



ATTENTION!

This document was last updated June 20, 2017

Please view the online catalog for the most current information at

http://www.waketech.edu/studentservices/catalog

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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!

We offer pathways for everyone – programs of study that can help you reach your goals and prepare for career success in today's job market. This catalog can help you design the program that's right for you.

Build highly-specialized skills for technical jobs that are in high demand; launch an entrepreneurial venture; add to your professional credentials; or start a whole new career doing something you love. Thanks to our expanded articulation agreements with colleges and universities across the state, you can also choose to transfer your Wake Tech degree to a four-year institution and continue your studies.

We offer multiple locations and convenient evening and weekend classes – as well as hundreds of courses and programs online. Our outstanding instructors, small classes, and hands-on approach enhance the learning experience; our support services help you find the resources you need.

Wake Tech has served the Wake County region for half a century, offering innovative education while maintaining a standard of excellence. Wake Tech graduates are doing amazing things in the health sciences and other STEM disciplines, engineering and construction, computer technologies, hospitality, and many other fields – here in our community, and beyond. Join us!

Stephen C. Scott President



Last updated 6/20/2017

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.

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 SUPPORT 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 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 Wendell Goodwin, Facilities Engineering Officer 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

Last updated 6/20/2017

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

The mission of Wake Technical Community College is to improve and enrich lives by meeting the lifelong education, training, and workforce development needs of the communities it serves; to promote individual success in the workplace and in higher education; and to increase entrepreneurship and cultural, social, and economic development.

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

At Wake Technical Community College, our vision is a college that exceeds the expectations of our stakeholders for effective lifelong education, training and workforce development by providing world-class programs and services.

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

Student Success

Provide a dynamic learning environment to ensure successful achievement of students' goals by administering sound policies, curricula, instruction, and support services.

Workforce Development

In collaboration with Regional Economic Development Partnerships, identify the workforce needs of emerging jobs in rural and urban economies in North Carolina. Develop and implement the educational and training programs necessary to meet the workforce needs of each community college service area in North Carolina and promote recruitment, retention, and development of high quality faculty and staff necessary to achieve the educational and training objectives of the community college system and provide North Carolina with a world-class workforce.

Diverse Populations Learning Needs

Provide North Carolina citizens with the opportunity to develop essential skills for lifelong learning. Upgrade and retrain North Carolina learners for the workplace through flexible, accessible, and customized educational and training programs within their communities.

Resources

Continuously research, analyze, and secure the resources necessary to fulfill the mission of the North Carolina Community College System and develop processes for measuring the effectiveness of resource allocations and utilization, within the North Carolina Community College System.

Technology

Encourage and support North Carolina Community College faculty and staff in the effective and efficient uses of instructional technology and administrative computing systems to improve the delivery of academic programs to North Carolina citizens.

Community Services

Provide courses and support service activities for the enrichment of the community's civic, economic, and cultural needs.

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.

SACS ACCREDITATION

Southern Association of Colleges and Schools 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 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 National Automotive Technicians Education Foundation (NATEF) 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 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.

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, North Carolina 27699-9001.

Early Childhood Education Program Accreditation

The Early Childhood Education (AAS) program is accredited by the National Association for the Education of Young Children (NAEYC).

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.

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 (Telephone number 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 (Telephone number 404-975-5000) (Fax number 404-975-5020). Website: 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, Maryland 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 (Telephone number 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;

7 x 24 Exchange International

ABC of the Carolinas

APPA Membership & Outreach Department

Advisory Board/Education Advisory Board (American Health Line)

Air Conditioning Contractors of America (ACCA)

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 & University Presidents' Climate Commitment (ACUPCC)

American College Personnel Association (ACPA)

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 Data Center Management Professionals (AFCOM)

Association for Student Conduct Administration (ASCA)

Association for Talent Development (ATD)

Association for the Advancement of Sustainability in Higher Education (AASHE)

Association for the Title IX Administrators (ATIXA)

Association of College & University Policy Administrators (ACUPA)

Association of Community College Facility Operations (ACCFO)

Association of Community College Trustees (ACCT)

Carolinas Association of Collegiate Registrars and Admissions Officers (CACRAO)

Center for Community College Student Engagement (CCCSE)

Chamber of Commerce - Apex

Chamber of Commerce - Cary

Chamber of Commerce - Durham

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Chamber of Commerce - Fuguay-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
Coalition of Community College Architectural Program (CCCAP)
College and University Professional Association for Human Resources (CUPA-HR)
College Student Educators International (ACPA)
Community College Business Officers (CCBO) Community College Humanities Association (CCHA)
Construction Management Association of America (CMAA)
Cooperating Raleigh Colleges (CRC)
Council for Adult & Experiential Learning (CAEL)
Council for Resource Development (CRD)
Downtown Raleigh Alliance (DRA)
EduCause
Help Desk Institute (HDI)
Institute of Internal Auditors
International Association of Campus Law Enforcement Administrators (IACLEA)
League for Innovation Community College, Leadership Institute, League Alliance Services
Learning Resources Network (LERN)
Mobile Lab Coalition
NASPA (Student Affairs Administrators in Higher Education)
National Academic Advising Association (NACADA)
National Association of Colleges and Employers (NACE)
National Association of Educational Procurement (NAEP)
National Association of International Educators (NAFSA)
National Association of Presidential Assistants in Higher Education (NAPAHE)
National Association of Student Financial Aid Administrators (NASFAA)
National Behavioral Intervention Team Association (NaBITA)
National Council for Marketing & Public Relations (NCMPR)
National Council for Continuing Education & Training (NCCET)
National Council on Learning Resources (NCLR)
National Council on Student Development (NCSD)
National HEP Camp Association
National Institute of Governmental Purchasing (NIGP)
National Institute for Staff & Organizational Development – The University of Texas (NISOD)
National Orientation Directors Association (NODA)
National Restaurant Association/NC Restaurant Association (NC RLA)
National Strength and Conditioning Association (NSCA)
NC Sustainable Energy Association (NCSEA)
North Carolina Association for Community College Instructional Administrators (NCACCIA)
North Carolina Association of Campus Law Enforcement Administration (NCACLEA)
North Carolina Association of Colleges and Employers (NCACE)
North Carolina Association of Community College Trustees (NCACCT)
North Carolina Association of Government Information Officers (NCAGIO)
North Carolina Association on Higher Education and Disability (NC-AHEAD)
North Carolina Campus Compact
North Carolina Chamber (formerly NCCBI)
North Carolina Community College Student Development Administrator's Association (NCCSDAA)
North Carolina Community College Student Development Personnel Association (N3CSDPA)
North Carolina Council of Officers for Resource Development (NC CORD)
North Carolina Counseling Association (NCCA)
North Carolina Internal Affairs Investigators Association (NCIAIA)
North Carolina Hispanic Chamber of Commerce (NCHCC)
North Carolina Law Enforcement Accreditation Network (NCLEAN/CALEA)
North Carolina Police Executives Association (NCPEA)
North Carolina Technology Association (NCTA)
Organization for Safety, Asepsis & Prevention (OSAP)
Professional Grounds Management Society (PGMS)
Regional Transportation Alliance
Southern Association of Colleges & Schools (SACS)
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Southern Association of Colleges with Associate Degree (SACAD)
Southern Association of Collegiate Registrars and Admissions Officers (SACRAO)
Student Development Administrator's Association (SDAA)Student Leadership Institute
Two Year First Year (TYFY)
University and College Designers Association (UCDA)
US Green Building Council (USGBC)



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

WAKE TECH FOUNDATION

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

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 the Chief of Police, Associate VP for Enrollment Services, General Counsel and VP of Legal Services, and a Student Services Counselor 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 five (5) 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. In compliance with U.S. Department of Education guidelines, Wake Tech may allow only **those students from states that have granted Wake Tech permission** to register their residents in online courses. Applications for admission from students in states that have not granted Wake Tech permission will be flagged before admission is determined, and a designated member of Wake Tech's Distance Education staff will ascertain enrollment intentions.

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, Affirmative Action 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

Dean of Student Development/Student Conduct Officer

Main Campus: 919-866-5404

Northern Wake Campus: 919-532-5663

Employee Matters

Associate Vice President & Title IX Coordinator, Human Resources, 919-866-7894

STEPS TO ENROLLMENT

- 1. Submit the Online Application for Admission, http://admissions.waketech.edu
- 2. Submit all official high school transcripts if required for placement into a particular program of study. If it is determined your high school transcript is not from a valid institution, it may affect your ability to receive financial aid
- 3. Submit official college transcripts for consideration of transfer of credits in your chosen program of study. However, all college transcripts are required for Health Science programs of study.
- 4. Apply for financial aid, if needed
- 5. Take appropriate placement tests (unless waived)
- 6. Contact advisor for course selection
- 7. Attend orientation, if required by program area
- 8. Attend class

Anyone wishing to apply to Wake Technical Community College should complete the online Application for Admission at http://admissions.waketech.edu/. The application should indicate whether the person is a curriculum student applicant or a special/visiting student applicant.

- A curriculum student applicant is anyone pursuing admission into a degree, diploma, or certificate program.
 Curriculum applicants must complete the standard online Application for Admission and submit official high school transcripts, if required, for placement into a program of study. Current or subsequent registrations and awarding of financial aid will be blocked if official transcripts are not on file.
- A special/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. Special/visiting student applicants must complete
 the standard online Application for Admission and meet all course prerequisites. To verify completion of prerequisite
 courses, applicants must complete the <u>Special Student Prerequisite Approval Form</u> and provide official or unofficial
 transcripts before registering.

Note: Generally, the special credit status is limited to 16 semester hours. Special credit 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 special credit to curriculum status must complete the standard online Application for Admission and submit all necessary transcripts.

High School Programs/ Career and College Promise

The Career and College Promise program provides seamless dual enrollment educational opportunities for eligible North Carolina high school students. Contact the Associate Dean of Admissions for eligibility, admissions, and enrollment information.

TRANSCRIPTS FOR INCOMING STUDENTS

Each curriculum applicant must have official copies of transcripts of all previous high school and college (if any) work submitted directly to Wake Tech. Transcripts become the property of the College upon receipt and may not be copied for student use. Faxed copies are NOT considered official transcripts. Acceptance by Wake Tech is conditional, based on receipt of all final, official transcripts.

High School: Applicants who are high school seniors must have their school submit a transcript showing work through the first semester of the senior year, as soon as possible after the semester has ended, and a supplementary transcript showing graduation at the close of school. Students are required to submit all official transcripts. Current and/or subsequent registrations and awarding of financial aid may be blocked if official transcripts are not on file.

GED: 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 State GED Office in the state where the GED was issued.

College: Official transcripts of previous education in other colleges and universities should be submitted to Wake Tech. Applicants presenting transcripts of completed associate degrees, or higher, will not need to submit high school transcripts, except in Health Sciences curricula, where ALL transcripts are required.

How do I request my transcript from Wake Tech? Print the Transcript Request form online and deliver/mail or fax to Registration and Student Records Services in the Student Services Building, Room 254, on Main Campus – or you may complete and submit the request online. For more information see the Registration and Records chapter or go to http://www.waketech.edu/student-services/registration-student-records/transcripts.

PLACEMENT TESTING (ACCUPLACER and NC DAP)

The North Carolina Diagnostic Assessment and Placement (NC DAP) test is a customized ACCUPLACER test given to determine readiness and skill level in English, reading, writing, and math. It is given to applicants pursuing a degree, a diploma, and certain certificates. Test results are used to place students in appropriate classes and to determine if developmental instruction is needed.

