
Requisites:
This course provides an introduction to the metric, avoirdupois, and apothecary systems of measurement and the calculations used in pharmacy practice. Topics include ratio and proportion, dosage determinations, percentage preparations, reducing and enlarging formulas, dilution and concentration, aliquots, specific gravity and density, and flow rates. Upon completion, students should be able to correctly perform calculations required to properly prepare a medication order.

PHM-115A   **Pharmacy Calculations Lab**   0 2 0 1
Requisites:
This course provides an opportunity to practice and perform calculations encountered in pharmacy practice. Emphasis is placed on ratio and proportion, dosage calculations, percentage, reduction/enlargement formulas, aliquots, flow rates, and specific gravity/density. Upon completion, students should be able to perform the calculations required to properly prepare a medication order.

PHM-118   **Sterile Products**   3 3 0 4
Requisites: Take PHM-110(S12770) PHM-111; Take previously. Required.
This course provides an introduction to intravenous admixture preparation and other sterile products, including total parenteral nutrition and chemotherapy. Topics include aseptic techniques; facilities, equipment, and supplies utilized in admixture preparation; incompatibility and stability; laminar flow hoods; immunizations and irrigation solutions; and quality assurance. Upon completion, students should be able to describe and demonstrate the steps involved in preparation of intermittent and continuous infusions, total parenteral nutrition, and chemotherapy.

PHM-120   **Pharmacology I**   3 0 0 3
Requisites:
This course introduces the study of the properties, effects, and therapeutic value of the primary agents in the major drug categories. Topics include nutritional products, blood modifiers, hormones, diuretics, cardiovascular agents, respiratory drugs, and gastrointestinal agents. Upon completion, students should be able to place major drugs into correct therapeutic categories and identify indications, side effects, and trade and generic names.

PHM-125   **Pharmacology II**   3 0 0 3
Requisites: Take PHM-120; Take previously. Required.
This course provides a continuation of the study of the properties, effects, and therapeutic value of the primary agents in the major drug categories. Topics include autonomic and central nervous system agents, anti-inflammatory agents, and anti-infective drugs. Upon completion, students should be able to place major drugs into correct therapeutic categories and identify indications, side effects, and trade and generic names.

PHM-132   **Pharmacy Clinical**   0 0 6 2
Requisites:
This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

PHM-133   Pharmacy Clinical   0 0 9 3
Requisites:
This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

PHM-134   Pharmacy Clinical   0 0 12 4
Requisites:
This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

PHM-135   Pharmacy Clinical   0 0 15 5
Requisites:
This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is placed on effective communication with personnel, developing proper employee attitude, and dispensing of medications. Upon completion, students should be able to demonstrate an understanding of pharmacy operations, utilize references, dispense medications, prepare patient charges, and efficiently operate computers.

PHM-140   Trends in Pharmacy   2 0 0 2
Requisites:
This course covers the major issues, trends, and concepts in contemporary pharmacy practice. Topics include professional ethics, continuing education, job placement, and the latest developments in pharmacy technician practice. Upon completion, students should be able to demonstrate a basic knowledge of the topics discussed.

PHM-150   Hospital Pharmacy   3 3 0 4
Requisites:
This course provides an in-depth study of hospital pharmacy practice. Topics include hospital organizational structure, committee functions, utilization of reference works, purchasing and inventory control, drug delivery systems, and intravenous admixture preparation. Upon completion, students should be able to explain hospital organization/committee functions, interpret and enter patient orders, fill unit-dose cassettes, and prepare intravenous admixtures.

PHM-155   Community Pharmacy   2 2 0 3
Requisites:
This course covers the operational procedures relating to retail pharmacy. Emphasis is placed on a general knowledge of over-the-counter products, prescription processing, business/inventory management, and specialty patient services. Upon completion, students should be able to provide technical assistance and support to the retail pharmacist.

PHM-160   Pharm Dosage Forms   3 0 0 3
Requisites:
This course is a study of pharmaceutical dosage forms and considerations in their manufacture. Topics include bioavailability, routes of administration, tablets, capsules, solutions, syrups, suspensions, elixirs, aerosols, transdermals, topicals, ophthalmics, otics, and other dosage forms. Upon completion, students should be able to describe the characteristics of the major dosage forms and explain how these characteristics affect the action of the drug.

PHM-165   Pharmacy Prof Practice   2 0 0 2
Requisites:
This course provides a general overview of all aspects of pharmacy technician practice. Emphasis is placed on pharmacy law, calculations, compounding, pharmacology, and pharmacy operations. Upon completion, students should be able to demonstrate competence in the areas required for the Pharmacy Technician Certification Examination.

CURRICULUM COURSE DESCRIPTIONS

PHYSICS (PHY PREFIX)

PHY-110   Conceptual Physics   3 0 0 3
Requisites:
This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied.

PHY-110A   Conceptual Physics Lab   0 2 0 1
Requisites: Take PHY-110; Take either previously or concurrently. Required.
This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110.

PHY-131   Physics-Mechanics   3 2 0 4
Requisites: Take MAT-121(S23927) or MAT-171(S23934); Take previously. Required. Take MAT-121(S24993) or MAT-171(S24997); Minimum grade C; Take previously. Required.
This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

PHY-151   College Physics I   3 2 0 4
Requisites: Take MAT-171(S25432) or MAT-271(S23939); Take previously. Required. Take MAT-171(S24997) or MAT-271(S23939); Minimum grade C; Take previously. Required.
This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

PHY-152   College Physics II   3 2 0 4
Requisites: Take PHY-151(S16517); Take previously. Required. Take PHY-151(S20924); Minimum grade C; Take previously. Required.
This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

PHY-251   General Physics I   3 3 0 4
Requisites: Take MAT-271(S13631); Take previously. Required. Take MAT-272(S13612); Take either previously or concurrently. Required. Take MAT-271(S13631); Minimum grade C; Take previously. Required.
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

PHY-252   General Physics II   3 3 0 4
Requisites: Take MAT-272(S13612) PHY-251; Take previously. Required. Take MAT-272(S13612) PHY-251; Minimum grade C; Take previously. Required.
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

PLUMBING (PLU PREFIX)

PLU-110   **Modern Plumbing**   4 15 0 9
Requisites:
This course introduces the tools, equipment, and materials associated with the plumbing industry. Topics include safety, use and care of tools, recognition and assembly of fittings and pipes, and other related topics. Upon completion, students should be able to safely assemble various pipes and fittings in accordance with state code requirements.

PLU-110AB   **Modern Plumbing**   2 8 0 5
Requisites:
This course introduces the tools, equipment, and materials associated with the plumbing industry. Topics include safety, use and care of tools, recognition and assembly of fittings and pipes, and other related topics. Upon completion, students should be able to safely assemble various pipes and fittings in accordance with state code requirements.

PLU-110BB   **Modern Plumbing**   2 7 0 4
Requisites: Take PLU-110AB; Take either previously or concurrently. Required.
This course introduces the tools, equipment, and materials associated with the plumbing industry. Topics include safety, use and care of tools, recognition and assembly of fittings and pipes, and other related topics. Upon completion, students should be able to safely assemble various pipes and fittings in accordance with state code requirements.

PLU-111   **Intro to Basic Plumbing**   1 3 0 2
Requisites:
This course introduces basic plumbing tools, materials, and fixtures. Topics include standard tools, materials, and fixtures used in basic plumbing systems and other related topics. Upon completion, students should be able to demonstrate an understanding of a basic plumbing system.

PLU-115   **Basic Plumbing**   2 6 0 4
Requisites:
This course covers the basic installation and maintenance of plumbing systems and components. Topics include safe use of tools, implementation of standard practices, and installation/maintenance of piping, fittings, valves, appliances and fixtures used in plumbed systems. Upon completion, students should be able to install/maintain basic plumbing systems, components, appliances, and fixtures through appropriate use of plumbing tools and standard practices.

PLU-120   **Plumbing Applications**   4 15 0 9
Requisites:
This course covers general plumbing layout, fixtures, and water heaters. Topics include drainage, waste and vent pipes, water service and distribution, fixture installation, water heaters, and other related topics. Upon completion, students should be able to safely install common fixtures and systems in compliance with state and local building codes.

PLU-120AB   **Plumbing Applications**   2 8 0 5
Requisites:
This course covers general plumbing layout, fixtures, and water heaters. Topics include drainage, waste and vent pipes, water service and distribution, fixture installation, water heaters, and other related topics. Upon completion, students should be able to safely install common fixtures and systems in compliance with state and local building codes.

PLU-120BB   **Plumbing Applications**   2 7 0 4
Requisites: Take PLU-120AB(L56880); Take either previously or concurrently. Required.
This course covers general plumbing layout, fixtures, and water heaters. Topics include drainage, waste and vent pipes, water service and distribution, fixture installation, water heaters, and other related topics. Upon completion, students should be able to safely install common fixtures and systems in compliance with state and local building codes.

PLU-124   **Plumbing Business Operations**   2 0 0 2
Requisites:
This course introduces plumbing contractor and plumbing business regulations and success strategies. Topics include plumbing business organization, structure, operations, bonds and insurance, municipal and state licensure requirements, state examinations, ethical and legal issues, and best practices for ensuring successful plumbing business operations. Upon completion, students should be able to demonstrate how to develop and sustain a successful plumbing business.

PLU-130   **Plumbing Systems**   3 9 0 6
Requisites:
This course covers the maintenance and repair of plumbing lines and fixtures. Emphasis is placed on identifying and diagnosing problems related to water, drain and vent lines, water heaters, and plumbing fixtures. Upon completion, students should be able to identify and diagnose needed repairs to the plumbing system.

PLU-130AB   **Plumbing Systems**   2 4 0 3
Requisites:
This course covers the maintenance and repair of plumbing lines and fixtures. Emphasis is placed on identifying and diagnosing problems related to water, drain and vent lines, water heaters, and plumbing fixtures. Upon completion, students should be able to identify and diagnose needed repairs to the plumbing system.

PLU-130BB   **Plumbing Systems**   1 5 0 3
Requisites: Take PLU-130AB; Take either previously or concurrently. Required.
This course covers the maintenance and repair of plumbing lines and fixtures. Emphasis is placed on identifying and diagnosing problems related to water, drain and vent lines, water heaters, and plumbing fixtures. Upon completion, students should be able to identify and diagnose needed repairs to the plumbing system.

PLU-140   **Intro to Plumbing Codes**   1 2 0 2
Requisites:
This course covers plumbing industry codes and regulations. Emphasis is placed on North Carolina regulations and the minimum requirements for plumbing materials and design. Upon completion, students should be able to research and interpret North Carolina plumbing codes.

PLU-145   **Plumbing Measurement and Calculations**   1 2 0 2
Requisites:
This course is designed to contextualize installation and layout measurements, conversions, and pipe slope calculations, that are common to the plumbing industry. Topics include measurement, calculating and converting fractions and whole numbers, transferring print measurements to the worksite, and calculating pipe slopes for various industry layout requirements. Upon completion, students should be able to demonstrate an understanding of plumbing measurements, calculations, and pipe slope determination, unique to the plumbing industry.

PLU-150   **Plumbing Diagrams**   1 2 0 2
Requisites:
This course introduces sketching diagrams and interpretation of blueprints applicable to the plumbing trades. Emphasis is placed on plumbing plans for domestic and/or commercial buildings. Upon completion, students should be able to sketch plumbing diagrams applicable to the plumbing trades.

PLU-160   **Plumbing Estimates**   1 2 0 2
Requisites: Take PLU-140; Take either previously or concurrently. Required.
This course covers techniques for estimating quantities of materials and cost of installation for various types of plumbing systems. Topics include design of systems, codes, material take-offs, pricing, and public relations. Upon completion, students should be able to order materials needed for installation from a designed system.

PLU-211   **Commercial/Ind Plumbing**   2 2 0 3
Requisites:
This course covers the installation of various commercial and industrial piping. Topics include piping in steam, gas, air, fire sprinklers, and other related topics. Upon completion, students should be able to select and install various piping systems for a variety of applications.

PLU-212 **Advanced Commercial and Industrial Plumbing** 1 4 0 3
Requisites: Take PLU-211; Take previously. Required.
This course expands upon commercial water and gas lines that meet specific requirements for commercial and industrial plumbing applications. Topics include plumbing code, galvanized, copper, black steel, cast, and schedule 80 pipe, appropriate industry-accepted rough-in assembly procedures, and sweating and brazing of common fittings and pipes. Upon completion, students should be able to demonstrate an understanding of rough-in procedures for commercial and industrial water and gas piping in accordance with plumbing schematics and state plumbing codes.

PLU-220 **Commercial Rough-In Plumbing** 2 6 0 4
Requisites: Take PLU-120; Take previously. Required.
This course introduces industry-acceptable rough-in procedures for commercial piping installations. Topics include acceptable commercial plumbing rough-in installation procedures involving cast iron, polyvinyl chloride (PVC), galvanized, steel, and other popular piping materials, in conjunction with various plumbing fixtures commonly used in commercial facilities. Upon completion, students should be able to demonstrate an understanding of the proper procedures for properly installing pipes and fittings following layout plans on a commercial plumbing project.