Students may be exempt from taking the ACCUPLACER/NC DAP or portions thereof if they meet one of the following criteria (verified through official transcript or score report):

- 1. Graduation from a North Carolina high school within the past five (5) years with an unweighted GPA of 2.6 or higher **and** completion of Algebra I, Algebra II, Geometry, and one of the following:
 - Advanced Functions & Modeling
 - Discrete Mathematics
 - o Pre-Calculus
 - o Integrated Mathematics IV
 - AP Statistics

- Calculus
- Analytical Geometry
- o International Baccalaureate (IB) Math
- Mindset
- Probability & Statistics
- Trigonometry
- Essentials for College Math (SREB-Math Ready); or
- 2. SAT scores of 500 or higher in critical reading or writing and 500 or higher in math; scores must be less than five (5) years old at the time of application to Wake Tech; **or**
- 3. ACT scores of 22 or higher in reading or 18 or higher in English, and 22 or higher in math; scores must be less than five (5) years old at the time of application to Wake Tech; or
- 4. A grade of "C" or better in college-level English and math courses.

Students who enter under criterion #1 above (high school GPA placement) whose unweighted GPA is between 2.60 and 2.99 will be required to take supplemental instruction courses concurrently with certain entry-level English and math courses, as follows:

- Writing and Inquiry Lab (ENG 111A) required for students in Writing and Inquiry (ENG 111)
- Math Skills Support (MAT 001P) required for students in Pre-calculus Algebra (MAT 171)

Students who are non-native speakers of English will take the COMPASS-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 online at http://testingcenter.waketech.edu or by calling 919-866-5461.

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

PROGRAM PLACEMENT REQUIREMENTS

Associate Degree and Diploma Programs

- · High school diploma or equivalent
- Sufficient mathematics and science to meet specific program requirements
- 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)

Certificate Programs

- High school diploma or equivalent for some certificate programs (contact admissions advisor at 919-866-5000 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)

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 admissions counselor or appropriate academic department head to determine if such sanctions apply.

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

Special 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 WebAdvisor: http://webadvisor.waketech.edu. Current students should click "Log in" and then select "Search for Sections" or "Search and Register" under the Registration heading. More detailed information is available by clicking on "WebAdvisor How-to's" at the bottom of the page.

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://registration.curred.waketech.edu or WebAdvisor at http://webadvisor.waketech.edu for more information.

Registration will be deleted 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 WebAdvisor and the Registration and Student Records Services website: http://registration.curred.waketech.edu. 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 by email to each student's Wake Tech email address. 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
Air Conditioning, Heating, and Refrigeration Technology
Associate Degree Nursing
Automotive Systems Technology
Construction Equipment Systems
Computed Tomography
Cosmetology
Magnetic Resonance Imaging Technology
Dental Assisting
Dental Hygiene

Diesel & Heavy Equipment Emergency Medical Science

Esthetics

Heavy Equipment Operator

Medical Assisting

Medical Laboratory Technology

Phlebotomy

Radiography

Welding Technology

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. 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.

The EFL office is located on the Main campus in the Technical Education Building, Room 109. Prospective students can call 919-866-5325 for more information.

INTERNATIONAL STUDENTS

The International Student Office assists international student applicants who wish to apply for a student (F-1) visa. It also assists F-1 visa students in communicating with Citizenship and Immigration Services (CIS) regarding authorization of application for appropriate employment, extension of I-20 expiration date, transferring an I-20 to another college or university, travel abroad, and re-entry procedures and 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 CIS 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

Any student who withdraws from the College for reasons other than academic or administrative may be considered for readmission at any subsequent semester. Applicants who have not attended for **two years or more** must submit a new application and upon readmission, will be subject to the current program of study requirements. A student who has been dismissed for academic or administrative reasons for one semester or more may re-enroll upon approval by the Associate Vice President for Enrollment Services after a review of the student's situation with the division dean. Requests for reenrollment must be in writing and addressed to the Dean of Students. Readmission and any conditions or restrictions attached to such readmission are at the discretion of the College.

Health Sciences curricula may have readmissions policies that differ from the general policies of the College. These policies will be made available to Health Sciences students in the Student Policy Handbook for each 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 tetanus vaccination, completion of the Hepatitis B short series, and undergo tuberculosis screening prior to admission.
- 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.

WE ARE HERE TO HELP!

Locations

Main Campus, 9101 Fayetteville Rd. (401 South), Raleigh, NC 27603 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

Curriculum Admissions

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

Registration and Student Records Services

Location: Main Campus, Student Services Building, Room 243

Phone: (919) 866-5700

Advising

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

CURRICULUM CLASS SCHEDULES

Curriculum class schedules are available online approximately one to two months before the start of the upcoming semester or term through WebAdvisor: http://webadvisor.waketech.edu.

- 1. Visit the WebAdvisor main page
- 2. Click "Future Students"
- 3. Next, click "Admission Information"
- 4. Finally, click "Search for Curriculum Sections"

WebAdvisor instructions and help are available at http://webadvisor.waketech.edu.

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

To qualify for in-state tuition, a legal resident must have maintained his or her domicile in North Carolina for at least the 12 months immediately prior to his or her classification as a resident for tuition purposes. To be eligible for such classification, the individual must establish that his or her presence in the state during such 12-month period was for the purpose of maintaining a bona fide domicile rather than for purposes of mere temporary residency incident to education.

Aliens are subject to the same considerations as U.S. citizens in the determination of residency status for tuition purposes, except that holders of B, C, D, F, J, M, P, Q, or S visas may not be considered residents for tuition purposes and their dependent relatives are not eligible for a tuition rate less than the out-of-state rate. Holders of E, H, L, O, or R visas may (under certain circumstances) be eligible for the in-state tuition rate.

Regulations concerning residency classification for tuition purposes are set forth in detail in A Manual to Assist the Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes. Each enrolled student is responsible for knowing the contents of this Manual, which is the controlling administrative statement of policy on this subject. Copies of the Manual are available for student inspection in the Registration and Student Records Services Division.

Determination of student resident status for tuition purposes:

Upon applying for admission to the College, each prospective student is classified as a resident or non-resident of North Carolina for tuition purposes, according to the student's declaration at the time of application.

In the case of an individual who is originally classified as non-resident and later requests reclassification to resident status, the individual will be asked to complete a "Residency and Tuition Status Application." Along with the completed application, two proofs must be provided support a claim for in-state status. Additional forms may be needed if the student is not a naturalized citizen of the United States. These forms are available on the College's website. Registrar staff will review the application, make a determination about residency status, and advise the individual in writing of the decision.

North Carolina Residency Forms

Residence and Tuition Status Application or

https://secure.waketech.edu/eaglesnest/forms/files/427_SSncresapp.pd

- Attachment A: Visa Information or
- https://secure.waketech.edu/eaglesnest/forms/files/427A_SSncres-visa.doc
- Attachment B: Parent or Spouse of Student or

https://secure.waketech.edu/eaglesnest/forms/files/427B_SSncres-sup.doc

Procedures for Hearing Appeals

In the event that an individual disagrees with the Registrar's ruling on his/her residency status, the ruling may be appealed to the College Residency Committee, which has been established by the President of Wake Technical Community College. The appeal must be made in writing to the Vice President of Student Services.

TRANSCRIPT REQUESTS

Wake Tech's Registration and Student Records Services Division 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 Main, Northern Wake, and Health Sciences Campus with a photo I.D. Transcripts may also be obtained by mail to Registration and Student Records, Wake Technical Community College, 9101 Fayetteville Road, Raleigh, NC 27603; by fax; or by downloading an order form online at http://www.waketech.edu/student-services/registration-student-records/how/order-transcripts.

Mail, fax, and online transcript requests will be processed within two (2) business days. One copy of a transcript will be provided per request.

Official Wake Tech transcripts are **\$5 per copy**. Student 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.

ADVANCED STANDING

Advanced standing is a means by which students can satisfy graduation requirements by applying transfer work and credits from placement examination. When it is determined that work from another college is equivalent to a Wake Tech course(s), students are given an equivalency for the advanced standing work, meaning that it is deemed equivalent to a specified Wake Tech course. However, no academic credit is awarded, and thus the equivalency will 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 advanced standing work at one college does not necessarily mean that acceptance will be given at every college. Students are encouraged to review the advanced standing policies at any college for which 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. Requests must be made with full justification to the appropriate academic dean or designee at the time of registration. Upon approval, the appropriate dean or designee will either direct the student to contact the Individualized Learning Center, on Main Campus, to schedule a time for the examination or contact the dean or department head to schedule the 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 must register and pay tuition for courses to be challenged and must submit requests for challenge examinations after registering for the course(s) to be challenged. In order to get credit on the transcript record, it is necessary to remain registered for a class that has been challenged successfully. ENG 111, 112, 113, and 114 and all other College/University Transfer courses may not be challenged; instead, students may take the appropriate CLEP, AP, or DANTES exam.

Note: Native speakers of French and Spanish are not eligible to receive credit for 100-level foreign language classes.

Most challenge exams are administered within the appropriate department; however, a select number of courses including BUS 110, 121, 137, 147, 153; ENG 101; and PSY 101, 110, and 118 may be taken in the Individualized Learning Center (ILC) on Main 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 is 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.

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

CLEP Examination	Minimum Score Needed for Credit	Wake Tech Equivalency	Semester Hours
<u>Business</u>			
Financial Accounting	50	ACC 120	4
Business Law, Introductory	50	BUS 115	3
Information Systems and Computer			
Applications	50	CIS 110, 111	3
Management, Principles of	50	BUS 137	3
Marketing, Principles of	50	MKT 120	3
Composition and Literature			
American Literature	50	ENG 231, 232	6
Analyzing and Interpreting Literature	50	ENG 261, 262	6
College Composition	50	ENG 111, 112	6
English Composition without Essay	50	ENG 111, 112	6
English Literature	50	ENG 241, 242	6
College Composition Modular	N/A	N/A	N/A
Humanities	50	HUM 211, 212	6
Foreign Languages			
French Language, Level 1	50	FRE 111, 112	6
French Language, Level 2	59	FRE 111, 112, 211, 212	12
German Language, Level 1	50	N/A	N/A
German Language, Level 2	60	N/A	,
Spanish Language, Level 1	50	SPA 111, 112	6
Spanish Language, Level 2	63	SPA 111, 112, 211, 212	12
Level 1 – Equivalent to the first two semesters (or 6 semester hours) of college- level foreign language course work			
Level 2 – Equivalent to the first four semesters (or 12 semester hours) of college- level foreign language course work			
<u>History and Social Sciences</u>			
American Government	50	POL 120	3
Educational Psychology, Introduction to	50	PSY 263	3
History of the United States I: Early	F.0	1110 404	
Colonization to 1877	50	HIS 131	3
History of the United States II: 1865 to Present	50	HIS 132	3
Human Growth and Development	50	PSY 241	3
Macroeconomics, Principles of	50	ECO 252	3
Microeconomics, Principles of	50	ECO 251	3
Psychology, Introductory	50	PSY 150	3

Social Sciences and History	50	HIS 111 and HIS 112	6
Sociology, Introductory	50	SOC 210	3
Western Civilization I: Ancient Near East to		30022	
1648	50	HIS 121	3
Western Civilization II: 1648 to Present	50	HIS 122	3
Sciences and Mathematics			
Biology	50	BIO 111	4
Calculus	50	MAT 263 or MAT 271	4
Chemistry	50	CHM 151	4
		*Students with >50 on Pre-	
		Calculus & College Algebra	
		get MAT 171 credit & MAT	
College Algebra	Special	172*	3
College Algebra – Trigonometry2	50	MAT 175*	4
College Mathematics	0	No Credit	0
Precalculus	50	MAT 172*	4
Natural Sciences	50	N/A	N/A
Trigonometry2	50	N/A	N/A

^{*}Equivalency is given only for the lecture (MAT ###) and not for the lab (MAT ###A)

Table Last updated 4/20/15

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 (MAT 271 for four credit hours) may be awarded for the AP Calculus AB exam with a score of three, four, or five; two courses of credit (MAT 271 and 272 for eight credit hours) may be awarded for the AP Calculus BC exam with a score of three, four or five. 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.