PLU-225 **Commercial Trim-Out Procedures** 2 6 0 4
Requisites: Take PLU-120; Take previously. Required.
This course introduces industry-acceptable trim-out procedures associated with commercial plumbing applications. Topics include setting of commercial fixtures including water closets, urinals, water coolers, three compartment sinks, and other fixtures commonly used in commercial facilities. Upon completion, students should be able to demonstrate an understanding of how to properly install plumbing fixtures utilizing plumbing plans on commercial projects.

PLU-230 **Concrete Slab Plumbing Rough-In** 2 6 0 4
Requisites: Take PLU-120; Take previously. Required.
This course introduces concrete slab plumbing rough-in utilizing commercial fixtures. Topics include concrete slab rough-in utilizing commercial fixtures, pipes, and fixtures commonly found on commercial facility sites. Upon completion, students should be able to demonstrate an understanding of how to properly perform a concrete slab rough-in using commercial fixtures following layout plans for a commercial plumbing project.

POWER MECHANICS (PME PREFIX)

PME-111 **Harvest and Spraying Equipment** 2 6 0 4
Requisites:
This course covers the theory, design principles of operation, adjustments, troubleshooting and repair of harvesting and spraying equipment. Emphasis is placed on set-up, troubleshooting and repair of systems. Upon completion, students should be able to diagnose, adjust or repair new and used harvesters and sprayers in accordance with manufacturer's specifications.

PME-112 **Consumer Products** 1 2 0 2
Requisites:
This course introduces compact utility, lawn and garden tractors, and other related equipment and attachments. Topics include set-up, adjustments and general servicing of equipment. Upon completion, students should be able to set-up, adjust, service and repair equipment.

PME-117 **Equipment Braking Systems** 2 3 0 3
Requisites:
This course covers fundamental theory, adjustments, and repair of hydraulic and pneumatic braking systems used primarily in mobile construction equipment. Emphasis is placed on braking systems used in construction equipment including pneumatic, hydraulic, dynamic, and inboard brakes. Upon completion, students should be able to use proper diagnostic procedures to identify, repair, or replace components.

PME-118 **Undercarriage Components** 1 2 0 2
Requisites:
This course covers the fundamentals, function, repair, adjustments, and safety requirements of undercarriage components on track-equipped machines. Topics include identification, measurement, wear points, adjustments, and operation of components on track-equipped machines. Upon completion, students should be able to properly measure, adjust, rebuild or replace undercarriage components.

PME-122   Agricultural Telematics   2 3 0 3
Requisites:
This course covers the set-up, activation, and programming for computerized and guidance controls for agricultural harvesting and planting equipment. Emphasis is placed on set-up, troubleshooting and repair of system. Upon completion, students should be able to install, program, and troubleshoot the system.

PME-211   Adv Equipment Repair   2 6 0 4
Requisites:
This course provides advanced training in equipment repair through hands-on training along with additional training aids. Emphasis is placed on systems and components found on construction equipment. Upon completion, students should be able to adjust, troubleshoot, and repair most construction equipment systems.

PME-221   Const Equip Servicing   1 2 0 2
Requisites:
This course covers the servicing requirements for construction equipment. Topics include pre-delivery, after-sales check, routine servicing, and thousand-hour service. Upon completion, students should be able to locate service points, make minor service adjustments, and perform other routine servicing.

PROJECT MANAGEMENT TECHNOLOGY (PMT PREFIX)

PMT-111   Project Management Assessing Risk   3 0 0 3
Requisites:
This course provides various ways to identify, analyze, and mitigate the full range of project risks. Topics include risk management planning, risk identification, qualitative risk analysis, quantitative risk analysis, risk response planning, as well as risk monitoring and control. Upon completion, students should be able to demonstrate knowledge of risk management processes and application of risk management techniques to case study problems.

PMT-210   Project Management Issues   2 2 0 3
Requisites:
This course is designed to explore various development and management techniques and tools of integrated project schedules and plans. Emphasis is placed on project control methods from a scheduling perspective, including critical path networking, float analysis, and schedule performance predictability and accomplishment. Upon completion, students should have a clear understanding of accepted techniques for schedule development and management.

PMT-215   Project Management Leadership   3 0 0 3
Requisites:
This course provides an overview of the importance of project teams and human resource management in the planning, scheduling, and controlling of multi-project programs. Topics include the role of projects in organizations; alternative organizational systems; program management methodologies; team management and leadership; legal/ethical issues; and conflict identification/resolution. Upon completion, students should be able to identify and exhibit the behaviors needed for effective project management and team leadership.

POLITICAL SCIENCE (POL PREFIX)

POL-120   American Government   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S25433); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course is a study of the origins, development, structure, and functions of American government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy process. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system.

POL-220   International Relations   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S24022); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course provides a study of the effects of ideologies, trade, armaments, and alliances on relations among nation-states. Emphasis is placed on regional and global cooperation and conflict, economic development, trade, non-governmental organizations, and international institutions such as the World Court and UN. Upon completion, students should be able to identify and discuss major international relationships, institutions, and problems.

PSYCHOLOGY (PSY PREFIX)

PSY-118   Interpersonal Psychology   3 0 0 3
Requisites:
This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.

PSY-150   General Psychology   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology.

PSY-237   Social Psychology   3 0 0 3
Requisites: Take PSY-150 or SOC-210; Take previously. Required. Take PSY-150 or SOC-210; Minimum grade C; Take previously. Required.
This course introduces the study of individual behavior within social contexts. Topics include affiliation, attitude formation and change, conformity, altruism, aggression, attribution, interpersonal attraction, and group behavior. Upon completion, students should be able to demonstrate an understanding of the basic principles of social influences on behavior.

PSY-239   Psychology of Personality   3 0 0 3
Requisites: Take PSY-150; Take previously. Required. Take PSY-150; Minimum grade C; Take previously. Required.
This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual differences in human behavior.

PSY-241   Developmental Psychology   3 0 0 3
Requisites: Take PSY-150; Take previously. Required. Take PSY-150; Minimum grade C; Take previously. Required.
This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span.

PSY-259   Human Sexuality   3 0 0 3
Requisites: Take PSY-150; Take previously. Required. Take PSY-150; Minimum grade C; Take previously. Required.
This course provides the biological, psychological, and sociocultural aspects of human sexuality and related research. Topics include reproductive biology, sexual and psychosexual development, sexual orientation, contraception, sexually transmitted diseases, sexual disorders, theories of sexuality, and related issues. Upon completion, students should be able to demonstrate an overall knowledge and understanding of human sexuality.

PSY-265   Behavioral Modification   3 0 0 3
Requisites: Take PSY-150; Take previously. Required. Take PSY-150; Minimum grade C; Take previously. Required.
This course is an applied study of factors influencing human behavior and strategies for behavioral change. Emphasis is placed on cognitive-behavioral theory, behavioral assessment, practical applications of conditioning techniques, and maintenance of adaptive behavior patterns. Upon completion, students should be able to implement basic learning principles to effect behavioral changes in self and others.

PSY-281   **Abnormal Psychology**   3 0 0 3
Requisites: Take PSY-150; Take previously. Required. Take PSY-150; Minimum grade C; Take previously.
Required.
This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques.

PHARMACEUTICAL TECHNOLOGY (PTC PREFIX)

PTC-110   **Industrial Environment**   3 0 0 3
Requisites:
This course introduces the pharmaceutical industry, including a broad overview of work in this field. Emphasis is placed on good manufacturing practices (GMP), work conduct, company organization, job expectations, personal safety, hygiene, and company rules and regulations. Upon completion, students should be able to follow good manufacturing practice regulations and inspect a pharmaceutical manufacturing facility for compliance with GMP.

PTC-120   **Pharmaceutical Quality Control**   3 2 0 4
Requisites: Take PTC-110; Take previously. Required.
This course covers the principles and techniques of quality control as found in the pharmaceutical industry. Emphasis is placed on lot inspection, sampling procedures, control charts, vendor auditing, statistical analysis, and Military Standard 105. Upon completion, students should be able to apply and follow the appropriate statistical sampling plans for Pharmaceutical Product Lot Acceptance.

PTC-210   **Pharmaceutical Industrial Processes**   3 2 0 4
Requisites:
This course examines the manufacturing processes for selected pharmaceutical dosage forms. Emphasis is placed on manufacturing and testing of tablets, capsules, sustained release drugs, solutions, emulsions, suspensions, creams, ointments, aerosols, and sterile products. Upon completion, students should be able to demonstrate the processing steps and test procedures for these dosage forms.

PTC-212   **Applied Microbiology**   3 2 0 4
Requisites: Take BIO-110(S13284) or BIO-111(S13307); Take previously. Required.
This course covers microbiology as it applies to the pharmaceutical industry. Emphasis is placed on types of microorganisms and identification, culture, sterilization, and contamination control. Upon completion, students should be able to explain how microbiology and microbiological control are important to the pharmaceutical industry.

PTC-214   **Parenteral Processes**   3 2 0 4
Requisites:
This course covers quality assurance for injectable products. Emphasis is placed on environmental monitoring and sterility, pyrogen, particulate, and package integrity testing. Upon completion, students should be able to demonstrate competence in these test procedures.

PTC-226   **Validation**   3 0 0 3
Requisites: Take PTC-110; Take previously. Required.
This course covers the methods used in pharmaceutical process and product validation. Emphasis is placed on manufacturing processes, specific dosage forms, FDA rationale, and documentation requirements. Upon completion, students should be able to write a validation protocol and perform validation studies for a variety of pharmaceutical applications.

PTC-228   **Pharmaceutical Issues**   1 0 0 1
Requisites:
This course provides a forum for discussion of current pharmaceutical topics. Emphasis is placed on events, news, regulations, and technology in pharmaceutical manufacturing. Upon completion, students should be able to demonstrate an understanding of the dynamic nature of the pharmaceutical industry.

CURRICULUM COURSE DESCRIPTIONS

RADIOGRAPHY (RAD PREFIX)

RAD-110   **Rad Intro & Patient Care**   2 3 0 3
Requisites: Take RAD-111(S13029) RAD-151(S12925); Take either previously or concurrently. Required.
This course provides an overview of the radiography profession and student responsibilities. Emphasis is placed on basic principles of patient care, radiation protection, technical factors, and medical terminology. Upon completion, students should be able to demonstrate basic skills in these areas.

RAD-111   **RAD Procedures I**   3 3 0 4
Requisites:
This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the chest, abdomen, extremities, bony thorax and pelvis. Upon completion, students should be able to demonstrate competence in these areas.

RAD-112   **RAD Procedures II**   3 3 0 4
Requisites: Take RAD-110(S13079) RAD-111(S24943) RAD-151(S12925); Take previously. Required. Take RAD-121(S24945) RAD-161(S13703); Take either previously or concurrently. Recommended.
This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the skull, spine, and gastrointestinal, biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas.

RAD-121   **Image Production I**   2 3 0 3
Requisites: Take RAD-110(S13079) RAD-111(S24943) RAD-151(S12925); Take previously. Required.
This course provides the basic principles of radiographic image production. Emphasis is placed on image production, x-ray equipment, receptor exposure, and basic imaging quality factors. Upon completion, students should be able to demonstrate an understanding of basic principles of radiographic image production.

RAD-122   **Image Production II**   1 3 0 2
Requisites: Take RAD-112(S13039) RAD-121(S22447) RAD-161(S13703); Take previously. Required.
This course is designed to continue to develop the concepts and principles in the field of radiologic technology. Emphasis is placed on advanced digital principles and production. Upon completion, students should be able to demonstrate an understanding of advanced principles of digital imaging production.

RAD-151   **RAD Clinical Ed I**   0 0 6 2
Requisites: Take RAD-110(S13079) RAD-111(S13029); Take either previously or concurrently. Required.
This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment, and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD-161   **RAD Clinical Ed II**   0 0 15 5
Requisites: Take RAD-110(S13079) RAD-111(S24943) RAD-151(S12925); Take previously. Required. Take RAD-112(S13039) RAD-121(S13711); Take either previously or concurrently. Required.
This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD-171   **RAD Clinical Ed III**   0 0 9 3
Requisites: Take RAD-112(S13039) RAD-121(S13711) RAD-161(S13703); Take previously. Required.
This course provides experience in patient management specific to advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and transitioning to mastering positioning of advanced studies. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD-181   **RAD Clinical Elective**   0 0 3 1
Requisites:
This course provides advanced knowledge of clinical applications. Emphasis is placed on enhancing clinical skills. Upon completion, students should be able to successfully complete the clinical course objectives.

RAD-211   **Radiographic Procedures III**   2 3 0 3
Requisites: Take RAD-122(S24946) RAD-141(S24950) RAD-171(S24947); Take previously. Required.
This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures, advanced imaging, radiographic pathology and image analysis. Upon completion, students should be able to demonstrate an understanding of these areas.

RAD-231   **Image Production III**   1 3 0 2
Requisites: Take RAD-122(S24946) RAD-141(S24950) RAD-171(S24947); Take previously. Required.
This course is designed to continue to develop the concepts and principles in the field of radiologic technology. Emphasis is placed on complex imaging production and principles, quality control and quality assurance in the imaging sciences. Upon completion, students should be able to demonstrate an understanding of advanced radiographic equipment and quality control programs.

RAD-251   **RAD Clinical Ed IV**   0 0 21 7
Requisites: Take RAD-122(S24946) RAD-171(S24947); Take previously. Required. Take RAD-211(S24948) RAD-231(S24949); Take either previously or concurrently. Required.
This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and a further awareness of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD-261:   **Radiographic Clinical Eduction V**   0 0 21 7
Requisites: Take RAD-251(S25000); Take previously. Required.Take RAD-271(S24951); Take either previously or concurrently. Required
This course is designed to enhance expertise in all radiographic procedures, patient management, radiation protection, and image production and evaluation. Emphasis is placed on developing an autonomous approach to the diversity of clinical situations and successfully adapting to those procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

RAD-271   **Radiography Capstone**   2 3 0 3
Requisites: Take RAD-211(S24948) RAD-231(S24949) RAD-251(S11897); Take previously. Required.
This course provides an opportunity to exhibit problem-solving skills required for certification. Emphasis is placed on critical thinking and integration of didactic and clinical components. Upon completion, students should be able to demonstrate the knowledge required of an entry-level radiographer.

REFRIGERATION (REF PREFIX)

REF-116   **Commercial Systems I**   2 6 0 4
Requisites: Take AHR-115; Take previously. Required.
This course introduces and compares various commercial refrigeration systems. Topics include service, repair, and diagnostic procedures for commercial systems and components, as well as evacuation, charging, startup, and evaluation. Upon completion, students should be able to use appropriate tools, instruments, and procedures to service and install basic refrigeration systems or components.

REF-117   **Refrigeration Controls**   2 6 0 4
Requisites: Take AHR-110(S14098) AHR-111(S14148) or ELC-111; Take previously. Required.
This course covers the design, operation, function, and schematics of basic control systems used in the refrigeration industry. Topics include proper control application, selection, and use of test instruments; simple control wiring; and the use of schematics as a troubleshooting tool. Upon completion, students should be able to identify, diagnose, and repair electrical and mechanical malfunctioning components.

CURRICULUM COURSE DESCRIPTIONS

RELIGION (REL PREFIX)

REL-110   World Religions   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied.

REL-211   Introduction to Old Testament   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature.

REL-212   Introduction to New Testament   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course is a survey of the literature of first-century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature.

SUBSTANCE ABUSE (SAB PREFIX)

SAB-110   Substance Abuse Overview   3 0 0 3
Requisites:
This course provides an overview of the core concepts in substance abuse and dependence. Topics include the history of drug use/abuse, effects on societal members, treatment of addiction, and preventive measures. Upon completion, students should be able to demonstrate knowledge of the etiology of drug abuse, addiction, prevention, and treatment.

SAB-125   SA Case Management   2 2 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required. Take DMA-010 DMA-020 DMA-030 or MAT-003; Take previously. Required.
This course provides case management activities, including record keeping, recovery issues, community resources, and continuum of care. Emphasis is placed on establishing a systematic approach to monitor the treatment plan and maintain quality of life. Upon completion, students should be able to assist clients in the continuum of care as an ongoing recovery process and develop agency networking.

SAB-135   Addictive Process   3 0 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course explores the physical, emotional, psychological, and cultural aspects of the addictive process. Emphasis is placed on addictions to food, sex, alcohol, drugs, work, gambling, and relationships. Upon completion, students should be able to identify the effects, prevention strategies, and treatment methods associated with addictive disorders.

SAB-210   Sub Abuse Counseling   2 2 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course provides theory and skills acquisition by utilizing intervention strategies designed to obtain therapeutic information, support recovery, and prevent relapse. Topics include counseling individuals and dysfunctional families, screening instruments, counseling techniques and approaches, recovery and relapse, and special populations. Upon completion, students should be able to discuss issues critical to recovery, identify intervention models, and initiate a procedure culminating in cognitive/behavioral change.

SAB-220   Group Techniques/Therapy   2 2 0 3
Requisites: Take HSE-112; Take previously. Required. Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course provides a practical guide to diverse methods of group therapy models used in the specific treatment of substance abuse and addiction. Emphasis is placed on the theory and practice of group therapy models specifically designed to treat the cognitive distortions of addiction and substance abuse. Upon completion, students should be able to skillfully practice the group dynamics and techniques formulated for substance abuse and addiction.

SAB-240   Sab Issues in Client Serv   3 0 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course introduces systems of professional standards, values, and issues in substance abuse counseling. Topics include confidentiality, assessment of personal values, professional responsibilities, competencies, and ethics relative to multicultural counseling and research. Upon completion, students should be able to understand and discuss multiple ethical issues applicable to counseling and apply various decision-making models to current issues.

INFORMATION SYSTEMS SECURITY (SEC PREFIX)

SEC-110   Security Concepts   2 2 0 3
Requisites:
This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy.

SEC-150   Secure Communications   2 2 0 3
Requisites: Take NET-126(S24383); Take previously. Required.
This course provides an overview of current technologies used to provide secure transport of information across networks. Topics include data integrity through encryption, Virtual Private Networks, SSL, SSH, and IPSec. Upon completion, students should be able to implement secure data transmission technologies.

SEC-193A   Selected Topics in Security Concepts   1 4 0 3
Requisites:
This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

SEC-210   Intrusion Detection   2 2 0 3
Requisites: Take SEC-110(S23204) NOS-120(S24396) NOS-130(S24397); Take previously. Required.
This course introduces the student to intrusion detection methods in use today. Topics include the types of intrusion detection products, traffic analysis, and planning and placement of intrusion detection solutions. Upon completion, students should be able to plan and implement intrusion detection solution for networks and host-based systems.

SEC-285   Systems Security Project   1 4 0 3
Requisites: Take CTS-115(S20996) CTI-110(S22510) CTI-120(S22511); Take previously. Required. Take CCT-240 CCT-251 SEC-160(S24399); Take previously. Required.
This course provides the student the opportunity to apply the skills and competencies acquired in the program that focus on systems security. Emphasis is placed on security policy, process planning, procedure definition, business continuity, compliance, auditing, testing procedures and systems security architecture. Upon completion, students should be able to design and implement comprehensive information security architecture from the planning and design phase through implementation.

CURRICULUM COURSE DESCRIPTIONS

SIMULATION AND GAME DEVELOPMENT (SGD PREFIX)

SGD-111   **Introduction to SGD**   2 3 0 3
Requisites:
This course provides students with an introduction to simulation and game development. Topics include setting, storytelling, narrative, character design, interface design, game play, internal economy, core mechanics, game genres, AI, the psychology of game design and professionalism. Upon completion, students should be able to demonstrate knowledge of the major aspects of simulation and game design and development.

SGD-112   **SGD Design I**   2 3 0 3
Requisites: Take SGD-113(S21242); Take previously. Required.
This course introduces the fundamentals of simulation and game design. Topics include industry standards and design elements for simulation and games. Upon completion, students should be able to design simple simulations and/or games.

SGD-113   **SGD Programming**   2 3 0 3
Requisites: Take 1 group; Take DRE-097(S23642) DMA-050(S24984); Take RED-090 MAT-060; Take ENG-002 MAT-003; Take previously. Required.
This course introduces the fundamentals of programming languages and tools employed in simulation and game development. Emphasis is placed on programming concepts used to create simulations and games. Upon completion, students should be able to program simple games and/or simulations.

SGD-114   **SGD 3D Modeling I**   2 3 0 3
Requisites: Take SGD-116(S22247); Take previously. Required.
This course introduces the tools required to create three-dimensional (3D) models. Emphasis is placed on exploring tools used to create 3D models. Upon completion, students should be able to create and animate 3D models using 3D modeling tools.

SGD-116   **SGD Graphic Design Tools**   2 3 0 3
Requisites:
This course introduces students to computer-based graphic design tools and their use within the context of simulation and game design. Topics include texture creation, map creation, and introduction to advanced level graphic design techniques. Upon completion, students should be able to competently use and explain industry-standard graphic design software.

SGD-117   **Art for Games**   2 3 0 3
Requisites: Take SGD-116(S22247); Take either previously or concurrently. Required.
This course introduces students to the basic principles of art and how they apply to simulations and games. Emphasis is placed on learning to develop industry quality concept art for characters and other assets, as well as techniques needed to create such art. Upon completion, students should be able to create their own industry standard concept art for use in SGD projects.

SGD-134   **SG Quality Assurance**   2 2 0 3
Requisites: Take SGD-112(S21241); Take previously. Required.
This course provides an introduction to software quality assurance as it relates to simulation and game development. Emphasis is placed on designing testing tools, bug databases, and on learning methodologies required for systematic, detail-oriented testing procedures for the simulation and game industry. Upon completion, students should be able to demonstrate the proper skills to obtain a job as a quality assurance tester in the simulation/game industry.

SGD-135   **Serious Games**   3 0 0 3
Requisites: Take ENG-111(S24022) SGD-112(S21241) SGD-116(S22247); Take previously. Required.
This course provides students with an overview of serious games and their applications in immersive learning and education. Emphasis is placed on developing games for education, corporate training, and medical/military simulations. Upon completion, students should be able to design their own serious games.

SGD-158   **SGD Business Management**   3 0 0 3
Requisites: Take ENG-111(S13673) SGD-111(S21240) SGD-112(S21241); Take previously. Required.
This course introduces the business side of the interactive game industry. Emphasis will be placed on licenses, serious games, psychological profiling, publisher/developer relations, and contract negotiation skills. Upon completion, students should be able to understand how a game evolves from concept to the customer.

SGD-159   SGD Production Management   3 0 0 3
Requisites: Take SGD-111(S21240); Take previously. Required.
This course introduces the techniques and methods used in interactive game production and how to manage a project. Emphasis is placed on scheduling, production plans, marketing and budgeting. Upon completion, students should be able to manage a team, track production, and understand the process of project management.

SGD-162   SGD 3-D Animation I   2 3 0 3
Requisites: Take SGD-114(S21243); Take previously. Required.
This course introduces the fundamental principles of 3D animation used in simulation and game development. Emphasis is placed on a historical survey of 3D animation, aspects of the 3D animation techniques. Upon completion, students should be able to produce 3D character sketches, morph simple objects, create walk and run cycles and develop professional storyboards.

SGD-163   SGD Documentation   2 3 0 3
Requisites: Take ENG-002 SGD-111(S21240); Take previously. Required.
This course introduces the techniques and methods used to create simulation and game production and design documents. Emphasis is placed on the design document to include scheduling, production plans, marketing and budgeting. Upon completion, students should be able to create design and produce documents for any simulation or game.

SGD-165   SGD Character Development   2 3 0 3
Requisites: Take SGD-162(S21250); Take previously. Required.
This course introduces the concepts needed to create fictional personality for use in digital videos, animations, simulations and games. Topics include aspects of character, developing backgrounds, mannerisms and voice. Upon completion, students should be able to develop characters and backgrounds for simulations and games.

SGD-166   SGD Physiology and Kinesis   3 0 0 3
Requisites:
This course introduces the principles of simulation and game development. Topics include analysis of the human form and other living organisms. Upon completion, students should be able to demonstrate an understanding of the physiology and kinesiology concepts related to simulation and game development.

SGD-167   SGD Ethics   3 0 0 3
Requisites: Take ENG-111(S13673) SGD-111(S21240); Take previously. Required.
This course introduces principles of philosophy and ethics as they relate to simulation and game development. Topics include moral philosophy and ethics. Upon completion, students should be able to discuss philosophical and ethical issues related to simulation and game development.

SGD-168   SGD Mobile Programming I   2 3 0 3
Requisites: Take SGD-113(S21242); Take previously. Required.
This course introduces the mobile simulation and game programming process. Topics include mobile simulation/game programming, performance tuning, animation, sound effects, music, and mobile networks. Upon completion, students should be able to apply simulation/game programming concepts to the creation of mobile simulations and games.

SGD-172   SGD Virtual Environments   2 3 0 3
Requisites: Take SGD-113(S21242) SGD-114(S21243); Take previously. Required.
This course covers the use of virtual reality tools and techniques in simulation and game development. Emphasis is placed on acquiring the skills necessary to create scalable virtual characters and environments for use in simulations and games. Upon completion, students should be able to create a simple game or simulation in a virtual environment.

SGD-174   SGD Level Design I   2 3 0 3
Requisites: Take SGD-114(S21243); Take previously. Required.
This course introduces the tools used to create levels for real-time simulation and games. Topics include level design, architecture theory, modeling for 3D engines and texturing methods. Upon completion, students should be able to design simple levels using industry standard tools.