AP Examination	Minimum Score Needed for Equivalency	Wake Tech Course Equivalency	Semester Hours
Art History	3	ART 114 and ART 115	6
Biology:	3	BIO 111	4
	4	BIO 111 and BIO 112	8
Chemistry:	3	CHM 151	4
	4 or 5	CHM 151 and CHM 152	8
Computer Science A	3	CIS 115	3

Computer Science B	3	CIS 115 and CSC 120	7
Economics, Macro	3	ECO 252	3
Economics, Micro	3	ECO 251	3
English, Language and Composition	3	ENG 111 and 112 or	6
English, Literature and Composition	3	ENG 111 and ENG 113	6
Environmental Science	3	BIO 140 and BIO 140A	4
European History	3	HIS 121 and HIS 122	6
French Language & Culture:	3	FRE 111, 181, 112, and 182	8
	4	FRE 111, 181, 112, 182, 211, and 281	12
	5	FRE 111, 181, 112, 182, 211, 281, 212, and 282	16
French Language Literature:	4	FRE 111 and 181	4
	5	FRE 111, 181, 112, and 182	8
Spanish Language & Culture:	3	SPA 111, 181, 112, and 182 SPA 111, 181, 112, 182,	8
	4	211, and 281 SPA 111, 181, 112, 182,	12
	5	211, 281, 212 and 282	16
Spanish Language Literature:	4	SPA 111 and 181	4
	5	SPA 111, 181, 112, and 182	8
Government and Politics, Comparative	3	POL 210	3
Government and Politics, United States	3	POL 120	3
Mathematics, Calculus AB	2	MAT 263*	4
	4	MAT 271	4
Mathematics, Calculus BC:	3	MAT 263*	4
	3	MAT 271	4
	4	MAT 271 and MAT 272	8
Physics, Physics B:	3	PHY 131 and PHY 133 or PHY 151 and PHY 152 or PHY 251	8 8 4
Physics, Physics C: Mechanics	4	PHY 251	4
Physics, Physics C: Electricity and Magnetism	4	PHY 252	4
Physics 1: Algebra based	4	PHY 151	4
Physics 2: Algebra based	4	PHY 152	4
Psychology	3	PSY 150	3
Spanish – Language and Literature:	3	SPA 111 and SPA 112	6
	4	SPA 211	3
	5	SPA 212	3
Statistics	3	MAT 152*	4
US History	3	HIS 131 and 132	6

*Equivalency is given for only the lecture (MAT ###) and not for the lab (MAT ###A)
Table Last updated 4/28/17

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.

DANTES Examination	Minimum Score Needed for Equivalency	Wake Tech Course Equivalency	Semester Hours
Art of the Western World	48	ART 114	3
Introduction to World Religions	49	REL 110	3
Principles of Public Speaking	47	ENG 115	3
Technical Report Writing (all other divisions)	47	ENG 114	3
Technical Report Writing 118 & AHS division award	(CET division awards CTS- ls ENG-110 per the Deans)		
Introduction to Computing	45	CIS 110	3
Fundamentals of College Algebra	0	No Credit	0
Introduction to Business (CTS 115 FOR CET DIV)	46	BUS 110	3
Management Information Systems	46	CTS 115	3
A History of the Vietnam War	44	HIS 167	3
Ethics in America	46	NO CR	0
General Anthropology	47	ANT 210	3
Human/Cultural Geography	48	GEO 110	3
Introduction to the Modern Middle East	47	NO CR	0
Rise and Fall of the Soviet Union	45	HIS 242	3
The Civil War and Reconstruction	47	HIS 226	3
Western Europe Since 1945	45	NO CR	0
Business Law II	44	BUS 116	3
Business Mathematics	48	BUS 121	3
Criminal Justice	49	CJC 111	3
Human Resource Management	46	BUS 153	3
Introduction to Business	46	BUS 110	3

Personal Finance	46	BUS 125	3
Principles of Finance	46	BUS 225	3
Principles of Financial	47	ACC 120	4
Accounting			
Principles of Supervision	46	BUS 137	3
Principles of Statistics	48	MAT 152	4
Principles of Physical	0	No Credit	0
Science			
Astronomy	48	AST 151 (no	3
		credit for AST 151A)	

Table Last updated 4/13/16

JST (Joint Services Transcript)

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 AARTS transcript sent to the college. The appropriate dean or department head will evaluate the transcript, and equivalency will be awarded as appropriate.

Effective January 1, 2013, AARTS transitioned to a new electronic transcript service called JST (Joint Services Transcript). JST has produced 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 DANTES-funded test scores. The merger of AARTS with JST was completed December 31, 2012. Personnel data should be reviewed to ensure accuracy and documentation of completed training in the Army Training Requirements and Resource System (ATRRS).

Navy Articulation Agreement

Wake Tech will award equivalencies for specific naval training courses in partial fulfillment of program requirements leading to an Associate in Applied Science degree in Industrial Systems Technology. Completion of coursework through Wake Tech and the Navy training curricula and job experience is required before the student is eligible to receive the associate's degree from Wake Tech.

US Navy Course	Wake Tech Course Equivalency	Semester Hours
Basic Ent. Submarine School	BPR 111	3
	MNT 110	2
Mach. Mate Sub. A	ELC 117	4
	HYD 121	2
	PLU 111	2
MM/Auxiliary	MNT 111	
Fireman	BPR 130	2
	MNT 150	2
Sub. Atmosphere Systems	AHR 112	4
Third Class (E-4)	ELC 113	4
	PLU 211	3
	ELC 115	4
	MNT 240	2
Pneumatics Submarine Maintenance	MNT 220	2
Sub. Refrig. R-12	AHR 113	4
Sub. Hyd. Combined	MNT 230	2

Table Last reviewed 4/20/16

Curriculum French and Spanish Placement Exams

Students who are proficient in a foreign language and want to earn credit as soon as possible should take the CLEP exam. Visit http://www.collegeboard.org/ for more information on CLEP testing.

Foreign language faculty reserve the right to ask students to take the Language Placement Exam. Students should start the challenge examination process as soon as they register for a course; they must take all challenge examinations no later than the 10 percent point of the semester or term. Examination results are available through Registration and Student Records (with photo ID); results will be mailed after the exams have been graded.

The following students **must** take the Wake Tech Language Placement Exam to determine the level at which they should continue language studies:

- Native French and Spanish speakers: Students whose primary literacy education was in French or Spanish.
- Heritage learners: Students whose primary literacy education was not in French or Spanish. Language skills vary and may not include reading and writing skills in the second language.
- Students who have completed three years of high school study of a language with a grade of B (87) or better for each year of study.
- Students who have lived or studied in a French- or Spanish-speaking country.
- Transfer students returning to the study of French or Spanish begun in high school but not pursued at the college level.

Students may take the Language Placement Exam in a foreign language only once; they may **not** take the exam if they are currently taking or have taken a foreign language course at Wake Tech. Students who believe their placement level is not correct should contact the Foreign Language Department Head.

Certified Professional Secretary® (CPS®) and Certified Administrative Professional® (CAP®) Credentials
Students applying for entry into: Office Administration, Office Administration/Legal, Medical Office Administration, Business
Administration, Business Administration/Human Resources Management, and Business Administration/Electronic
Commerce programs will be granted equivalency for related Wake Tech equivalencies, upon documented proof of earning the CAP, CPS, CPC, CCA, or CCS-P rating within the last six years.

CAP or CPS Rating	Wake Tech Course Equivalency	Semester Hours
Part I Finance and Business Law	BUS 115	3
	ACC 120	4
	ECO 252	3
Part I (a.) Office Systems &	OST 131	2
Technology	CIS 110	3
Part II Office Systems and	BUS 260	3
Administration	CIS 110	3
	OST 131	2
	OST 181	3
Part II (a.) Office Administration	OST 184	3
	BUS 260	3
Part III Management	BUS 137	3
	BUS 151	3
	BUS 153	3
Part IV Organizational Planning	HUM 230	3
	BUS 137	3
	BUS 153	3
CPC, CCA, or CCS-P	Wake Tech Course Equivalency	Semester Hours
CPC Certificate	OST 148, OST 247, and OST 248	7
CCA Certificate	OST 148, OST 247, and OST 248	7
CCS-P Certificate	OST 148, OST 247, and OST 248	7

Table Last reviewed 4/20/16

Computer Concepts Equivalencies

Wake Tech will award equivalencies for specific computer-related credentials awarded by a third party, including IC3 Exams by Certiport, Microsoft Certification, Cisco Course Completion and Certification, as well as CompTIA certification.

Computer Accrediting Agency	Wake Tech Course Equivalency	Semester Hours
IC3 Exams by Certiport		
IC3 – Living Online	CIS 111	2
Key Applications		
Computing Fundamentals		
(All 3 must be successfully completed)		
Microsoft		
Windows 8.1-Configuring	NOS 130	3
Windows 8.1 – Enterprise Desktop Supt. Tech.	CTS 272	3
Windows Server 2012 – Server Administrator	NOS 230	3
Windows Server 2012 – Ntwk. Infrastruct. Config.	NOS 231	3
Windows Server 2012 – Appl. Infrastruct. Config.	NOS 232	3
Windows Server 2012 – Active Directory Config.	NET 198	3
Cisco: Exploration track Partial Course Completion		
CCNA Exploration 1: Network Fundamentals	NET 125	3
CCNA Exploration 2: Routing Protocols & Concepts	NET 126	3
CCNA Exploration 3: LAN Switching & Wireless	NET 225	3
CCNA Exploration 4: Accessing the WAN	NET 226	3
CCNA Discovery track Partial Course Completion		
CCNA Discovery 1: Networking for Home & Small Business		0
CCNA Discovery 2: Working at a Small-to-Medium Business		Ŭ
or ISP	NET 125	3
CCNA Discovery 3: Introducing Routing & Switching in the Enterprises	NET 125	3
CCNA Discovery 4: Designing & Supporting Computer Networks		12
*If only 1 is complete, NO CREDIT is awarded. If BOTH 1 &		
2 are complete, NET 125.	NET 125	3
*If ONLY 1, 2 & 3 are complete	NET 125	3
*If 1-4 are complete	NET 125, NET 126, NET 225, and NET 226	12
CCNA Discovery and Exploration MIXED completion	NET 125	3
CCNA Discovery 1: Networking for Home & Small Business		0
CCNA Discovery 2: Working at a Small-to-Medium Business or ISP	NET 125	3

CCNA Exploration 2: Routing Protocols & Concepts	NET 126	3
CCNA Exploration 3: LAN Switching & Wireless	NET 225	3
CCNA Exploration 4: Accessing the WAN	NET 226	3
*If only 1 is complete, NO CREDIT is awarded.		
*If BOTH 1 & 2 are complete, NET 125.		
CCNP: Implementing Cisco IP Routing	NET 270	3
CCNP: Implement Cisco IP Switched Networks	NET 272	3
CCNP: Troubleshooting & Maintain Cisco IP Networks	NET 273	3
Cisco: Completed Certification Process		
	NET 125, NET 126, NET	
Cisco Certified Network Associate (CCNA)	225, and NET 226	12
Intercon. Cisco Ntwk Devices 1/Cisco Cert Ent Lev Tech.		
(ICND1)	NET 125	3
	NET 125, NET 126, NET	
Interconnecting Cisco Network Devices 2 (ICND2)	225, and NET 226	12
	NET 270, NET 272, and	
Cisco Certified Network Professional (CCNP)	NET 273	9
Cisco Certified Design Associate (CCDA)	NET 240	3
CompTIA		
CompTIA	075 420 1075 220	
A+ Escaptials & A+ Dractical Applications	CTS 120 and CTS 220 or CTS 120 and NOS 110	6
A+ Essentials & A+ Practical Applications		6
Network +	NET 110	3
Security +	SEC 110	3
(Note: *depending on the student's program, course set ca	n be alternated)	

Table Last updated 4/20/16

Associate Degree Nursing - Advanced Placement Option for LPNs

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 155, BIO 175, ENG 111, PSY 150, and PSY 241.