SGD-180   **SGD HTML Programming I**   2 3 0 3
Requisites: Take SGD-113(S21242); Take previously. Required.
This course provides an introduction to using HTML based technologies as it relates to simulation and game development presented in a browser context. Emphasis is placed on creating webpages that use HTML, CSS and Javascript to create game content that is usable in a variety of platforms. Upon completion, students should be able to design and create an HTML based games or simulations.

SGD-212   **SGD Design II**   2 3 0 3
Requisites: Take SGD-112(S21241); Take previously. Required. Take SGD-116(S22247); Take previously. Required.
This course covers the advanced principles of simulation and game design. Topics include advanced design concepts in simulation and game development. Upon completion, students should be able to design an advanced simulation or game.

SGD-213   **SGD Programming II**   2 3 0 3
Requisites: Take SGD-113(S21242) CSC-134(S21066) CSC-151 or CSC-153; Take previously. Required.
This course covers advanced programming concepts used to create simulations and games. Emphasis is placed on acquiring advanced programming skills for use in creating simulations and games. Upon completion, students should be able to program an advanced simulation or game.

SGD-214   **SGD 3D Modeling II**   2 3 0 3
Requisites: Take SGD-114(S21243); Take previously. Required.
This course introduces the tools used to create and animate advanced 3 dimensional models. Emphasis is placed on identifying and utilizing the tools required to create and animate advanced 3D models. Upon completion, students should be able to create and animate advanced 3D models using 3D modeling tools.

SGD-237   **Rigging 3D Models**   2 3 0 3
Requisites: Take SGD-114(S21243); Take previously. Required. Take SGD-162(S21250); Take either previously or concurrently. Required.
This course covers the fundamentals of rigging 3D models for animation. Emphasis is placed on learning how to properly weight a model, rig it with a skeleton, and create fluid movement. Upon completion, students should be able to demonstrate the ability to properly rig 3D models.

SGD-239   **SGD Tech Art**   2 3 0 3
Requisites: Take SGD-113(S21242) SGD-114(S21243); Take previously. Required.
This course is designed to connect the disciplines of art and programming in Simulation and Game Development. Emphasis is placed on the creation and integration of game assets into the simulation or game development pipeline. Upon completion, students should be able to create art and customize art tools using scripting languages for development of simulations and video games.

SGD-242   **SGD Photogrammetry**   2 3 0 3
Requisites: Take SGD-114(S21243); Take previously. Required.
This course introduces the use of photogrammetry for simulations and game development. Emphasis is placed on the process of pulling visual data from an array of photographs to generate fully textured, high-poly models. Upon completion, students should be able to translate photogrammetry creations into industry-standard game and simulation models for use in real-time engines and surfaces in physics-based materials.

SGD-268   **SGD Mobile Programming II**   2 3 0 3
Requisites: Take SGD-168(S23058); Take previously. Required.
This course introduces advanced mobile simulation and game programming processes. Topics include advanced mobile simulation/game platforms, performance tuning, animation, sound effects, music, and mobile networks. Upon completion, students should be able to apply advanced simulation/game programming concepts to the creation of mobile simulations and games.

SGD-274   **SGD Level Design II**   2 3 0 3
Requisites: Take SGD-174(S21264); Take previously. Required.
This course introduces the advanced tools used to create levels for real-time simulations and games. Topics include advanced level guide and architecture theory, concepts related to "critical path" and "flow," game balancing, playtesting and storytelling. Upon completion, students should be able to design complex levels using industry standard tools.

SGD-285   **SGD Software Engineering**   2 3 0 3
Requisites: Take SGD-212 SGD-213(S21266) or SGD-214(S21263); Take previously. Required. Take SGD-213(S23019); Take previously. Required.
This course introduces object oriented software engineering concepts related to simulation and game development. Topics include systematic approaches to the development, operation and maintenance of simulations and games. Upon completion, students should be able to apply software engineering techniques to the development of simulations and games.

SGD-288   **SGD Portfolio Design**   1 2 0 2
Requisites: Take SGD-289(S22278); Take either previously or concurrently. Required.
This course covers the organization and presentation of a simulation and game design portfolio and appropriate related materials. Emphasis is placed on development and evaluation of the portfolio, design and production of a resume and self-promotional materials, and interview techniques. Upon completion, students should be able to prepare and professionally present an effective portfolio and related self-promotional materials.

SGD-289   **SGD Project**   2 3 0 3
Requisites: Take SGD-212 SGD-213(S21266) SGD-214(S21263) or SGD-285(S22374); Take previously. Required. Take 1 group; Take SGD-212 SGD-163(S21251) SGD-174(S21264) SGD-134 SGD-165(S21253); Take SGD-212 SGD-163(S21251) SGD-174(S21264) SGD-134 SGD-285(S22374); Take SGD-212 SGD-163(S21251) SGD-174(S21264) SGD-134 SGD-172(S21261); Take previously. Required.
This course provides students with the opportunity to create a functional simulation or game with minimal instructor support. Emphasis is placed upon verbal and written communication, skill documentation, professional presentation and user training. Upon completion, students should be able to create and professionally present a fully functional simulation or game.

SOCIOLOGY (SOC PREFIX)

SOC-210   **Introduction to Sociology**   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies.

SOC-213   **Sociology of the Family**   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change.

SOC-220   **Social Problems**   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems.

SOC-225   **Social Diversity**   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S13673); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course provides a comparison of diverse roles, interests, opportunities, contributions, and experiences in social life. Topics include race, ethnicity, gender, sexual orientation, class, and religion. Upon completion, students should be able to analyze how cultural and ethnic differences evolve and how they affect personality development, values, and tolerance.

SOC-242   **Sociology of Deviance**   3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-111(S24022); Take DRE-098(S23643); Take ENG-002; Take previously. Required.
This course provides an overview of deviant behavior and the processes involved in its definition, causation, prevention, control, and treatment. Topics include theories of causation, social control, delinquency, victimization, criminality, the criminal justice system, punishment, rehabilitation, and restitution. Upon completion, students should be able to identify and analyze issues surrounding the nature and development of social responses to deviance.

SONOGRAPHY (SON PREFIX)

SON-110   **Intro to Sonography**   1 3 3 3
Requisites:
This course provides an introduction to medical sonography. Topics include applications, sonographic terminology, history, patient care, ethics, and basic skills. Upon completion, students should be able to define professionalism and sonographic applications and perform basic patient care skills and preliminary scanning techniques.

SON-111   **Sonographic Physics**   3 3 0 4
Requisites:
This course introduces ultrasound physical principles, bioeffects, and sonographic instrumentation. Topics include sound wave mechanics, transducers, sonographic equipment, Doppler physics, bioeffects, and safety. Upon completion, students should be able to demonstrate knowledge of sound wave mechanics, transducers, sonography equipment, the Doppler effect, bioeffects, and safety.

SON-120   **SON Clinical Ed I**   0 0 15 5
Requisites: Take SON-110; Take previously. Required.
This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON-121   **SON Clinical Ed II**   0 0 15 5
Requisites: Take SON-120; Take previously. Required.
This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON-130   **Abdominal Sonography I**   2 3 0 3
Requisites:
This course introduces abdominal and small parts sonography. Emphasis is placed on the sonographic anatomy of the abdomen and small parts with correlated laboratory exercises. Upon completion, students should be able to recognize and acquire basic abdominal and small parts images.

SON-131   **Abdominal Sonography II**   1 3 0 2
Requisites: Take SON-130; Take previously. Required.
This course covers abdominal and small parts pathology recognizable on sonograms. Emphasis is placed on abnormal sonograms of the abdomen and small parts with correlated sonographic cases. Upon completion, students should be able to recognize abnormal pathological processes in the abdomen and on small parts sonographic examinations.

SON-140   **Gynecological Sonography**   2 0 0 2
Requisites: Take SON-130; Take previously. Required.
This course is designed to relate gynecological anatomy and pathology to sonography. Emphasis is placed on gynecological relational anatomy, endovaginal anatomy, and gynecological pathology. Upon completion, students should be able to recognize normal and abnormal gynecological sonograms.

SON-220   **Son Clinical Ed III**   0 0 24 8
Requisites: Take SON-121; Take previously. Required.
This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON-221   **SON Clinical Ed IV**   0 0 24 8
Requisites: Take SON-220; Take previously. Required.
This course provides continued active participation off campus in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations.

SON-225   **Case Studies**   0 3 0 1
Requisites: Take SON-110 or CVS-163; Take previously. Required.
This course offers the opportunity to present interesting cases found during clinical education. Emphasis is placed on presentation methods which integrate patient history, laboratory results, and sonographic findings with reference to current literature. Upon completion, students should be able to correlate information necessary for complete presentation of case studies.

SON-241   **Obstetrical Sonography I**   2 0 0 2
Requisites: Take SON-110; Take previously. Required.
This course covers normal obstetrical sonography techniques, the normal fetal environment, and abnormal first trimester pregnancy states. Topics include gestational dating, fetal anatomy, uterine environment, and first trimester complications. Upon completion, students should be able to produce gestational sonograms which document age, evaluate the uterine environment, and recognize first trimester complications.

SON-242   **Obstetrical Sonography II**   2 0 0 2
Requisites: Take SON-241; Take previously. Required.
This course covers second and third trimester obstetrical complications and fetal anomalies. Topics include abnormal fetal anatomy and physiology and complications in the uterine environment. Upon completion, students should be able to identify fetal anomalies, fetal distress states, and uterine pathologies.

SON-250   **Vascular Sonography**   1 3 0 2
Requisites:
This course provides an in-depth study of the anatomy and pathology of the vascular system. Topics include peripheral arterial, peripheral venous, and cerebrovascular disease testing. Upon completion, students should be able to identify normal vascular anatomy and recognize pathology of the vascular system.

SON-271   **Doppler Sonography Topics**   1 3 0 2
Requisites:
This course covers Doppler principles and instrumentation. Topics include basic Doppler principles, CW Doppler, pulsed-wave Doppler, color Doppler, and power Doppler. Upon completion, students be able to demonstrate knowledge of Doppler principles and instrumentation.

SON-289   **Sonography Topics**   2 0 0 2
Requisites:
This course provides an overview of sonographic topics in preparation for certification examinations. Emphasis is placed on registry preparation. Upon completion, students should be able to demonstrate a comprehensive knowledge of sonography and be prepared for the registry examinations.

SPANISH (SPA PREFIX)

SPA-111   **Elementary Spanish I**   3 0 0 3
Requisites: Take 1 group; Take ENG-090 RED-090; Take DRE-098(S23643); Take ENG-111(S13673);
Take ENG-002; Take previously. Required. Take SPA-181; Take either previously or concurrently. Required.
This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness.

SPA-112   **Elementary Spanish II**   3 0 0 3
Requisites: Take SPA-111; Take previously. Required. Take SPA-111; Minimum grade C; Take previously.
Required. Take SPA-182(S13968); Take either previously or concurrently. Required.
This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness.

SPA-120 **Spanish for the Workplace** 3 0 0 3
Requisites: Take 1 group; Take RED-090 ENG-090; Take ENG-110(S22173); Take ENG-111(S13673); Take DRE-097(S23642); Take ENG-002; Take previously. Required.
This course offers applied Spanish for the workplace to facilitate basic communication with people whose native language is Spanish. Emphasis is placed on oral communication and career-specific vocabulary that targets health, business, and/or public service professions. Upon completion, students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity. Emphasis will be on cultural awareness and cultural context issues.

SPA-181 **Spanish Lab 1** 0 2 0 1
Requisites: Take 1 group; Take ENG-090 RED-090; Take DRE-098(S23643); Take ENG-111(S13673); Take ENG-002; Take previously. Required. Take SPA-111; Take either previously or concurrently. Required.
This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness.

SPA-182 **Spanish Lab 2** 0 2 0 1
Requisites: Take SPA-111; Take previously. Required. Take SPA-181; Minimum grade C; Take previously. Required. Take SPA-112; Take either previously or concurrently. Required.
This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate cultural awareness.

SPA-211 **Intermediate Spanish I** 3 0 0 3
Requisites: Take SPA-112; Take previously. Required. Take SPA-112; Minimum grade C; Take previously. Required. Take SPA-281; Take either previously or concurrently. Required.
This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

SPA-281 **Spanish Lab 3** 0 2 0 1
Requisites: Take SPA-182(S13968); Take previously. Required. Take SPA-182(S13968); Minimum grade C; Take previously. Required. Take SPA-211; Take either previously or concurrently. Required.
This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

SURVEYING (SRV PREFIX)

SRV-110 **Surveying I** 2 6 0 4
Requisites: Take 1 group; Option: Take MAT-121; Option: Take MAT-171; Option: Take DMA-060 DMA-070 DMA-080; Option: Take DMA-065; Option: Take MAT-003; From rule RMINP2M; Option: Take BSP-4003; From rule RMINP2M: Take either previously or concurrently. Required.
This course introduces the theory and practice of plane surveying. Topics include the precise measurement of distances, angles, and elevations; bearing, azimuth and traverse computations; topography and mapping. Upon completion, students should be able to use/care for surveying equipment, collect field survey data, perform traverse computations and create a contour map.

SRV-111 **Surveying II** 2 6 0 4
Requisites: Take SRV-110(S12339); Take previously. Required. Take SRV-110(S23990); Take previously. Required.
This course introduces route surveying and roadway planning and layout. Topics include simple, compound, reverse, spiral, and vertical curves; geometric design and layout; planning of cross-section and grade line; drainage; earthwork calculations; and mass diagrams. Upon completion, students should be able to calculate and lay out highway curves; prepare roadway plans, profiles, and sections; and perform slope staking.

SRV-210   **Surveying III**   2 6 0 4
Requisites: Take SRV-110(S12339); Take previously. Required. Take CIV-125(S21521) SRV-110(S22362); Take previously. Required.
This course introduces boundary surveying, land partitioning, and calculations of areas. Topics include advanced traverses and adjustments, preparation of survey documents, and other related topics. Upon completion, students should be able to research, survey, and map a boundary.

SRV-220   **Surveying Law**   2 2 0 3
Requisites: Take SRV-110(S12339); Take previously. Required.
This course introduces the law as related to the practice of surveying. Topics include surveyors' responsibilities, deed descriptions, title searches, eminent domain, easements, weight of evidence, riparian rights, and other related topics. Upon completion, students should be able to identify and apply the basic legal aspects associated with the practice of land surveying.

SRV-240   **Topo/Site Surveying**   2 6 0 4
Requisites: Take SRV-110(S12339); Take previously. Required. Take CIV-125(S21521) SRV-110(S22362); Take previously. Required.
This course covers topographic, site, and construction surveying. Topics include topographic mapping, earthwork, site planning, construction staking, and other related topics. Upon completion, students should be able to prepare topographic maps and site plans and locate and stake out construction projects.

SRV-250   **Advanced Surveying**   2 6 0 4
Requisites: Take SRV-111; Take previously. Required. Take SRV-111 CIV-125(S21521); Take previously. Required.
This course covers advanced topics in surveying. Topics include photogrammetry, astronomical observations, coordinate systems, error theory, GPS, GIS, Public Land System, and other related topics. Upon completion, students should be able to apply advanced techniques to the solution of complex surveying problems.

SRV-260   **Field & Office Practices**   1 3 0 2
Requisites: Take SRV-110(S23990) CEG-115 or EGR-115(S20666); Take previously. Required.
This course covers surveying project management, estimating, and responsibilities of surveying personnel. Topics include record-keeping, starting and operating a surveying business, contracts, regulations, taxes, personnel management, and professional ethics. Upon completion, students should be able to understand the requirements of operating a professional land surveying business.

SUSTAINABILITY TECHNOLOGY (SST PREFIX)

SST-140   **Green Building and Design Concepts**   3 0 0 3
Requisites:
This course is designed to introduce the student to sustainable building design and construction principles and practices. Topics include sustainable building rating systems and certifications, energy efficiency, indoor environmental quality, sustainable building materials and water use. Upon completion, students should be able to identify the principles and practices of sustainable building design and construction.

SOCIAL WORK (SWK PREFIX)

SWK-110   **Intro to Social Work**   3 0 0 3
Requisites:
This course examines the historical development, values, orientation, and professional standards of social work and focuses on the terminology and broader systems of social welfare. Emphasis is placed on the various fields of practice including those agencies whose primary function is financial assistance, corrections, mental health, and protective services. Upon completion, students should be able to demonstrate an understanding of the knowledge, values, and skills of the social work professional.

SWK-113   **Working With Diversity**   3 0 0 3
Requisites:
This course examines and promotes understanding, sensitivity, awareness, and knowledge of human diversity. Emphasis is placed on professional responsibilities, duties, and skills critical to multicultural human services practice. Upon completion, students should be able to integrate and expand knowledge, skills, and cultural awareness relevant to diverse populations.

CURRICULUM COURSE DESCRIPTIONS

THREE DIMENSIONAL PRINTING (TDP PREFIX)

TDP-110   Introduction to Three Dimensional Printing   2 3 0 3
Requisites:
This course covers the historical, social and ethical issues, as well as the basic techniques surrounding 3D Printing. Topics include current and historical events, social impact of the technology and basic model creation and manipulation techniques. Upon completion, students should be able to demonstrate an understanding of the major advantages and disadvantages of 3D Printing technology as well as demonstrate an ability to create and print a simple project.

TRANSPORTATION TECHNOLOGY (TRN PREFIX)

TRN-110   Introduction to Transport Technology   1 2 0 2
Requisites:
This course covers workplace safety, hazardous materials, environmental regulations, hand tools, service information, basic concepts, vehicle systems, and common transportation industry terminology. Topics include familiarization with major vehicle systems, proper use of various hand and power tools, material safety data sheets, and personal protective equipment. Upon completion, students should be able to demonstrate appropriate safety procedures, identify and use basic shop tools, and describe government regulations regarding transportation repair facilities.

TRN-120   Basic Transportation Electricity   4 3 0 5
Requisites:
This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

TRN-120A   Basic Transportation Electrical Lab   0 3 0 1
Requisites: Take TRN-120; Take either previously or concurrently. Recommended.
This course provides a lab that allows students to enhance their understanding of electrical components and circuits used in the transportation industry. Topics include inspection, diagnosis, and repair of electrical components and circuits using appropriate service information for specific transportation systems. Upon completion, students should be able to diagnose and service electrical components and circuits used in transportation systems.

TRN-130   Intro to Sustainable Transportation   2 2 0 3
Requisites:
This course provides an overview of alternative fuels and alternative fuel vehicles. Topics include composition and use of alternative fuels including compressed natural gas, biodiesel, ethanol, hydrogen, and synthetic fuels, hybrid/electric, and vehicles using alternative fuels. Upon completion, students should be able to identify alternative fuel vehicles, explain how each alternative fuel delivery system operates, and perform minor repairs.

TRN-140   Transportation Climate Control   1 2 0 2
Requisites:
This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis and repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to diagnose and repair vehicle climate control systems.

TRN-170   Pc Skills for Transportation   1 2 0 2
Requisites:
This course introduces students to personal computer literacy and Internet literacy with an emphasis on the transportation service industry. Topics include service information systems, management systems, computer-based systems, and PC-based diagnostic equipment. Upon completion, students should be able to access information pertaining to transportation technology and perform word processing.

TRN-180   Basic Welding for Transportation   1 4 0 3
Requisites:
This course covers the terms and procedures for welding various metals used in the transportation industry with an emphasis on personal safety and environmental health. Topics include safety and precautionary measures, setup/operation of MIG equipment, metal identification methods, types of welds/joints, techniques, inspection methods, cutting processes and other related issues. Upon completion, students should be able to demonstrate a basic knowledge of welding operations and safety procedures according to industry standard

TRN-180A   Basic Welding for Transportation Lab   0 3 0 1
Requisites: Take TRN-180; Take either previously or concurrently. Recommended.
This course provides a laboratory experience for enhancing student skills in welding and cutting procedures associated with the transportation industry. Emphasis is placed on safety and precautionary measures, setup/operation of MIG equipment, metal identification, welds/joints, techniques, inspection of welds/joints, cutting processes and other related topics. Upon completion, students should be able to demonstrate a basic knowledge of welding operations and safety procedures according to industry standards.

UNMANNED AIRCRAFT SYSTEMS (UAS PREFIX)

UAS-111   Unmanned Aircraft Systems   3 0 0 3
Requisites:
This course provides students with the various products and technologies commonly associated with unmanned aircraft systems utilized by hobbyists, government, industry, and the military. Topics include data acquisition, operations and the various technologies associated with unmanned flight. Upon completion, students should be able to demonstrate an understanding of flight control operations including programming telemetry and data acquisition.

UAS-150   Unmanned Aircraft Systems Flight Simulation   2 3 0 3
Requisites:
This course introduces learners to a flight simulator to help them build and develop knowledge in flight dynamics, the proper manipulation of aircraft controls, and the ability to accurately monitor sensor functions. Emphasis is placed on developing the learner's flight and control skills that will be utilized to operate an unmanned ground control station which is dependent upon piloting and control skills. Upon completion, students should be able to demonstrate the proper use of flight controls required to maintain a non-eventful simulated or actual UAS flight as well as one requiring emergency corrections.

UAS-230   Unmanned Aircraft Systems Aerial Photography and Surveys   2 2 0 3
Requisites:
This course introduces students to some of the popular unmanned aerial photographic applications commonly utilized in commercial unmanned aircraft systems (UAS) operations involving aerial surveys and photography. Topics include aerial photography and equipment, aerial vehicles, examples of successful UAS survey and photographic business models, and Federal Aviation Regulations governing airspace applications. Upon completion, students should be able to plan, implement and conduct a successful photo aerial survey mission.

WORK BASED LEARNING (WBL PREFIX)

WBL-111   Work-Based Learning I   0 0 0 1
Requisites:
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WBL-111R   Work-Based Learning I   0 0 0 1
Requisites: See specific program requirements.
WBL 111R is restricted to Human Services Technology. This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WBL-112   Work-Based Learning I   0 0 0 2
Requisites:
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WBL-113   Work-Based Learning I   0 0 0 3
Requisites:
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WBL-115   Work-Based Learning Seminar I   1 0 0 1
Requisites: Take WBL-111 WBL-112 WBL-113 or WBL-114; Take either previously or concurrently. Required.
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study.

WBL-120   Career Readiness, Exploration, and Employability   2 3 0 3
Requisites:
This course is designed to familiarize individuals with fundamental skill sets that are critical for successful employment including locating and using workplace information, conveying professionalism, communicating effectively, promoting teamwork, thinking critically, and providing individuals with career exploration experiences. Topics include career readiness credential preparation, career exploration, and employability skillsets. Upon completion, students should be able to demonstrate the ability to locate and use information, interpret graphic information, apply mathematics to work-related situations, use key employability skills, and match education with careers in business and industry. null null

WBL-121   Work-Based Learning II   0 0 0 1
Requisites:
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WBL-122   Work-Based Learning II   0 0 0 2
Requisites:
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WBL-123   Work-Based Learning II   0 0 0 3
Requisites:
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WBL-132   Work-Based Learning III   0 0 0 2
Requisites:
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WBL-133   Work-Based Learning III   0 0 0 3
Requisites:
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WBL-212   Work-Based Learning IV   0 0 0 2
Requisites:
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WBL-222   Work-Based Learning V   0 0 0 2
Requisites:
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

WEB TECHNOLOGIES (WEB PREFIX)

WEB-110   Internet/Web Fundamentals   2 2 0 3
Requisites: Take 1 group; Take DRE-098(S23643) DMA-010 DMA-020 DMA-030; Take ENG-002; Take MAT-003; Take previously. Required.
This course introduces World Wide Web Consortium (W3C) standard markup language and services of the Internet. Topics include creating web pages, search engines, FTP, and other related topics. Upon completion, students should be able to deploy a hand-coded website created with mark-up language, and effectively use and understand the function of search engines. Topics include HTML, XHMTL.

WEB-111   Introduction to Web Graphics   2 2 0 3
Requisites: Take DRE-098(S23643) or ENG-002; Take previously. Required.
This course introduces the creation of web graphics, and addressing problems peculiar to WWW display using appropriate software. Topics include web graphics file types, optimization, RGB color, web typography, elementary special effects, transparency, animation, slicing, basic photo manipulation, and other related topics. Upon completion, students should be able to create graphics, such as animated banners, buttons, backgrounds, logos, and manipulate photographic images for Web delivery.

WEB-115   Web Markup and Scripting   2 2 0 3
Requisites: Take WEB-110(S22058) or CTI-110(S22510); Take previously. Required.
This course introduces Worldwide Web Consortium (W3C) standard client-side Internet programming using industry-established practices. Topics include JavaScript, markup elements, stylesheets, validation, accessibility, standards, and browsers. Upon completion, students should be able to develop hand-coded web pages using current markup standards. Students will also be exposed to industry standard development tools and practices with these technologies.

WEB-125   Web Mobile Design   2 2 0 3
Requisites: Take WEB-140
This course introduces students to web design for mobile devices. Topics include planning an effective mobile Web site, industry standard Mobile Markup Language, CSS3, multimedia, m-commerce, social media, testing and publishing. Upon completion, students should be able to plan, develop, test, and publish Web content designed for mobile devices.

WEB-140   Web Development Tools   2 3 0 3
Requisites: Take 1 group; Take DRE-098(S23643) DMA-010 DMA-020 DMA-030; Take ENG-002 MAT-003; Take previously. Required.
This course provides an introduction to web development tools. Topics include creating websites using web development tools and web standards. Upon completion, students should be able to create small web sites and upload files to a web server.

CURRICULUM COURSE DESCRIPTIONS

WEB-180   **Active Server Pages**   2 2 0 3
Requisites: Take CIS-115(S24979) or CSC-153; Take WEB-110(S22058) or CTI-110(S22510); Take previously. Required.
This course introduces active server programming. Topics include HTML forms processing and other issues related to developing active web applications. Upon completion, students should be able to create and maintain a dynamic website. Current trends in ASP, to include ASP.Net will be taught.