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

LPN Credentials	Wake Tech Course Equivalency (Awarded at end of program)	Semester Hours
LPN Diploma and Licensure	NUR 111	8
	NUR 112	5
	NUR 113	5
	NUR 211	5

Table Last reviewed 4/20/16

Emergency Medical Science Advanced Placement through Certification

Students may receive advanced standing through certification. Students should contact the Department Head of EMS with questions about additional advanced standing.

Certification	Wake Tech Course Equivalency	Semester Hours
EMT – Basic Certification	EMS 110	7
One year active service as an EMT	EMS 150	2
EMT – Intermediate Certification	EMS 120 and EMS 121	5

Table Last reviewed 4/20/16

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.

CAGC Course	Wake Tech Course Equivalency	Semester Hours
Course 1 – Professional Construction Supervisor	CMT 210	3
Course 2 – Total Safety Performance	CMT 212	3
Course 3 – Effective Preplanning and Project Scheduling	CMT 214	3
Course 4 – Cost Control and Productivity Improvement	CMT 216	3
Course 5 – Human Side of Project Success	CMT 218	3

Table Last reviewed 4/20/16

International Baccalaureate (IB) Credit

Students may receive credit for achieving acceptable scores on the International Baccalaureate (IB) examinations.

IB College Credit	Minimum Score Needed for Equivalency	Wake Tech Course Equivalency
IB Biology (Standard Level)	4+	BIO 110
IB Biology (Higher Level)	4+	BIO 111
IB Environmental Systems (Standard Level)	4+	BIO 140/140A
IB Chemistry (Higher Level)	4+	CHM 151/152
IB General Chemistry (Standard Level)	4+	No Credit
IB Applied Chemistry	4+	No Credit
IB Computing Studies (Higher Level)	4+	CSC 120
IB Computing Studies (Standard Level)	4+	No Credit
IB Economics (Higher Level)	4+	ECO 251/252
IB English A1 (Higher Level)	4+	ENG 113
IB English A1 (Standard Level)	4+	ENG 111
IB English B	4+	No Credit
IB Geography	4+	GEO 111
IB History (Higher Level)	4+	HIS 112 or HIS 122
IB History (Standard Level)	4+	No Credit
IB Mathematics (Higher Level)	4+	MAT 271/272

IB Advanced Mathematics	4+	MAT 271/272
(Higher Level)		
IB Mathematical Studies	4+	MAT 161 or MAT 171
(Standard Level)		
IB Mathematical Methods	4+	MAT 161 or MAT 171
(Standard Level)		
IB Philosophy	4+	No Credit
IB Physics (Higher Level)	4+	PHY 251/152
IB Physics (Standard Level)	4+	PHY 151/152
IB Spanish	4+	SPA 111/181,112/182,211/212

^{*}This chart is a guideline of possible transfer credit. Credit can also be awarded at the discretion of the dean.

Table Last updated 4/20/16

Business Industry Certifications

This chart is a guideline of possible transfer credit. Credit can also be awarded at the discretion of the dean or department head.

Business and Industry Certifications/Agency	Wake Tech Course Equivalency	Semester Hours
Cisco Certified Network Associate (CCNA)	NET 125, NET 126, NET 225, & NET 226	
CompTIA A+	CTS 120 and CTS 220	
Certified Administrative Professional Exam: Part I. Finance & Business Law	BUS 115, ACC 120, & ECO 253	
Certified Administrative Professional Exam: Part II. Office Systems & Administration	BUS 260, OST 080, & OST 181	
Certified Administrative Professional Exam: Part III. Management	BUS 137, BUS 151, & BUS 153	
Certified Administrative Professional Exam: Part IV. Organizational Planning	HUM 230	
Association of Operations Management: CPIM/CSCP	LOG 215	
U.S. Customs and Border Protection: CBP	LOG 235	
Institute of Supply Management: CPM	LOG 240	
Basic NC Correctional Officer Trng Cert	CJC 141, CJC 225 & CJC 233	9

Table Last updated 4/28/17

High School Articulation Agreement

The North Carolina Department of Public Instruction and the North Carolina Community College System have a statewide articulation agreement allowing eligible students to earn college credit for completion of identified Career Technical Education (CTE) courses in high school. The agreement creates a seamless process through which students can move from

high school to community college without repetition of courses or duplication of effort.

Credit for CTE courses is based on the following criteria:

- Final grade of B or higher in CTE course
- RAW score of 93 or higher on standardized CTE post-assessment test (effective fall 2012)
- Enrollment in community college within two years of high school graduation

The student's official high school transcript must include the CTE post-assessment scores. Community college officials will verify CTE courses on the high school transcript and accept for college credit.

TRANSFER CREDITS

Transferred Coursework

Wake Tech will consider courses for transfer equivalency from other colleges or accredited collegiate institutions, provided those institutions are accredited by a commission that is responsible for accrediting degree-granting, collegiate institutions and is housed within 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. Courses not equivalent to a specific Wake Tech course may be accepted as elective credit at the discretion of the college. Official transcripts from accredited institutions will be reviewed against established standard equivalencies; transfer equivalency will be recommended by the appropriate dean or 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.

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.

NOTE: A granted course equivalency does not mean that the course 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. 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.

Some programs may also have a time limit on transferability of selected courses. The academic dean has the option of moving the student to a more current version of the program of study, which may alter the impact of previously-awarded transfer credit toward program completion.

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 percent 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 (SACS-COC) 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.

CHANGE PROGRAM OF STUDY

Students wishing to change from one curriculum to another must initiate the change through an advisor at Main, Northern Wake, Perry Health Sciences, Western Wake, or Public Safety Education Campus. Students receiving Veteran Affairs educational benefits must also file the request for a program of study change (VA form 22-1995) with the college Veteran Services office.

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 Main, Northern Wake, and Perry Health Sciences Campus. **Forms must be accompanied by copies of 1) the legal document authorizing the name change and 2) the student's social security card 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 WebAdvisor.

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

SECURITY OF STUDENT RECORDS

Annual Notice To Students Of Their Rights Under The Family Educational Rights And Privacy Act Of 1974

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 (by the fifth day 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 Enrollment and Records Services Division.

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. 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. 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. Students' college-issued electronic mail addresses
- 2. 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.

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.

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

Main Campus: 9101 Fayetteville Road (401, south of Garner), Raleigh NC 27603 Northern Wake Campus: 6600 Louisburg Road (401, north of I-540), Raleigh NC 27616 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

Curriculum Admissions

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

REGISTRATION AND RECORDS

Registration and Student Records Services

Main Campus: Student Services Building, Room 243 919-866-5700 or registrar@waketech.edu

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

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 after January 1 for the upcoming academic year, using your/your parents' prior year's federal tax information. If you prefer not to complete the application online you may call the Central Processing Center (1-800-433-3243) and request a paper application.

DEADLINE & "PRIORITY" DATES

IF YOU PLAN TO ENROLL:	FAFSA must be completed online by:	All required paperwork must be submitted to the Financial Aid Office by:	
Fall Semester	May 1	June 1	
Spring Semester	October 1	November 1	
Summer Term	April 1	April 15	

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

Once your eligibility for financial aid has been determined you will receive an e-mail notifying you that your financial aid award may be viewed on WebAdvisor. The e-mail notification will be sent to your official student e-mail address, my.waketech.edu.

If your eligibility for financial aid has not been determined or your file is not complete by the dates listed above, you will be responsible for payment of your tuition, fees, and bookstore charges.

STUDENT RESPONSIBILITIES

To receive Federal Title IV assistance and state assistance, a student must:

- Demonstrate financial need.
- Have a valid high school diploma or a High School Equivalency certificate on file with the college. (See NOTE below.)
- Be enrolled at least half time (6 credit hours) in an eligible program of study.
- Be a U.S. citizen or an eligible non-citizen.
- · Have a valid Social Security Number.
- Maintain satisfactory academic progress.
- Sign a statement on the FAFSA certifying that federal student aid will be used for educational purposes only
- Certify that you are not in default on a federal student loan and do not owe money on a federal student grant.
- 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 determined to be 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.

If first period of enrollment was before July 1, 2012, the student must do one of the following:

- 1. Complete GED; or
- 2. Pass an approved ability to benefit test and earn the minimum required score; or
- 3. Have completed at least 6 credit hours or 225 clock hours that are applicable toward a degree, diploma, or certificate: or
- 4. Have transferred six credit hours from another institution.

If first period of enrollment was after July 1, 2012, the student must complete GED.

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.

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 "Veterans." 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 11, 2001, may be eligible for Post 9/11 GI Bill benefits. Benefits are payable for training on or after August 1, 2009. More information about these benefits is available at www.gibill.va.gov.

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 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 also must sumbit 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 Main Campus in the Student Services Building, room 143, or Northern Wake Campus, Building C, room 217, for more information.

Veterans are afforded the same rights as any Wake Tech student and must meet the same academic requirements and standards. Veterans must meet the grade-point average (GPA) standards established in Wake Tech's Academic Probation and Suspension policy. A veteran failing to meet GPA standards at the end of a term will be placed on probation. A veteran failing to meet those standards at the end of the next term in attendance will have VA enrollment certification terminated and benefits suspended. Enrollment certification will not be restored until GPA standards are met, or upon approval of a Satisfactory Academic Progress Appeal (SAP) Form.

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

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.

There is no additional charge for enrolling in non-traditional courses.

Online remedial courses cannot be certified for GI Bill benefits.

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

Veteran Services Office Hours and Locations

Southern Wake (Main) Campus

Student Services Building (SSB), Room 143 Monday-Thursday, 8:00 a.m.–5:00 p.m. Friday 8:00am - 5:00 p.m. (by appointment only after 2:00 p.m.)

Northern Wake Campus

Building C, Room 217
Monday-Thursday, 8:00 a.m.-5:00 p.m.
Friday 8:00am - 5:00 p.m. (by appointment only after 2:00 p.m.)

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.

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. Financial aid will not be given for courses for which the student receives transfer credit.

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

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 2017-2018, annual awards range from \$ 593-\$5920. The maximum PELL-eligible Estimated Family Contribution (EFC) is \$5328, with a minimum award for a full-time student of \$606. Award ranges are subject to change based on congressional action.

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 awarded 100% for the year. Pell grants are only available to undergraduate students. Once a bachelor degree is earned, the student is no longer eligible for Pell, even if the 600% eligibility has not been met. Students are required to meet and maintain satisfactory academic progress standards to maintain eligibility.

Federal Supplemental Educational Opportunity Grants (FSEOG)

To be considered, students must be PELL-eligible. Students with an EFC of zero who submit the FAFSA by March 15 and all supplemental paperwork by May 1 will receive priority consideration. The maximum award at Wake Tech is \$800 per academic year. Awards may be reduced for students enrolled less than half time.

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. For more information pertaining to the Federal Work Study Program, visit the Financial Aid webpage at: http://www.waketech.edu/student-services/financial-aid/federal-work-study-program.

Iraq and Afghanistan Service Grant (IASG)

If your parent or guardian died as a result of military service in Iraq or Afghanistan, you may be eligible for an Iraq and Afghanistan Service Grant, provided 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

North Carolina Community College Grant Program (NCCCG)

Students must complete the FAFSA to be considered for these grants and must be a North Carolina resident enrolled for at least six (6) credit hours in an eligible curriculum program. Students must have an EFC within the range determined by the state of North Carolina each academic year. Student must meet all Federal PELL grant eligibility requirements. 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.

North Carolina Education Lottery Scholarship (NCELS)

Students must complete the FAFSA to be considered for this grant and must be a North Carolina resident enrolled for at least six (6) credit hours in an eligible program of study. Students must meet all Federal PELL grant eligibility requirements. Students who have already earned a bachelor's degree or have exceeded the lifetime limit of 10 full-time semesters are not eligible.

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.

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.

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.

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.

2016-17 Direct Loan Interest Rates and Fees

(for loans with a first disbursement date on or after July 1, 2016 to June 30, 2017)

Subsidized Interest Rate: 3.76% Fee: 1.069%*

Unsubsidized Interest Rate: 3.76% Fee: 1.069% *

*Direct Loan Fee: The Subsidized and Unsubsidized Federal Direct Stafford Loans have a 1.069% origination fee which will be deducted from the gross amount of the loan borrowed.

Interest rates are subject to change July 1, 2017, and origination fees are subject to change October 1, 2017.

North Carolina Loan Programs

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.

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 in the financial aid office and 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 award, 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 award 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 award 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 Award 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 awarded under the assumption that a student will remain in classroom attendance for the entire period (semester) for which the funds were awarded.

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 awarded. 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 awarded 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 awarded.

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 30% 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 awarded financial aid, because your financial aid award 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.

STANDARDS OF SATISFACTORY ACADEMIC PROGRESS FOR FINANCIAL AID RECIPIENTS

Standards of Satisfactory Academic Progress for Financial Aid Recipients Effective July 1, 2013

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, North Carolina Community College Grant, North Carolina Education Lottery Scholarship, North Carolina Student Incentive Grant, 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 terminated 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 GPA and cumulative completion rate for the purpose of determining Satisfactory Academic Progress for financial aid recipients. 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, 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 terminated. 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 terminated. 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 ($64 \times 150\% = 96$). To determine the published length of a program, please refer to the Wake Technical Community College Catalog.

A student who exceeds the maximum allowable time frame for completing a program of study may appeal. The student must provide a graduation plan signed by his/her academic advisor; if the plan is deemed reasonable, 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 termination of financial aid.

Appeals

Students may appeal the termination of their financial aid eligibility in the event of documented extenuating circumstances, such as illness or injury of the student or the death of an immediate family member. 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 and addressed to the director. The Satisfactory Academic Progress Appeals Committee will review the appeal and notify the student in writing regarding the status of the appeal. Students are generally limited to two termination 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 next semester of attendance. The student will, in conjunction with the SAP committee, develop an individualized academic plan that must be followed in order to continue enrollment. The plan may include requirements for academic performance 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, and a new academic plan will be developed. 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", "WP", "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 satisfactory progress requirements.

Incompletes: Students will not be affected by "incompletes" at the time of the review. Upon notification 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.

KEY TERMS RELATED TO SATISFACTORY ACADEMIC PROGRESS STANDARDS

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 Termination: 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 terminated. Financial aid will also be terminated for students who have attempted the maximum allowable credit hours for their program of study.

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

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

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.

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.

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.

Petition of Waiver of Satisfactory Academic Progress Standards: Students who have been disqualified from receiving financial aid may request a waiver of the satisfactory progress requirements by submitting a Satisfactory Academic Progress Appeals 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 may include but are not limited to illness or injury of the student or an immediate family member, death of a family member, and full-time employment. If the student's financial aid is reinstated, the student is placed on probation and an Academic Plan established; the student is expected to meet the satisfactory academic progress standards by the end of the semester.

All appeals are reviewed by the SAP Appeals Committee, and the decision of the committee is final. Appeals are not retroactive; they are approved for the current semester only. The SAP Appeals Committee is composed of the Dean of Financial Aid and Veteran Affairs, the Registrar or designee, an academic counselor, and a faculty member.

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 termination 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 Financial Aid Director (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

Main Campus

9101 Fayetteville Rd. (401 South), Raleigh Student Services Bldg Rom 015 Monday-Thursday 8:00 a.m. - 6:00 p.m.

*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 8:00am - 4:00pm (limited services)

Western Wake Campus Millpond Village

3434 Kildaire Farm Rd., Cary Room 255, Tuesday 10:00 a.m. - 12:00 pm

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 (1 imited Services offere

*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 - 3:00 pm

Main 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

ATTENDANCE POLICY

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 complete 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 Web Advisor, 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.

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 WebAdvisor 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 NA:

Students who never attend and do not drop on or before the drop deadline are assigned a grade of NA (never attended). There is no tuition refund for classes that are not dropped by the published drop and refund deadlines.

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.

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 **special 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.

PRE-CURRICULUM

The Pre-Curriculum program is designed to prepare students for college-level coursework by helping them develop the reading, English, and mathematics skills required for entry into curriculum courses. Any person who has a high school diploma or a GED may enroll in pre-curriculum courses. The number of courses and the time required to complete them will vary. Some students may need only one course, while others may take several semesters to complete a series of courses.

Students are placed in pre-curriculum courses on the basis of their admissions test scores, the recommendation of their advisor or instructor, or their own voluntary selection. Students who require pre-curriculum courses in more than one discipline will be required to take a study skills course, ACA 090. This course has been designed to improve pre-curriculum students' success in both pre-curriculum and curriculum courses. Depending on individual circumstances and pending advisor approval, students may take pre-curriculum and curriculum courses during the same term. Most pre-curriculum courses are offered every term, both day and evening. A student taking required pre-curriculum courses must earn a grade of "C" or better on a seven-point scale to progress to the curriculum program or next pre-curriculum course level. A grade of "F" requires the student to repeat the course.

Pre-Curriculum Courses:

ENG 070, ENG 080, ENG 090, RED 070, RED 080, RED 090, DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, DMA 070, DMA 080, and ACA 090

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 WebAdvisor 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

Students are graded according to the following grade-point system in all courses, except Pre-Curriculum.

GRADE POINTS

<u>Grade</u>	Per Credit	Explanation
Α	4	Excellent
В	3	Very Good
С	2	Satisfactory
D	1	Poor

<u>Grade</u>	Per Credit	Explanation Explanation
F	0	Failing
W	0	Withdrawal (prior to 60%)
WF	0	Withdrawal – Failing (after 60%)
WP	0	Withdrawal – Passing (after 60%)

Students in Pre-Curriculum Reading and English courses are graded according to the following system.

<u>Grade</u>	<u>Explanation</u>
Α	Excellent
В	Very Good
С	Satisfactory
F	Failing
W	Withdrawal (prior to 60%)
WF	Withdrawal – Failing (after 60%)
WP	Withdrawal – Passing (after 60%)

Students in Pre-Curriculum Math courses (DMA or DMS course prefixes) are graded according to the following system.

<u>Grade</u>	Explanation
Р	Pass
R	Repeat (maps to a 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.

<u>Grade</u>	Explanation
AU	Audit
FG	Forgiven
I	Incomplete
IP	In Progress (Pre-Curriculum and Multi- entry/multi-exit classes only)
NA	Never Attended
Р	Pass (Developmental Mat and Work Based Learning Use Only)
R	Repeat (Developmental Math Use Only)
W	Withdrew
WP	Withdrew Passing (after 60%)
Т	Transfer Credit
X	Credit by Examination

A grade of Incomplete (I) will be given only when circumstances justify additional time for the completion of a course. 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 two business days after the deadline for faculty to submit final grades. To view grades, access WebAdvisor. Click on Current Students and select Grades under Academic Profile. 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):

- 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, beginning Fall 2006, the best grade (except when the repeat results in a grade of I, IP, NA, 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	Α	4	12
Physics	3	D	1	3
Economics	3	В	3	9
Chemistry	5	F	0	0
Psychology	3	С	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. Grades of NA (never attended) are recorded on the student's official academic record but are not considered a course repetition. 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 block** on their third attempt to repeat a course and must contact the appropriate department in order to proceed. The block 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. (Item 45550, Records Retention and Disposition Schedule Amendment, as amended August 1, 2002).

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 and College registrar; WebAdvisor 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.

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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.

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 pre-curriculum courses are not counted in credit hours attempted; thus, grades from pre-curriculum classes are not counted toward cumulative GPA. Likewise, courses with a grade of NA (never attended), AU (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 Pre-Curriculum Courses

The objective of the pre-curriculum program is to assist students in obtaining the academic skills they need to succeed in a curriculum program. Therefore, a student taking required pre-curriculum courses must earn a grade of "C" or better to progress to a curriculum program or to the next level in a pre-curriculum course. A grade of "F" requires the student to repeat the course.

ACADEMIC STANDING LEVELS

Warning

If the cumulative GPA of a student is below 2.0 at the end of the spring semester, when final grades are submitted to the Registrar, the student will be placed on academic warning. Students who have been placed on academic warning will receive e-mail notification from Student Services at their college-issued address. Students on academic warning will be encouraged to consult with a Student Services advisor or faculty advisor within the first 10 days of the semester to learn about available academic resources and services.

Probation

If the cumulative GPA of a student who is already on academic warning remains below 2.0 at the end of the spring semester, when final grades are submitted to the Registrar, he or she will be placed on academic probation. Students who have been placed on academic probation will receive e-mail notification from the Curriculum Dean of Registration & Student Records at their college-issued address.

Students on academic probation will have a restriction placed on their record by the Registrar to prevent access or continued access to the registration system and will be required to meet with a Student Services advisor or counselor to develop an Academic Probation/Suspension Success Contract. Depending on the student's major, the advisor should release the restriction to restore the student's access to the registration system once the Academic Success Contract has been created and signed by the student. The Academic Probation/Suspension Success Contract may be obtained from an Academic Advisor or counselor.

Suspension

If the cumulative GPA of a student who is already on academic probation remains below 2.0 at the end of the spring semester, when final grades are submitted to the Registrar, he or she will be placed on academic suspension. Students who have been placed on academic suspension will receive e-mail notification from the Curriculum Dean of Registration & Student Records at their college-issued address.

Suspension means that students are blocked from registering for classes and may not remain in any classes for which they have pre-registered. The Registrar will drop registration for suspended students when the notifications are sent. The Registrar will authorize a refund of any tuition and fees paid. The Financial Aid Director will cancel financial aid for the term. Students on academic suspension are not allowed to participate in college functions, including but not limited to athletics, student activities, and clubs; or to use college facilities, such as the student lounge, etc. As non-enrolled students, they are considered visitors and must abide by college rules for visitors.

Appeal Process for Students on Academic Suspension

Students on academic suspension may request an appeal in order to continue their enrollment by submitting an online Appeal

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of Academic Suspension form. The appeal will be considered by the Academic Standing Review Committee if the student's transcript shows that while the cumulative GPA of 2.0 has not been achieved, significant progress has been made. Significant progress would mean a minimum 2.0 GPA for the most current term and/or a grade of C or better in all pre-curriculum courses for the current term. Appeal decisions will be sent to the student's Wake Tech e-mail address.