WEB-182   **PHP Programming**   2 2 0 3
Requisites: Take WEB-110(S22058) or CTI-110(S22510); Take previously. Required.
This course introduces students to the server-side, HTML-embedded scripting language PHP. Emphasis is placed on programming techniques required to create dynamic web pages using PHP scripting language features. Upon completion, students should be able to design, code, test, debug, and create a dynamic web site using the PHP scripting language.

WEB-210   **Web Design**   2 2 0 3
Requisites: Take WEB-140(S21133); Take previously. Required.
This course introduces intermediate to advanced web design techniques. Topics include customer expectations, advanced markup language, multimedia technologies, usability and accessibility practices, and techniques for the evaluation of web design. Upon completion, students should be able to employ advanced design techniques to create high impact and highly functional web sites. Students will develop a working knowledge of using CSS and employing within a website.

WEB-213   **Internet Marketing and Analytics**   2 2 0 3
Requisites: Take WEB-140(S21133); Take previously. Required.
This course introduces students to Search Engine Optimization (SEO), Search Engine Marketing (SEM)and web analytics. Topics include Search Engine Optimization (SEO), Pay Per Click advertising (PPC), Search Engine Marketing (SEM), web analytics, eye-tracking software and email marketing. Upon completion, students should be able to set up, monitor and maintain SEO optimized websites; and develop strategies for online marketing and advertising plans.

WEB-214   **Social Media**   2 2 0 3
Requisites: Take 1 group: Take ENG-111 DMA-010 DMA-030; Take MAT-003
This course introduces students to social media for organizations. Topics include social media, marketing strategy, brand presence, blogging, social media analytics and technical writing. Upon completion, students should be able to utilize popular social media platforms as part of a marketing strategy, and work with social media analytics tools.

WEB-215   **Advanced Markup and Scripting**   2 2 0 3
Requisites: Take WEB-115(S21130); Take previously. Required. Take WEB-115(S22059); Take previously. Required.
This course covers advanced programming skills required to design Internet applications. Emphasis is placed on programming techniques required to support Internet applications. Upon completion, students should be able to design, code, debug, and document Internet-based programming solutions to various real-world problems using an appropriate programming language. Students will be exposed to emerging technology in web development tools.

WEB-225   **Content Management Systems**   2 2 0 3
Requisites: Take WEB-140(S25584); Take previously. Required.
This course introduces students to Content Management Systems (CMS) designed for the publication of Web content to Web sites. Topics include individual user accounts, administration menus, RSS-feeds, customizable layout, flexible account privileges, logging, blogging systems, creating online forums, and modules. Upon completion, students should be able to register and maintain individual user accounts and create a business website and/or an interactive community website.

WEB-250   **Database Driven Websites**   2 2 0 3
Requisites: Take DBA-110 or DBA-120; Take previously. Required. Take WEB-110(S22058) or CTI-110(S22510); Take previously. Required.
This course introduces dynamic (database-driven) website development. Topics include the use of basic database CRUD statements (create, read, update and delete) incorporated into web applications, as well as in software architecture principles. Upon completion, students should be able to design and develop database driven web applications according to industry standards.

WEB-260   **E-Commerce Infrastructure**   2 2 0 3
Requisites: Take WEB-250(S24410) WEB-182(S24403) or DBA-120; Take previously. Required.
This course introduces the concepts and tools to implement electronic commerce via the Internet. Topics include
application and server software selection, securing transactions, use and verification of credit cards, publishing of
catalogs, documentation, and site administration. Upon completion, students should be able to setup a working e-
commerce Internet web site.

WEB-287   **Web E-Portfolio**   1 2 0 2
Requisites: Take WEB-210(S22061); Take previously. Required.
This course covers the creation and organization of a web-based e-portfolio that includes a resume, references, and
comprehensive academic and work samples. Emphasis is placed on creating an e-portfolio with solid design and
demonstrable content, the production of a resume and self-promotional materials, and interview techniques. Upon
completion, students should be able to present their own domain with included professional e-portfolio elements of
resume, sample work, and related self-promotional materials.

WELDING (WLD PREFIX)

WLD-110   **Cutting Processes**   1 3 0 2
Requisites:
This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and
operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon
completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness.

WLD-112   **Basic Welding Processes**   1 3 0 2
Requisites:
This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers,
and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and
oxy-fuel equipment and perform welding, brazing, and soldering processes.

WLD-115   **SMAW (Stick) Plate**   2 9 0 5
Requisites:
This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and
groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform
SMAW fillet and groove welds on carbon plate with prescribed electrodes.

WLD-115AB   **SMAW (Stick) Plate**   2 3 0 3
Requisites:
This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and
groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform
SMAW fillet and groove welds on carbon plate with prescribed electrodes.

WLD-115BB   **SMAW (Stick) Plate**   0 6 0 2
Requisites: Take WLD-115AB; Take either previously or concurrently. Required.
This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and
groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform
SMAW fillet and groove welds on carbon plate with prescribed electrodes.

WLD-116   **SMAW (stick) Plate/Pipe**   1 9 0 4
Requisites: Take WLD-115(S23304); Take previously. Required. Take WLD-110(S23303) WLD-141(S23307);
Take previously. Required.
This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on
advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be
able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead
positions.

WLD-121   **GMAW (MIG) FCAW/Plate**   2 6 0 4
Requisites:
This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and
fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon
completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat,
horizontal, and overhead positions.

WLD-121C   GMAW (MIG) FCAW/Plate   2 0 0 2
Requisites:
This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions.

WLD-122   GMAW (MIG) Plate/Pipe   1 6 0 3
Requisites: Take WLD-121(S23305); Take previously. Required. Take WLD-110(S23303) WLD-115(S23304) WLD-141(S23307); Take previously. Required.
This course is designed to enhance skills with the gas metal arc (MIG) welding process. Emphasis is placed on advancing skills with the GMAW process making groove welds on carbon steel plate and pipe in various positions. Upon completion, students should be able to perform groove welds with prescribed electrodes on various joint geometry.

WLD-131   GTAW (TIG) Plate   2 6 0 4
Requisites: Take WLD-110(S23303) WLD-115(S23304) WLD-121(S23305) WLD-141(S23307); Take previously. Required.
This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

WLD-132   GTAW (TIG) Plate/Pipe   1 6 0 3
Requisites: Take WLD-131(S23306); Take previously. Required.
This course is designed to enhance skills with the gas tungsten arc (TIG) welding process. Topics include setup, joint preparation, and electrode selection with emphasis on manipulative skills in all welding positions on plate and pipe. Upon completion, students should be able to perform GTAW welds with prescribed electrodes and filler materials on various joint geometry. Orbital welding fundamentals will be introduced during this course.

WLD-141   Symbols and Specifications   2 2 0 3
Requisites:
This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

WLD-151   Fabrication I   2 6 0 4
Requisites: Take WLD-115(S10891) WLD-141(S11462) WLD-110(S10913) WLD-121(S23305); Take previously. Required.
This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, cutting, joining techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

WLD-215   SMAW (stick) Pipe   1 9 0 4
Requisites: Take WLD-115(S23304) or WLD-116; Take previously. Required. Take WLD-116; Take previously. Required.
This course covers the knowledge and skills that apply to welding pipe. Topics include pipe positions, joint geometry, and preparation with emphasis placed on bead application, profile, and discontinuities. Upon completion, students should be able to perform SMAW welds to applicable codes on carbon steel pipe with prescribed electrodes in various positions.

WLD-231   GTAW (TIG) Pipe   1 6 0 3
Requisites: Take WLD-132; Take previously. Required. Take WLD-215; Take previously. Required.
This course covers gas tungsten arc welding on pipe. Topics include joint preparation and fit up with emphasis placed on safety, GTAW welding technique, bead application, and joint geometry. Upon completion, students should be able to perform GTAW welds to applicable codes on pipe with prescribed electrodes and filler materials in various pipe positions.

WLD-262   **Inspection & Testing**   2 2 0 3
Requisites: Take WLD-116 WLD-131(S23306) WLD-122 WLD-141(S23307); Take previously. Required.
This course introduces destructive and non-destructive testing methods. Emphasis is placed on safety, types and methods of testing, and the use of testing equipment and materials. Upon completion, students should be able to understand and/or perform a variety of destructive and non-destructive testing processes.

WLD-265   **Automated Welding/Cutting**   2 6 0 4
Requisites: Take WLD-110(S10913) WLD-121(S13138); Take previously. Required. Take WLD-122 WLD-132; Take previously. Required.
This course introduces automated welding equipment and processes. Topics include setup, programming, and operation of automated welding and cutting equipment. Upon completion, students should be able to set up, program, and operate automated welding and cutting equipment.

CAMPUSES AND CENTERS
Courses are offered at Wake Technical Community College locations throughout Wake County.

All Wake Technical Community College policies (academic; student services; administrative) apply to all students, regardless of campus and center locations or mode of instructional delivery, unless expressly defined by the college.

SOUTHERN WAKE CAMPUS
9101 Fayetteville Road (401S)
Raleigh, North Carolina 27603
919-866-5000
http://maincampus.waketech.edu

The 138-acre Southern Wake Campus first opened its doors in 1963. It offers Associate in Arts, Associate in Science, and Associate in Engineering degrees for college transfer, as well as career programs in Applied Engineering and Technologies, Business and Public Services Technologies, and Computer Technologies. It is home to college administration, including the President's Office and the Wake Tech Foundation. It also offers a physical education building/gymnasium, and specialized training labs for culinary arts, cosmetology, automotive, heavy equipment, and skilled trades.

SCOTT NORTHERN WAKE CAMPUS
6600 Louisburg Road (401N)
Raleigh, North Carolina 27616
919-532-5502
http://northerncampus.waketech.edu

The 127-acre Scott Northern Wake Campus offers an extensive college transfer program, business and IT programs, and a variety of Workforce Continuing Education (non-credit) classes, many offered in the evening and on weekends. The campus is home to Wake Tech's Corporate and Business Solutions division, which provides customized training. Career programs in Baking & Pastry Arts, Electrical, HVAC, and Welding start in 2017. Scott Northern Wake has the distinction of being the first college campus in the nation to have all buildings LEED (Leadership in Energy and Environmental Design) certified by the U.S. Green Building Council. The campus is also home to classes for students in the Wake Early College High School. Student services include admissions, counseling, and financial aid, and the campus has a library, chemistry and biology labs, a bookstore, and tennis and volleyball courts.

WESTERN WAKE CAMPUS
Millpond Village
3434 Kildaire Farm Road
Cary, North Carolina, 27518
919-335-1000
http://westerncampus.waketech.edu

The Western Wake Campus offers the Associate in Arts degree for college transfer. It is home to Wake Tech's Small Business Center and the Wake Tech/Wells Fargo Center for Entrepreneurship, which provide seminars, workshops, and other resources for entrepreneurs and small business owners. Workforce Continuing Education classes include computer skills, medical office assisting, BioWork, and English as a Second Language. Western Wake offers non-credit classes in human resources development, computer skills, art, horticulture, ESL, online GED preparation, and more. Support services include a library, computer lab, tutoring, and financial aid.

PERRY HEALTH SCIENCES CAMPUS
2901 Holston Lane (behind WakeMed Raleigh)
Raleigh, North Carolina 27610
919-747-0400
http://healthsciencescampus.waketech.edu

Wake Tech's Perry Health Sciences Campus, adjacent to WakeMed, offers 17 medical programs, preparing students for careers in nursing, radiography, dental hygiene, emergency medical science, and other high-

demand health care professions. Wake Tech partners with Wake Med and other local institutions to provide hands-on clinical training and work-based learning experiences. The campus features a state-of-the-art nursing simulation suite, a dental hygiene clinic, and an EMS ambulance bay. It is also home to the Wake Early College of Health and Sciences, a partnership with Wake County Public Schools that allows students to work toward a high school diploma and an associate degree at the same time.

PUBLIC SAFETY EDUCATION CAMPUS
321 Chapanoke Road
Raleigh, North Carolina 27603
919-866-6100
http://www.waketech.edu/about-wake-tech/locations/public-safety-education-campus

Wake Tech's Public Safety Education Campus is a CALEA® Accredited Training Academy offering a state-of-the-art forensics lab, an Incident Command Center, simunition and defensive tactics rooms, and a mock courtroom and jail. The campus offers Associate in Applied Science degrees in Criminal Justice and Fire Protection Technology, Basic Law Enforcement Training, and in-service training for law enforcement and corrections officers, fire and rescue personnel, EMS technicians, and SBI and Homeland Security personnel. This campus also offers Workforce Continuing Education (non-credit) programs such as barbering, hospitality and Nurse Aide.

RTP CAMPUS
10908 Chapel Hill Road
Morrisville, North Carolina 27560
http://www.waketech.edu/about-wake-tech/locations/rtp-campus

The RTP Campus is located on NC Highway 54 near I-540 in Morrisville, NC. Its next-generation learning environment will be dedicated to the needs of individuals and corporations in Western Wake County and Research Triangle Park. Plans for the 94-acre site include up to 10 instructional buildings, with the capacity to serve as many as 7,000 students. Curriculum (for-credit) programs will include college transfer as well as Business Administration, Business Analytics, Cyber Security, Data Storage and Virtualization, and more. The RTP Campus will also house Wake Tech's Corporate and Business Solutions division, offering customized corporate training.

All Wake Tech campuses feature a library and study areas; an Individualized Learning Center (ILC) for reading, writing, and math tutoring; wireless internet access; a photo ID office; and support services that include admissions, advising, career counseling, disability support, and financial aid.

BELTLINE EDUCATION CENTER
3200 Bush Street
Raleigh, North Carolina 27609
919-334-1500
http://www.waketech.edu/about-wake-tech/locations/beltline-education-center

The Beltline Education Center is the hub of operations for Wake Tech's Workforce Continuing Education Division. It houses Wake Tech's College & Career Readiness programs: the High School Equivalency Preparation (HSEP), Adult High School (AHS), English as a Second Language (ESL), and Adult Basic Education (ABE), including ABE TOPS. The Beltline Education Center is home to Wake Tech's Advanced Manufacturing Center, with a customized training space for Wake County businesses and individuals. A School of Cosmetology offers a streamlined, non-degree alternative for cosmetology training and certification and an on-site salon, staffed by students and open to the public.

EASTERN WAKE EDUCATION CENTER
519 Industrial Drive
Zebulon, North Carolina 27597
http://www.waketech.edu/about-wake-tech/locations/eastern-wake-education-center

The Eastern Wake Education Center provides non-credit training for residents living in the eastern part of Wake County. Classes include job search skills and career readiness classes (fee-waived for the unemployed or underemployed); high school equivalency diploma preparation; Notary Public education; vocational classes taught in English and Spanish; and sustainability classes, including energy audit training in Wake Tech's BPI Test Center.

VERNON MALONE COLLEGE AND CAREER ACADEMY (VMCCA)

2200 S. Wilmington Street
Raleigh, North Carolina 27603
919-856-8119
ctehs.wcpss.net
http://www.wcpss.net/vernonmalonecca

Vernon Malone College and Career Academy is a Career and Technical Education (CTE) High School – a collaboration between Wake Tech, Wake County Public Schools, and Wake County Government. The academy provides a strong academic foundation along with education and training in eight career programs, including Biopharmaceutical Technology, Collision Repair, Cosmetology, Facilities Technology, Geomatics Technology, Nurse Aide, Simulation & Game Development, and Welding. Students complete the requirements for high school graduation while earning college credits that can be applied toward an associate's degree, diploma, or certificate at Wake Tech. Wake Tech also offers evening classes in these areas for adults pursuing degrees or seeking career advancement.

NORTH WAKE COLLEGE AND CAREER ACADEMY (NWCCA)

931 Durham Road
Wake Forest, North Carolina 27587
919-694-8650
ctehs.wcpss.net
http://www.wcpss.net/northwakecca

This new Career and Technical Education High School opens August 2017 and will offer certificates in Culinary Arts, Hospitality Management, Hardware Support and Repair, Early Childhood Education, and Emergency Medical Science. It will serve 400 students interested in pursuing educational credentials in career and technical fields while they complete the requirements for high school graduation.

BIONETWORK CAPSTONE CENTER

NC State University
850 Oval Drive
Raleigh, North Carolina 27695
919-515-0232
http://www.waketech.edu/about-wake-tech/locations/directions

Wake Tech provides hands-on training in a simulated biomanufacturing facility with state-of-the-art classrooms, industrial grade equipment laboratories, and a certified cleanroom suite. Courses taught by industry experts focus on biomanufacturing skills sets, including good manufacturing practices (GMP), aseptic manufacturing, operations in biotechnology processes, industrial microbiology, good laboratory practices (GLP), HPLC, and validation. The Capstone Center is part of the statewide BioNetwork program.
http://www.ncbionetwork.org/educational-resources/instructional-videos/bionetwork-capstone-center.

CAMPUS LOCATIONS AND CONTACT INFORMATION

CONTACT INFORMATION

SERVICE/LOCATION	WEB ADDRESS	PHONE
Southern Wake Campus 9101 Fayetteville Road (401S) Raleigh NC 27603	http://maincampus.waketech.edu	919-866-5000
Scott Northern Wake Campus 6600 Louisburg Road (401N) Raleigh NC 27616	http://northerncampus.waketech.edu	919-532-5502 or 5501
Western Wake Campus 3434 Kildaire Farm Road Cary NC 27518	http://westerncampus.waketech.edu	919-335-1000
Perry Health Sciences Campus: 2901 Holston Lane Raleigh NC 27610	http://healthsciencescampus.waketech.edu	919-747-0400
Public Safety Education Campus (PSEC) 321 Chapanoke Road Raleigh NC 27603	http://www.waketech.edu/about-wake-tech/locations/public-safety-education-campus	919-866-6100
RTP Campus 10908 Chapel Hill Rd. Morrisville NC 27560	http://www.waketech.edu/about-wake-tech/locations/rtp-campus	919-335-1400
Beltline Education Center 3200 Bush Street Raleigh NC 27609	http://www.waketech.edu/about-wake-tech/locations/beltline-education-center	919-334-1500
Eastern Wake Education Center (EWEC) 519 Industrial Drive Zebulon NC 27597	http://www.waketech.edu/about-wake-tech/locations/eastern-wake-education-center	919-866-5727
Vernon Malone College and Career Academy (VMCCA) 2200 S. Wilmington Street Raleigh, NC 27603	http://www.wcpss.net/vernonmalonecca	919-856-8119
North Wake College and Career Academy (NWCCA) 931 Durham Road Wake Forest, NC 27587	http://www.wcpss.net/northwakecca	919-694-8650
BioNetwork Capstone Center	http://www.waketech.edu/about-wake-tech/locations/directions	919-515-0232
Calendars/Deadlines	http://www.waketech.edu/calendar/	919-866-5500
Admissions	http://admissions.waketech.edu/	919-866-5000
Advising	http://www.waketech.edu/student-services/advising	919-866-5000
Basic Skills (GED, Adult High School, etc.)	http://basicskills.waketech.edu/	919-866-5280 919-334-1500
Campus Police	http://www.waketech.edu/about-wake-tech/administrative-offices/campus-police	919-866-5943 (Non-Emergency)
eLearning	http://www.waketech.edu/student-services/online-learning	919-866-5618
Workforce Continuing Education	http://conted.waketech.edu/	919-866-5800
Curriculum Education	http://curred.waketech.edu/	919-866-5000
Career and Employment Resources	http://www.waketech.edu/about-wake-tech/careers-employment/careers	919-866-5695
Wake Tech Foundation	http://foundation.waketech.edu/	919-866-5924
ITS Services and Support (Helpdesk/WebAdvisor/student portal, etc.)	http://its.waketech.edu/service.php	919-866-7000

CAMPUS LOCATIONS AND CONTACT INFORMATION

SOUTHERN WAKE CAMPUS

SERVICE	SOUTHERN WAKE CAMPUS	PHONE
Admissions	Student Services, Room 121 http://admissions.waketech.edu	919-866-5420
Advising	Student Services, Room 121 http://advising.waketech.edu/	919-866-5474
Campus Police	Holding Hall, Room 148 http://www.waketech.edu/about-wake-tech/administrative-offices/campus-police	919-866-5943 (Non-Emergency)
Career and Employment Resources	Holding Hall, Suite 150 http://www.waketech.edu/about-wake-tech/careers-employment/careers	919-866-5695
Cashier's Office	Montague Hall, 1st floor	919-866-5900
College Bookstore	Beside Student Services Building http://www.waketech.edu/student-services/wake-tech-bookstore	919-772-4204
Open Computer Labs *Student ID required*	ILC 124 http://www.waketech.edu/student-services/computer-labs	919-866-5119 *Additional computer resources available at each library and ILC location
Work-Based Learning	Holding Hall, Room 168A http://www.waketech.edu/about-wake-tech/careers-employment/careers	919-866-5693
Disability Support Services	Holding Hall, Room 124 http://www.waketech.edu/student-services/disability-support-services	919-866-5670
Financial Aid	Student Services, Room 015 http://www.waketech.edu/student-services/financial-aid	919-866-5410
Individualized Learning Center (ILC) (Reading, writing, and math tutoring)	ILC Building *(Student ID required)* http://www.waketech.edu/student-services/individualized-learning-center	919-866-5276
Library (open computer areas) *Student ID required*	Library Education Building, 1st floor http://www.waketech.edu/student-services/libraries	919-866-5644
Photo I.D.	Holding Hall, Room 102 http://www.waketech.edu/student-life/student-activities/college-id-badges	919-866-5867
Registration & Student Records (Curriculum Education)	Student Services Building, Room 254 http://www.waketech.edu/student-services/registration-student-records	919-866-5700

CAMPUS LOCATIONS AND CONTACT INFORMATION

SGA (Student Activities)	Student Services Building, Room 128 http://www.waketech.edu/student-life/student-government-association	919-866-5407
Veterans Services	Student Services Building, Room 143 http://www.waketech.edu/student-services/veterans-affairs	919-866-5417
OPEN COMPUTER AREAS *STUDENT ID REQUIRED		
Southern Wake Campus Library Microsoft Office available	Library Education, 1st Floor http://library.waketech.edu/	919-866-5644
Open Computer Lab	ILC Building, Room 124 http://www.waketech.edu/student-services/computer-labs	919-866-5119
WORKFORCE CONTINUING EDUCATION		
Registration	Student Services Building http://www.waketech.edu/programs-courses/non-credit/register-online	919-866-5800

SCOTT NORTHERN WAKE CAMPUS

SERVICE	SCOTT NORTHERN WAKE CAMPUS (401 North)	PHONE
Admissions	Building NB, Room 225	919-532-5502
Advising	Building NB, Room 239 http://www.waketech.edu/about-wake-tech/locations/northern-wake-campus/academic-advising	919-532-5502
Campus Police	Building B, Room 234	919-866-5943 (Non-Emergency)
Career and Employment Resources	Building B, Suite 137B http://www.waketech.edu/about-wake-tech/careers-employment/careers	919-866-5695
Cashier's Office	Building NC, Room 236D	919-532-5507
College Bookstore	Building B, Room 225 or online: http://www.waketech.edu/student-services/wake-tech-bookstore	919-790-9306
Corporate Solutions	http://www.waketech.edu/programs-courses/non-credit/build-your-business/corporate-solutions	919-532-5813
Disability Support Services	Building A, Room 218D	919-532-5505
eLearning	Building E, Room 250	919-532-5830
Financial Aid	Building NC, Room 218	919-532-5504
Individualized Learning Center (Reading, writing, and math tutoring)	Building B, Room 213 http://www.waketech.edu/student-services/individualized-learning-center	919-532-5548

CAMPUS LOCATIONS AND CONTACT INFORMATION

Library *Student I.D. required*	Building B, Room 239 http://www.waketech.edu/student-services/libraries	919-532-5550
Photo I.D. and Parking Decals	Building ND, Room 103	919-532-5867
Registration & Student Records Services	Building NB, Room 216	919-532-5574
SGA (Student Activities)	Building NB, Room 156	919-532-5654
Veteran Services	http://www.veterans.waketech.edu	919-866-5099
OPEN COMPUTER AREAS *Student ID Required		
Open Computer Lab	Building B, Room 216 http://www.waketech.edu/student-services/computer-labs	919-532-5584 *Additional computer resources available at each library and ILC location
WORKFORCE CONTINUING EDUCATION		
Registration	Building C, Lobby, Room 315	919-532-5501
Online Classes www.ed2go.com/waketech	Building B, Room 417	919-532-5581

PERRY HEALTH SCIENCES CAMPUS

SERVICE	PERRY HEALTH SCIENCES CAMPUS	PHONE
Advising/Admissions	HA Building, Room 102	919-747-0402
Campus Police	HA Building, Room 135	919-866-5943 (Non-Emergency)
Career and Employment Resources	HA, Suite 347	919-866-6160
Cashier's Office	HA Building., Room 131	919-747-0010
College Bookstore	HA Building, Room 2, (ground level)	919-890-5520
Disability Support Services	HA Building, Room 111	919-334-1510
eLearning Testing Center	HB Building Room 428	919-747-0100
Financial Aid	HA Building, Room 104	919-747-0047
Individualized Learning Center (Reading, writing, math, and computer tutoring; Health Sciences Skills lab) *Student I.D. required*	HE Building http://www.waketech.edu/student-services/individualized-learning-center	919-747-0233
Library	HC, Room 123 http://www.waketech.edu/student-services/libraries	919-747-0002
Photo ID	HA, Room 145	919-747-5867
Registration & Student Records	Student Services Center, HA, Room 102 (Limited services)	919-747-0402
SGA (Student Activities)	HA Building, Room 157	919-747-0092
OPEN COMPUTER AREAS *Student ID Required		
Open Computer Lab	HE Building, Room 514 http://www.waketech.edu/student-services/computer-labs	919-747-0042