If the appeal is approved, the student must meet with a counselor or advisor to develop an Academic Probation/Suspension Success Contract; the registration hold will then be removed to restore the student's access to the registration system. Students should understand that course availability may be limited, and that there should be no expectation of availability of the courses from which they may have been dropped. A student who fails to adhere to the conditions specified in the Academic Probation/Suspension Success Contract, at any point during the semester, will have his or her registration deleted. Students who have been granted an appeal are not eligible to participate in intercollegiate athletics, as the primary goal is to improve academic performance.

If the appeal is denied, the student must sit out for one semester and follow the reinstatement process as outlined in the following section.

Reinstatement Process for Students Not Appealing Academic Suspension

Students who choose not to appeal their academic standing or whose appeal is denied may request reinstatement for a future term (after sitting out one term of suspension) by submitting an Academic Suspension Reinstatement Plan to the Academic Advising Department. In order for reinstatement to be considered, students must attend a required Student Success Workshop sponsored by the Academic Advising department. Requests for reinstatement must be received one month prior to the start date of the term for which the student wants to re-enroll.

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, including graduation fees, which are to be paid during registration for the term in which graduation requirements will be completed.

* 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 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.

Dean's List

The College publishes a "Dean's List" at the end of each academic term, composed of 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.

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

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Application for Degree/Diploma/Certificate form to the Registration and Student Records Services Division. Application 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. They must request a graduation clearance by submitting an Application for Degree/Diploma/Certificate form to the Registration and Student Records Services Division by the 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 South - Main 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 North - Northern 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

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2017 Critical Success Factors Eight Performance Measures for Accountability

A. Basic Skills Student Progress

Percentage of students who progress as defined by an educational functioning level.

System Goal (Excellence Level) 68.3%

System Baseline (Baseline Level) 34.5%

Average NC System Percentage Completed

59.1%

Wake Technical Community College						
Total Students	Completing Level	Percent Completing 2015-2016	Percent Completing 2014-2015			
3,358	2,193	65.3%	62%			

B. Student Success Rate in College-Level English Courses, Fall 2014 Cohort

Percentage of first-time Associate Degree seeking and transfer pathway students passing a credit-bearing English course with a "C" or better within their first two academic years.

System Goal (Excellence Level)

(Baseline Level)

System Baseline Average NC System Percentage

Successful 50.9%

55.9%

23.8%

	Mala Taskadasi	# Students	# Success	% Successful	
	Wake Technical Community College	# Students	# Success	2014	2013
		3,441	2,482	52.2%	49%

C. Student Success Rate in College-Level Math Courses, Fall 2014 Cohort

Percentage of first-time Associate Degree seeking and transfer pathway students passing a credit bearing Math course with a "C" or better within their first two academic years.

System Baseline

System Goal (Excellence Level) 32.5%

(Baseline Level) 10.1%

Average NC System Percentage Successful 29%

% Successful # Students # Success Wake Technical 2014 2013 **Community College** 3,441 1,108 32.2% 31%

D. First Year Progression

Percentage of first-time fall curriculum students attempting at least 12 hours within their first academic year who successfully complete at least 12 of those hours.

System Goal (Excellence Level)

System Baseline (Baseline Level)

Average NC System Percentage Successful

75.0%

70.5%

54.1%

Wake Technical Community	# Cabart	12 hrs	12 hrs successfully completed	% Successful			
	# Cohort	attempted		2015-16	2014-15	2013-14	2012-13
College	3,667	2,922	1,991	68.1%	68%	68%	72%

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E. Curriculum Completion

Percentage of first-time fall credential seeking students who graduate, transfer, or are still enrolled with 36 non-developmental hours after 6 years.

System Goal (Excellence Level) 51.9%

System Baseline (Baseline Level) 35.9%

Average NC System Percentage Graduate and Transfer - 8% (2010)

Average NC System Percentage Graduate, Not Transfer - 14% (2010)

Average NC System Percentage Transfer, Not Graduate - 20% (2010)

Average NC System Percentage Retained, Not Graduate or Transfer - 2% (2010)

Average NC System Percentage Graduate, Transfer or Retained - 44% (2010)

	#	# % Graduates and Transfer			
Wake Technical Community College	Cohort	2010	2009	2008	2007
	3,050	9%	7%	7%	7%

Wake Technical Community College	% Graduate, Not Transfer				
	2010	2009	2008	2007	
	13%	12%	10%	11%	

Wala Taskalada	% Transfer, Not Graduate			
Wake Technical Community College	2010	2009	2008	2007
community concide	22%	21%	23%	27%

Mala Taskaisal	% Retained (36 HRS), Not Graduate or Transfer				
Wake Technical Community College	2010	2009	2008	2007	
Community Concide	2%	2%	3%	3%	

Mala Taskalada	% Graduate, Transfer, or Retained			
Wake Technical Community College	2010	2009	2008	2007
Community Concige	47.2%	43%	43%	48%

F. Licensure and Certification Passing Rate

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.

System Goal (Excellence Level)

System Baseline (Baseline Level)

90.9%

69.9%

Average NC System Percentage Passing Rate 82% (** means less than 5 students)

Wake Technical Community College				
Number of Test Takers	Number Passing	Aggregate Passing Rate 2015-2016	2014-2015	2013-2014
437	398	91.1%	94%	92%

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2015 – 2016 Licensure and Certification Rate by Exam

BLET				
15 – 16	15 – 16	14 – 15	13 – 14	12 - 13
#	%	%	%	%
Tested	Passed	Passed	Passed	Passed
38	95%	90%	91%	90%

Dental Hygiene				
15 – 16	15 – 16	14 – 15	13 – 14	12 - 13
#	%	%	%	%
Tested	Passed	Passed	Passed	Passed
21	90%	93%	87%	82%

Massage & Body Work					
15 – 16 15 – 16 14 – 15 13 – 14 12 – 13					
#	%	%	%	%	
Tested	Passed	Passed	Passed	Passed	
12	100%	100%	100%	100%	

Radiography				
15 – 16 15 – 16 14 – 15 13 – 14 12 – 13				
#	%	%	%	%
Tested	Passed	Passed	Passed	Passed
25	100%	100%	100%	100%

Registered Nursing					
15 – 16	15 – 16	14 – 15	13 – 14	12 – 13	
#	%	%	%	%	
Tested	Passed	Passed	Passed	Passed	
112	97%	98%	95%	89%	
Cosmetology					
15 – 16 15 – 16 14 – 15 13 – 14 12 – 13					
#	%	%	%	%	
Tested	Passed	Passed	Passed	d Passed	
17	94%	96%	96%	84%	

Esthetician				
15 – 16	15 – 16	14 – 15	13 – 14	12 – 13
#	%	%	%	%
Tested	Passed	Passed	Passed	Passed
15	93%	100%	95%	88%

		EMT		
15 – 16	15 – 16	14 – 15	13 – 14	12 – 13
#	%	%	%	% Passed
Tested	Passed	Passed	Passed	70 1 asseu
129	80%	89%	87%	90%

EMT - I				
15 – 16	15 – 16	14 – 15	13 – 14	12 – 13
#	%	%	%	%
Tested	Passed	Passed	Passed	Passed
**	**	**	**	**

EMT - P								
15 – 16	15 – 16	14 – 15	13 – 14	12 – 13				
# Tested	%	%	%	%				
	Passed	Passed	Passed	Passed				
11	100%	95%	100%	100%				

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G. College Transfer Performance

Among community college associate degree completers and those who have completed 30 or more credit hours who transfer to a four-year university or college, the percentage who earn a GPA of 2.25 or better after two consecutive semesters within the academic year at the transfer institution.

System Goal (Excellence Level) 87.6% System Baseline (Baseline Level) 65.1%

Average NC System Percentage Total 30 or More Hours: 79%

Average NC System Percentage Total Associate Degree Recipients: 86%

Average NC System Percentage Total: 82.8%

Wake Technical Community College	30 or More Semester Hours		Associate Degree Recipients	
	Students	% ≥ 2.25	Students	% ≥ 2.25
	691	84%	527	87%

Wake Technical		2014-2015 Tota	% ≥ 2.25		
Community	Students	#≥2.25	% ≥ 2.25	2013-14	2012-12
College	1,218	1,040	85.4%	85%	86%

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 to allow students to study, relax, and get refreshments between classes. The centers provide TV, a lounge area, a cafeteria, and other services, depending on the needs of each campus location. Student Centers are located on the Main Campus (Student Services Building), the Northern Wake Campus (Administration Building), the Perry Health Sciences Campus (Health Education Building 2), Western Wake Campus (2nd floor) and the Public Safety Education Campus.

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
- Refrain from profane or obscene language and behavior
- Do not engage in violent or aggressive behavior of any kind, including hitting, wrestling, play fighting, or throwing objects

Failure to comply with the guidelines above will result in the loss of student center privileges for one week. A second offense will result in loss of privileges for one semester.

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 Main Campus in the Student Services building, in the Student Development Office, 128. On the 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 a standard procedure 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.
- ID cards and credit or debit cards will be shredded and discarded after 48 hours.

No lost or unclaimed items will be held longer than 30 days. After 30 days:

• Clothing, backpacks, and other personal items will be donated to charity.

STUDENT-RELATED SERVICES AND ACTIVITIES

- Cell phones and other personal electric devices will be recycled.
- · Cash will be returned to the person who turned it in or deposited in the student activities account.
- Items valued at more than \$200 (laptops, purses, jewelry, tec.) 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: Main Campus repository is in the Student Services Building room 128; the Northern Wake Campus repository is located in Building B, room 150.

STUDENT GOVERNMENT ASSOCIATION

The <u>Student Government Association (SGA)</u> 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 Main 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 <u>athletics</u> 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.

MILITARY AND VETERANS RESOURCE CENTER

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

The Military and Veterans Resource Center, located at the Northern Wake Campus, Building C, room 206, was created to provide Wake Tech student veterans and their dependents with a "safe zone," a unique social and academic environment in which they can engage and interact. The center offers a variety of resources and

STUDENT-RELATED SERVICES AND ACTIVITIES

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, NCServes, Hire Heroes USA, Students Veterans of America, and USO of North Carolina. Wake Tech is proud to support veterans and thankful for their service and sacrifice.

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 <u>Success Stories</u> 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

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 the Wake Tech mission and promotes civility through the core values of respect, responsibility, communication, collaboration, critical thinking, and accountability. When a student's conduct adversely affects the learning environment or the pursuit of Wake Tech's educational objectives, disciplinary action will be taken: first, to resolve the problem; and second, to help students learn from mistakes. Discipline issues will be resolved informally whenever possible.

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 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.

- 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.
- Students have the right to freedom of expression, inquiry, and assembly without restraint or censorship, subject to reasonable and non-discriminatory rules and regulations regarding time, place, and manner.
- 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.
- Students have the right to expect a safe environment that ensures the continuity of the educational process.
- 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
 compulsion.
- 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.
- Students have the right to appeal academic integrity policy penalties. See Section III.4.
- Students have the right to appeal course grades. See Section III.5.
- Students have the right to grieve student code of conduct sanctions. See Section IV.C.
- Students have the right to a fair hearing of alleged grievances. See Section VI.2.