CAMPUS LOCATIONS AND CONTACT INFORMATION

WORKFORCE CONTINUING EDUCATION		
Registration	HD Building, Room 312	919-747-0077

WESTERN WAKE CAMPUS

SERVICE	WESTERN WAKE CAMPUS	PHONE
Admissions/Advising/ Student Success Counseling	Room 255	919-335-1059
Campus Police	(Contact 1st floor receptionist) http://www.waketech.edu/about-wake-tech/administrative-offices/campus-police	919-866-5943 (Non-Emergency)
Career and Employment Resources	Office Suite 255, Office A http://www.waketech.edu/about-wake-tech/careers-employment/careers	919-866-5695
Cashier's Office	Room 100A	919-335-1049
Financial Aid	Room 255	919-335-1040
Individualized Learning Center (Reading, writing, math, and computer tutoring) *Student I.D. Required*	Learning Resource Center, Suite 200E http://www.waketech.edu/student-services/individualized-learning-center	919-335-1028
Library *Student ID required*	Learning Resource Center, Suite 200B http://www.waketech.edu/student-services/libraries	919-335-1029
Photo I.D.	Room 254	919-335-1045
Student Lounge	Room 261	N/A
OPEN COMPUTER AREAS *Student ID Required		
Open Computer Lab *Photo ID Services Available*	Room 254 http://www.waketech.edu/student-services/computer-labs	919-335-1045
WORKFORCE CONTINUING EDUCATION		
Registration	1st and 2nd floor reception areas Suites 100 and 200	919-335-1000 919-335-1001
Business and Industry Center	Suite 200	919-335-1001

CAMPUS LOCATIONS AND CONTACT INFORMATION

PUBLIC SAFETY EDUCATION CAMPUS (PSEC)

SERVICE	PUBLIC SAFETY EDUCATION CAMPUS	PHONE
Admissions/Advising/ Student Success Counseling	Room 1716 W, Th 8 a.m.–5 p.m.	919-866-5468
Campus Police	Room 1428 M–F, 8 a.m.–5 p.m.	919-866-5943 (Non-Emergency)
Cashier's Office	Room 1718 M–F, 8 a.m.–5 p.m.	919-866-6108
Disability Support Services	Room 1714 By appointment	919-866-5670
Financial Aid	Room 1714 Monday, 1–3 p.m.	919-866-6137
Individualized Learning Center (Reading, writing, math, and computer tutoring) ***Student I.D. required***	Room 1611 http://www.waketech.edu/student-services/individualized-learning-center	919-866-6123
Library ***Student ID required***	Room 1615 M–F, 9 a.m.–3 p.m. http://www.waketech.edu/student-services/libraries	919-866-6107
Photo ID	Front Desk M–F, 8 a.m.–4:30 p.m.	919-866-6100

RTP CAMPUS

SERVICE	RTP CAMPUS	PHONE
Admissions	Bldg. RT1, 105	919-335-1400
Advising	Bldg. RT1, 105	919-335-1400
Bookstore	https://waketech.bncollege.com/shop/wake-tech/home	919-388-8218
Campus Police	http://www.waketech.edu/about-wake-tech/administrative-offices/campus-police	919-866-5943 (Non-Emergency)
Career and Employment Resources	Bldg. RT1, 131	919-866-5876
Cashier's Office	Bldg. RT1, 113	919-335-1200
Disability Support Services	Bldg. RT1, 211 http://www.waketech.edu/student-services/disability-support-services	919-866-5665

CAMPUS LOCATIONS AND CONTACT INFORMATION

Event and Conference Services	Bldg. RT1, 332MA https://www.waketech.edu/about-wake-tech/administrative-offices/events-and-conferences	
Financial Aid	Bldg. RT1, 105	919-335-1400
Individualized Learning Center *Student ID required*	Bldg. RT1, 209 hhttps://www.waketech.edu/student-services/individualized-learning-center	919-335-1251
Library *Student ID required*	Bldg. RT1, 206 http://www.waketech.edu/student-services/libraries	919-335-1270
Lost and Found	Bldg. RT1, 105 https://www.waketech.edu/student-life/lost-found	919-335-1400
Open Computer Labs	Bldg. RT1, 131 https://www.waketech.edu/student-services/computer-labs	
Parking Decals	Bldg. RT1, 107	
Registration & Student Records	Bldg. RT1, 105 http://www.waketech.edu/student-services/registration-student-records	919-335-1400
Student Activities	Bldg. RT1, 105 https://www.waketech.edu/student-life/student-activities	919-335-1400
Student Advocacy & Support	Bldg. RT1, 105-2 https://www.waketech.edu/student-services/student-advocacy	
Student ID's	Bldg. RT1, 107 https://www.waketech.edu/about-wake-tech/administrative-offices/campus-police/ids-and-parking	
Testing Center	Bldg. RT1, 101 https://www.waketech.edu/admissions/become-a-student/testing-center	919-335-1400
The Nest Food Pantry	Bldg. RT1, 137 https://www.waketech.edu/student-services/student-advocacy/the-nest	
Veterans Services	Bldg. RT1, 326B http://www.waketech.edu/student-services/veterans-affairs	

All Wake Technical Community College policies (academic; student services; administrative) apply to all students, regardless of campus and center locations or mode of instructional delivery, unless expressly defined by the college.

CREDENTIALS DIRECTORY

BOARD OF TRUSTEES

Each community college in North Carolina is governed by a volunteer board of trustees, with specific duties defined by state law. Among their responsibilities, trustees establish policies for the college to follow, approve the college's budget each year and serve as advocates for the college. When there is a vacancy in the college's presidency, the trustees are responsible for choosing a new president.

Wake Tech is served by 12 appointed trustees. Four are appointed by the Governor of North Carolina, four are appointed by the Wake County Commissioners and four are appointed by the Wake County Board of Education. These trustees are appointed to four-year terms of office, and the appointments are staggered so that the board always has a blend of experienced and new trustees.

In addition to the 12 appointed trustees, the college's Student Government Association president serves as an ex-officio member of the Wake Tech Board of Trustees. The SGA president is encouraged to share ideas and concerns with the board but does not vote on board issues.

The college president serves as secretary to the Wake Tech Board of Trustees but is not considered a member of the board.

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Albuquerque, Flavio G., Ph.D. .... *Instructor, Engineering*

Ali, Dominick L., M.S. .... *Instructor, Chemistry*

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Allen, DeeDee A., Ph.D. .... *Senior Professor, Natural Sciences, Chemistry*

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Allen, Kelli D., MFA. .... *Instructor, Pre-Curriculum*

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Annis, John G., M.P.A. ....*Senior Professor, Criminal Justice*

Applebaum, Lee ....*Instructor, Automotive Systems Technology*

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Arnette, Robyn M., M.A. .... *Assistant Professor, Psychology*

Asfari, Amin, Ph.D. .... *Associate Professor, Criminal Justice Technology*

Atkinson, Kevin D., B.A. ....*Assistant Professor, Pre-Curriculum Mathematics*

Atkinson, Kimberly A., B.S. .... *Assistant Professor, Office Administration*

Attanas, Melissa R., A.A.S. .... *Assistant Professor, Baking and Pastry Arts*

Auman, Stacey, M.S. .... *Assistant Professor, Mathematics*

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Averre, Patricia, DNP, MSN, RN .... *Associate Professor, Nursing*

Ayangma, Alain, Ed.D. .... *Assistant Professor, Mathematics*

Aycock, Shannon T., M.S. .... *Instructor/Center Coordinator, ILC Math*

Aydlett, Thomas, M.S. .... *Associate Professor, Mathematics*

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Benton, Holly K., ... *Instructor Clinical Manager, Dental Assisting*

Berry, Matthew W., B.S. .... *Instructor, Automotive Systems Technology*

Berry, Rebecca, M.A. .... *Senior Professor, History*

Best, Constance L., M.H.A. .... *Instructor, Emergency Medical Science*

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Blount, Briana J., M.S. .... *Assistant Professor, Mathematics*

Bonner, Diane, Ph.D. .... *Instructor, Biopharmaceutical Technology*

Bossing, William, Ph.D. .... *Instructor, English*

Bouknight, Ivory S., M.P.H. .... *Instructor, Adult Basic Education*

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Bowden, Joshua P., A.A.S. ....*Instructor, Heavy Equipment Transport Technology*

Bowden, Nicholas, M.A. .... *Assistant Professor, English*

Bowers, Joshua M., M.A. .... *Associate Professor, Mathematics*

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Brackett, Holly F., M.G.I.S.T. ....*Associate Professor, Surveying Technology*

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Breivogel, Kimberly B., M.S., M.A. .... *Professor, Psychology*

Breneman, Reed M., M.A. ....*Assistant Professor, Pre-Curriculum Integrated Reading and Writing*

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Brown, Ian C., M.S. .... *Assistant Professor, Geology*

Brust, Jason K., M.M. .... *Assistant Professor, Music*

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Buck, Jocelyn W., M.A. .... *Associate Professor, Health and Fitness*

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Burford, Brandon S., M.A. .... *Assistant Professor, English*

Burk, Cheryl A., M.Ed. .... *Senior Professor, Pre-Curriculum Integrated Reading and Writing*

Burkart, Kirsten M., M.A. .... *Associate Professor, English*

Burns, Charles L., M.S., M.B.A. .... *Assistant Professor, Chemistry*

Burtico, Michael, M.A. .... *Instructor, Music*

Byrd, Steven, T. M.A. .... *Instructor, English*

Cade, Christine, Ph.D. .... *Assistant Professor, Chemistry*

Cahoon, Elizabeth R., M.S. .... *Assistant Professor, Health and Fitness*

Campbell, Bruce D., A.A.S. .... *Instructor, Air Conditioning, Heating and Refrigeration*

Carapelle, Beverly, M.A. .... *Associate Professor, History*

Carbon, Jennifer, B.A.S. .... *Instructor, Dental Hygiene & Dental Assisting*

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Card, David O., M.Arch. .... *Associate Professor, Architectural Technology*

Carreno-Zingaro, Carrie, Ph.D. .... *Assistant Professor/Site Coordinator, ILC*

Castellow¸ Elizabeth S., M.A. .... *Professor, Spanish*

Celcer, Chad D. .... *Instructor, Welding Technology*

Chambers, William F., B.S. .... *Instructor, Networking Technology*

Chandler, Cynthia D., M.S.N. .... *Instructor, Nursing*

Chao, Frank G., Ph.D. .... *Associate Professor, Database Administration*

Chapman, James J., J.D. .... *Assistant Professor, Criminal Justice Technology*

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Chen, Chen-Pi Peter, M.A. .... *Associate Professor, Database Administration*

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Clarke, Kimberley E., M.S.N. .... *Assistant Professor, Nursing*

Cook, Robert J., M.S. .... *Instructor, Networking & Cloud Computing*

Copperthwaite, Joan A., M.S. .... *Instructor, Networking Technologies*

Corbett, Donna E., A.A .... *Instructor, Correction Education*

Corley, Bethany P., M.Ed. .... *Assistant Professor, Mathematics*

Cornell, Kimberley, M.A. .... *Assistant Professor, Accounting*

Cox, George, M.A. .... *Assistant Professor, Simulation and Game Development*

Crago, Elizabeth A., M.S.N. .... *Instructor, Nursing*

Cruz, Omayra, M.A. .... *Associate Professor, English*

Cui, Hong, M.S. .... *Associate Professor, Computer Programming/Database*

Cunningham, Maureen G., M.Ed. .... *Associate Professor, Pre-Curriculum Integrated Reading and Writing*

D'Agata, Nicolas, M.S. .... *Associate Professor, Web Technologies*

Daniel, Linda R., M.S. .... *Associate Professor, Biology*

Daniels, Cindy M., M.Ed. .... *Instructor, Dental Assisting*

Daniels, John, M.A. .... *Instructor, Human Services Technology*

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Darvish, Ali, M.S. ....*Instructor, Computer Information Technology*

Davis, Arthur P., M.A. ....*Instructor, Emergency Medical Science*

Davis, Elizabeth (Liza), Ph.D. ....*Assistant Professor, Psychology*

Davis, Howard, M.A. .... *Assistant Professor, Humanities*

Davis, Joseph K., M.A. .... *Instructor, English as a Foreign Language*

Davis, Scott K., M.A. ....*Instructor, Criminal Justice*

Dees, Lori A., M.Ed. .... *Professor, English*

DeMarco, Leslie, A.A.S. .... *Associate Professor, Baking and Pastry*

Denning, Nicklaus C., M.A. .... *Instructor, English*

Dennis, Phillip S., Ph.D. ....*Instructor, English*

Diamond, Ian R., B.S. .... *Instructor, ESL*

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