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

- Respecting the rights of others and exercising civility in all situations.
- 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.
- Respecting the property of others and the property, equipment, facilities, and programs of the college
- Refraining from actions that endanger the health, safety, or welfare of any member of the college community or any college visitors or guests.
- Complying with the normative 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)

- 1. The term "ACADEMIC INTEGRITY" refers to all of the academic assignments turned in shall be one's own work unless otherwise stated by the instructor.
- The term "ACCUSED STUDENT" refers to any student alleged to have violated the College Student Code of Conduct.

- 3. The term "APPEAL" refers to an official request that a currently-enrolled student would make to a faculty member regarding a final course grade or academic integrity sanction given to him/her by the faculty member; or a decision made by the DRGC to the President or committee of appointed trustees.
- 4. The term "BOARD OF TRUSTEES" refers to the group of appointed officials charged with oversight of the college.
- 5. The term "BUSINESS DAYS" refers to all days except Saturday, Sunday and college holidays. When counting days, the day a complaint is received at any point in the procedure shall be considered "day one."
- 6. The term "CHEATING" refers to, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the college community.
- 7. The term "COLLEGE" refers to Wake Technical Community College.
- 8. The term "COLLEGE OFFICIAL" refers to any person employed by the college performing assigned administrative or professional responsibilities.
- 9. The term "COLLEGE PREMISES" refers to all land, buildings, facilities, and other property in the possession of or owned, leased, used, or controlled by the college, including adjacent streets and sidewalks.
- 10. The term "COMPLAINT" refers to an accusation made by a currently-enrolled student who 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 or college official.
- 11. The term "COMPLAINANT" refers to any person who submits a charge alleging that a student violated the Student Code
- 12. The term "DISCIPLINARY REVIEW and GRIEVANCE COMMITTEE" (DRGC) refers to a judicial body designed to provide due process and participatory justice to students for college incidents which resulted in sanctions or penalties.
- 13. The term "DISCIPLINARY REVIEW and GRIEVANCE COMMITTEE CHAIRPERSON" refers to an individual selected by the Student Conduct Officer to facilitate a Disciplinary Review Grievance Committee.
- 14. The term "EDUCATIONAL ASSIGNMENT" refers to 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.
- 15. The term "FACULTY MEMBER" refers to any person hired by the college to conduct classroom or teaching activities or who is otherwise considered by the college to be a member of its faculty.
- 16. The term "GRIEVANCE" refers to a complaint about any issue or process that a currently-enrolled student may wish to have addressed, including a disciplinary action placed upon the student by a college official or DRGC.
- 17. The term "MAY" is used in the permissive sense.
- 18. The term "MEMBER OF THE COLLEGE COMMUNITY" refers to any person who is a student, faculty member, college official, or any other person employed by the college. A person's status in a particular situation will be determined by the Student Conduct Officer or designee.
- 19. The term "ORGANIZATION" refers to any group who has complied with the formal requirements for college recognition of sanctions.
- 20. The term "POLICIES" refers to the written regulations of the college as found in but not limited to the college catalog, the college website and web pages, the student handbook, and the computer use guidelines.
- 21. The term "PREPONDERANCE OF EVIDENCE" refers to a standard of proof in which the evidence strongly suggests the code has been violated.
- 22. The term "SHALL" is used in the imperative sense (mandatory).
- 23. The term "STUDENT" refers to all persons taking courses at the college, full-time or part-time, pursuing degree or non-degree programs, including Workforce Continuing education, Early College, and online courses.
- 24. The "STUDENT CONDUCT OFFICER" refers to the college official charged with the responsibility of administering the college's Student Code of Conduct.
- 25. The term "VICTIM" refers to any person who is acted on and usually adversely affected by a force or agent.
- 26. The term "**WITNESS**" refers to one that 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.

Cheating and plagiarism, as defined below are forms of academic dishonesty that violate the integrity of the academic process.

B. Violations of the Academic Integrity Policy

1. **Cheating**, including:

- a. receiving, giving, or helping another student receive or give any information during a quiz, test, examination, or individual assignment;
- using unauthorized materials or equipment during a quiz, test, or examination, e.g., notes or books:
- c. communicating the subject matter or contents of a quiz, test, or examination to another student unless specifically authorized by the instructor to share it;
- d. taking a quiz, test, or examination for another student;
- e. obtaining quiz, test, or examination questions beforehand;
- f. tampering with the grading of a quiz, test, or examination; or
- g. working with others in completing take-home quizzes, tests, examinations, or individual assignments unless the instructor specifically authorizes collaborative work.

2. Plagiarism

Plagiarism is stealing, or passing off as one's own, the ideas or words of another person. When students present others' words or ideas in a written assignment, they must document the source(s), as described in the MLA Handbook or as directed by the instructor of the course. Plagiarism also includes:

- a. having another person write a paper and submitting it as one's own;
- b. copying all or part of a paper from another student or another source, such as the internet; or
- c. allowing another person to copy one's work.
- 3. Buying, selling, stealing, or soliciting any materials purported to be unreleased contents of a forthcoming examination, quiz, test, or project/assignment or the use of such material.
- 4. Substituting for another person in any of the above-mentioned situations or allowing another person to substitute for oneself.
- 5. Collusion with another person in the preparation or editing of assignments submitted for credit, unless such collaboration has been approved in advance by the instructor.
- 6. Knowingly furnishing false information to the college; forgery, alteration and or use of college documents or instruments of identification with the intent to defraud.

C. Academic 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.

- 1. Loss of Grade: A zero for the assignment
- 2. Loss of Credit: An "F" for the course and loss of rights to attend the remaining class sessions.

Written notice of any academic penalty must be submitted on an Academic Integrity Reporting form to a student conduct officer for appropriate recordkeeping.

D. Academic Penalty Appeal Procedures

- 1. A student who wishes to appeal an Academic Integrity Violation penalty must initiate the appeal process with the instructor **within 3 business days** of the communication of the penalty to seek resolution. To initiate the appeal, the student must use the Academic Appeal Form. The instructor will review the matter and contact the student within 5 business days with a decision.
- 2. If the student wishes to appeal the instructor's resolution, the student must submit an Academic Appeal Form to the department head within 2 business days of receiving the instructor's response. The department head will review the matter and contact the student within 5 business days with a decision.

- 3. If the student wishes to appeal the department head's resolution, the student must submit the Academic Appeal Form to the division dean **within 2 business days** of receiving the department head's response. The division dean will review the matter and contact the student **within 5 business** days with a decision.
- 4. If the student wishes to appeal the division dean's resolution, the student must notify a student conduct officer within 2 business days of receiving the division dean's decision that he or she would like the matter reviewed by the Disciplinary Review and Grievance Committee (DRGC).
- The conduct officer will forward all documents to the DRGC Chair and contact the student within 5 days
 to schedule the DRGC committee hearing. The decision of the DRGC will be final and not subject to
 appeal.
- 6. At whatever stage the grievance is concluded, either due to amicable resolution or time limitations, all documentation should be maintained by a student conduct officer in accordance with the state records and retention policies.

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 the justification for doing so.

E. Course Grade Appeal Policy

1. Faculty Responsibility for Grades

A part of faculty responsibility at Wake Technical Community College is the assignment of student grades according to methods that are professionally acceptable, communicated to everyone in the class, and applied to all students equally.

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. The college believes that the preservation of the institution's academic integrity requires that the college ordinarily refrain from review of or participation 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.

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, or disability, the student must utilize the grievance procedure in lieu of the procedure described below.

2. Course Grade Appeals Process

- A student who wishes to contest a course grade must initiate the appeals process with the instructor of the course within fifteen (15) business days of the posting of that semester's final course grades.
- b. Within **five (5) business days** of the appeal, a student who is unable to resolve the disagreement with the instructor, and who wishes to appeal the grade beyond the authority of the instructor, must complete a Grade Appeal Form, which then becomes the document of record. This form is available from the department head.
- c. Within five (5) business days, the department head will decide whether a review of student work is required, and if necessary, the manner by which any such reviews of student work will be performed. The department head will also decide on an appropriate action.
- d. A student who is unable to resolve the disagreement through dialogue with the department head may appeal, within **five (5) business days**, to the academic dean of the division. The academic dean will investigate, and within approximately **five (5) business days**, decide on an appropriate action. The academic dean's assessment will be considered final.

IV. STUDENT CODE OF CONDUCT

Students are expected to conduct themselves in accordance with generally-accepted standards of scholarship and conduct. The purpose of the Student Code of Conduct (the Student Code) is not to restrict freedom but to protect the rights of all students in their academic pursuits.

A. Prohibited Conduct

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

- 1. Violation of the Academic Integrity Policy.
- 2. Disruption or obstruction of teaching, research, administration, disciplinary proceedings, or other collegeauthorized activity, on or off campus.
- Attempted or actual theft of, misuse of, or intentional damage to college property; or theft of or damage to
 property of a member of the college community or a campus visitor on college premises or at college
 functions.
- 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.
- Violation of the Drug and Alcohol Policy.
- Lewd or indecent conduct online, on college premises, or at college-sponsored or college-supervised functions.
- 7. 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, texting, email, and social networking sites.
- 8. Mental or physical abuse of any person online, on college premises, or at college-sponsored or college-supervised functions, including, coercion, stalking, intimidation, or verbal or physical actions that threaten or endanger an individual's health or safety.
- 9. Violation of the Sexual Harassment Policy.
- Occupation, refusal to depart, seizure, commandeering (or threatening to do so in any manner) of college
 property, a college facility, or any portion thereof for a use inconsistent with prescribed, customary, or
 authorized use.
- 11. Participating in or conducting an assembly, demonstration, or gathering in a manner which threatens or causes injury to persons or property; which interferes with free access to, ingress, or egress of college facilities; which is harmful, obstructive, or disruptive to the functions of the college; or remaining at the scene of such an assembly after being asked to leave by a college official.
- 12. Possession of firearms, fireworks, explosives, incendiaries, knives of any kind, and other types of weapons on college property or at any college function (except by persons specifically authorized by the college and in accordance with G.S. 14-269.2) in connection with a college-approved activity.
- 13. Setting off a fire alarm or using or tampering with fire safety equipment on college premises or at college-sponsored or college-supervised functions, except with reasonable belief in the need for such alarm or equipment.
- 14. 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 or college-supervised functions.
- 15. Smoking and/or use of any forms of tobacco products or e-cigarettes on all properties owned or rented by the college, except in college-approved designated smoking areas.
- 16. Violation of state or college regulations regarding the operation and parking of motor vehicles.
- 17. 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.
- 18. 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.
- 19. Violation of the terms of disciplinary probation or any college regulation during the period of probation.
- 20. 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.
- 21. Violation of any college policy; prohibited behavior; or local, state, or federal criminal law on college premises adversely affecting the college community's pursuit of its proper educational purposes; including, but not limited to falsification of documents, impersonation of another individual, etc.
- 22. 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.
- 23. Disruption, disturbance, or interference with any classroom activity or staff operation by the playing of loud, threatening, or obscene music.

- 24. Engaging in any action that is disruptive to orderly classroom instruction without limitations to the use of cell phones, (tablets, or electronic devices; students are therefore required to disengage all such devices when not approved for instruction in a classroom).
- 25. Engaging in any action that is disruptive or in violation of established rules and regulations regarding use of college areas, including but not limited to computer labs, library, ILC, student lounges, designated public transportation, and cafeteria.
- 26. Willfully encouraging others to commit any of the acts that have been herein prohibited.
- 27. Hazing of any individual or organization is defined as an act which endangers the mental or physical health or safety of a student or destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in, a group or organization.
- 28. Stalking is defined as engaging in a pattern of unwanted conduct directed at another person that threatens or endangers the safety, physical or mental health, or life or property of that person, or creates a reasonable fear of such a threat or action; including cyber stalking

B. Disciplinary Penalties for Violations of the Student Code

The following disciplinary actions may be imposed by an instructor or 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.

- Admonition: A warning to the student that the behavior is unacceptable and that if the pattern of behavior continues, the student will face disciplinary action up to and including suspension from the college. Verbal warnings will be documented by the instructor or college official and included as evidence in the event of subsequent violations.
- 2. **Reprimand:** A written communication which gives 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 prior infraction.
- 3. **Emergency (Interim) Suspension:** Instructors or college officials may impose 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.
 - Interim suspension will not exceed more than two class periods. Instructors must notify their department head or next ranking available supervisor immediately upon suspending 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 heading Forms, sub-heading Student Services Forms.
 - 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.

Disciplinary actions may be imposed only by the Disciplinary Review and Grievance Committee (DRGC), Sr. Vice President for Enrollment & Student Services, Student Conduct Officer, or Registrar when applicable:

- Educational Assignments: 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 drug and/or alcohol 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, or students.
- 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. 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.
- 10. **Expulsion:** Dismissing a student from campus for an indefinite period. The student loses his/her student status.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. **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 disciplinary record maintained by the Student Conduct Officer.

The Conduct Process

Informal Resolution Meeting

The Conduct Officer will request an initial meeting with the student in order to determine whether disciplinary charges should be initiated. The 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 conduct officer will take one of the following actions:

- 1. If the student fails to appear, the conduct officer may find the student responsible and impose sanctions. The student will be notified of the sanction via his or her official college email address or certified mail. 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 conduct officer will dismiss the allegation.

If the student does not accept responsibility, the dean will initiate formal disciplinary charges.

C. Disciplinary Procedures for Violations of Student Code

Instructor or College Official

When a student is alleged to have violated any portion of the Student Code, the instructor or college official reporting the incident must follow these steps:

- 1. Issue a verbal warning to the student if the alleged violation is minor.
- 2. Issue a written reprimand and refer the student to a Student Conduct Officer if the alleged violation is not minor or is a subsequent violation.
- 3. Report the violation in a timely manner by (1) validating the suspected misconduct, (2) notifying the student of the violation within five (5 business days of validation, and (3) submitting a violation report to the appropriate department head and the Conduct Officer immediately after student notification. Validation may include but is not limited to (1) finding unexplained and/or striking similarities between/among submissions during the grading process, (2) textual clues that point toward plagiarism/unattributed referencing, or (3) anecdotal information from other students in the class who report that a violation might have occurred. Failure to notify the student may result in no further action being taken regarding the alleged violation. Submit the report electronically to the appropriate Student Conduct Officer and department head. Forms are available at go.waketech.edu, under Forms, Student Services Forms.
- 4. If an instructor or college official who is considering reporting a student violation believes that the student poses an **immediate** threat to self or others, that instructor or college official should contact Campus Police. Other concerns should be reported on the Behavior of Concern reporting form for review by the Behavioral Assessment Team.

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 instructor may request a hearing with the Disciplinary Review and Grievance Committee (DRGC) within 15 business days after the sanction is issued. Request for a hearing must be made using a <u>Student Conduct Grievance Request Form</u>. The student will need to inform the Student Conduct Officer at this time if reasonable accommodations are needed.

If the student cannot the scheduled hearing because of an emergency, he or she must contact the Conduct Officer as soon as possible. The student will have only one opportunity to reschedule a hearing cancelled for an emergency. Hearings that have been rescheduled due to the absence of the student will convene, and the committee will render a decision in the case based on evidence provided by the Student Conduct Officer.

Note: If the Student Conduct Officer determines that the complainant or witness(es) may be harmed emotionally by testifying in the presence of the accused at the hearing, other arrangements will be made to allow participation without depriving the accused 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 **Disciplinary Review and Grievance Committee** is a judicial body designed to provide due process and participatory justice to students for college incidents resulting in sanctions or penalties. Whenever possible, a Student Conduct Officer will attempt to resolve such incidents informally.

- 1. Composition of the DRGC: The committee is composed of three members, each of whom may serve up to two years a student in good standing academically and otherwise, a staff member, and a faculty member plus a Presiding Chairperson, who serves a two-year term.
- 2. Powers and functions of the DRGC: The committee may confirm, deny, or modify the student code violation sanction. The decision of the committee is final except in cases of alleged discrimination or denial of due process.
- 3. Role of the DRGC Committee Chair:
 - a. The Chair will convene the hearing and inform students of their rights and responsibilities. The Chair will not be a voting member of the committee and will intervene in proceedings only to advise on points of order and procedure.
 - b. The Chair is expected to make electronic recordings of the hearing, which will be maintained in the office of the Student Conduct Officer.

- c. The Chair will be responsible for delivering the recommendations of the DRGC to the office of the Senior Vice-President of Student Services within two (2) business days.
- 4. In DRCG hearings, the Student Conduct Officer's role is to provide testimony when warranted.
- Meeting date and time: The DRGC will meet on Thursday afternoons or as announced to hear scheduled cases. DRGC members will be notified 24 hours in advance if there are cases to be heard.

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 5 business days.

VI. DISCRIMINATION AND DUE PROCESS

A. Definition of 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.

B. Definition of Due Process

A Disciplinary Review and Grievance Committee will guarantee the student the following due process rights:

- 1. The right to present relevant evidence and witnesses in his or her defense.
- 2. The right to a hearing before an impartial Disciplinary Review and Grievance Committee.
- 3. The right to know the identity of the person(s) bringing the charge(s) against him or her.
- 4. The right to hear the evidence against him or her and the right to cross-examine witnesses against him or her.

C. Avenues of Action

- 1. The instructor or college official meets with the student to discuss charges and may issue a warning depending upon the severity of the infraction within five (5) business days of the violation.
- 2. If a subsequent incident takes place or if the infraction threatens the safety of the instructor or other students, the instructor may impose an interim suspension from the class and submit a Student Code Violation Report to the Student Conduct Officer or designee within two (2) business days. The instructor must also notify his or her department head and dean immediately of an interim suspension. The interim suspension should not last longer than two class periods.
- 3. The Student Conduct Officer or designee will meet with student within three (3) business days to discuss charges and make a determination to impose a sanction if warranted. The sanctions are as follows:
 - a. General probation
 - b. Restrictive probation
 - c. Restitution
 - d. Withholding Academic Records
 - e. Suspension
 - f. Expulsion
 - g. Group Probation
 - h. Group Restriction
 - i. Group Charter Revocation

STUDENT CODE OF CONDUCT, RIGHTS AND RESPONSIBILITIES

j. No Contact

- 4. If student is not satisfied with the sanctions imposed, the student may file an appeal by completing a <u>Student Conduct Grievance Request</u> within fifteen (15) business days after the sanction is imposed.
- 5. A hearing with the DRGC will be scheduled within five (5) business days of the submission of the grievance request. Student notification will be given in person or by phone, through college-issued email account, or through certified mail to the last address provided, at least five (5) business days before a scheduled hearing.
- 6. Notification of the decision will be forwarded to the student within five (5) business days of the DRGC decision. Official notification of the decision will be sent from the Associate Vice President for Student Services to the student.
- 7. The decision of the DRGC is final; the only allowable basis for appeal is consideration of (1) the severity of the sanction; or (2) alleged violation of college procedures in the conduct of the hearing or investigation. 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.

D. Appeal of DRGC Decision

A student who is not in agreement with the decision of the Disciplinary Review and Grievance Committee may appeal in writing to the Senior Vice President of Enrollment and Student Services within five (5) business days of official notification of the decision. The only allowable basis for appeal to the SVP for Enrollment and Student Services is consideration of (1) the severity of the, sanction or (2) alleged violation of college procedures in the conduct of the hearing or investigation. It is the student's responsibility to clearly define and substantiate his or her grounds for appeal in the letter requesting appeal.

The SVP for Enrollment and Student Services will:

- 1. Review the findings and proceedings of the DRGC
- 2. At his or her 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 Conduct Officer of the final decision within ten (10) days of the receipt of the appeal.

The decision of the Senior Vice President is final.

VII. ATTORNEY INVOLVEMENT IN PROCEEDINGS

A. 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 (24 hours) of his or her decision to engage counsel.

B. 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.

C. 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 see fit. 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://bookstore.waketech.edu

Students are encouraged to take advantage of online ordering and home delivery.

Students may purchase from the College Bookstore necessary books, software, computer and general supplies, and other items such as stationery, class rings, and pins. Book buy back available for all books with market value at any time during the semester regardless of the source of purchase.

Special hours of operation are posted on the bookstore door as needed. Normal hours of operation for each bookstore location are listed below.

Main Campus Bookstore Store Hours

Mon 7:45am - 6pm Tue 7:45am - 6pm Wed 7:45am - 6pm Thu 7:45am - 6pm Fri 7:45am - 3pm Sat CLOSED Sun CLOSED

Northern Campus Bookstore Store Hours

Mon 8am - 6pm Tue 8am - 6pm Wed 8am - 6pm Thu 8am - 6pm Fri 8am - 2pm Sat CLOSED Sun CLOSED

Health Science Campus Bookstore Store Hours:

Mon 8am - 5pm Tue 8am - 5pm Wed 8am - 5pm Thu 8am - 5pm Fri 8am - 2pm Sat CLOSED Sun CLOSED

Students should be aware of the following operational policies of the Bookstore:

- 1. Required textbooks for a particular term are available through the drop/add period. Immediately following the tenth academic day of a semester, most of the unsold books are returned to the publishers.
- Cash refunds for returned books will only be authorized with presentation of the Bookstore cash register receipt.
 Books returned for refund must be new and in undamaged condition containing no writing or marks. Requests for refund for books must be made during the first ten academic days of the semester.
- 3. A special order for a book may be placed through the Bookstore by furnishing the title, author, edition, and publisher of the book. Students may purchase books online at http://bookstore.waketech.edu.

COLLEGE ID

Students

A college ID card (student photo identification card) will be provided to each registered student and must be carried by the student at all times. Students on all campuses (Main, Northern Wake, Perry Health Sciences, Western Wake, and Public Safety Education) must obtain a current semester validation sticker that will be affixed to their ID cards (effective Fall 2010). Semester validation stickers can be obtained at various locations on each campus.

The card is required for using campus services and attending campus functions, and it serves as a library card. Campus security or any college official may ask a student for his or her college ID card at any time while on campus or at any off-campus activity sponsored by the college. Students without a valid college ID card will be asked to leave the campus unless their purpose can be substantiated by a college official. The initial college ID card will be free; a duplicate will cost the student \$5.00.

College ID Office Hours of Operation*

*Note: The college reserves the right to change days and times of availability as needed.

Main Campus

8 a.m.-5 p.m., Monday-Friday

Northern Wake Campus

8 a.m.-7 p.m., Monday-Thursday 8 a.m.-5 p.m., Friday

Perry Health Sciences Campus

8 a.m.-5 p.m., Monday-Friday

Western Wake Campus

8 a.m.-1 p.m., Monday-Friday (Closed during curriculum class breaks)

Public Safety Education Campus

8 a.m.-4:30 p.m., Monday-Friday

ACADEMIC ADVISING

Website: advising.waketech.edu

Wake Tech employs professional Academic Advisors and Faculty Advisors to provide students with the most effective guidance possible as they pursue academic and career goals.

Students are responsible for planning their programs of study, with the assistance of their assigned advisor including:

- 1. clarifying their personal values, goals, and career interests;
- 2. gathering all relevant decision-making information;
- 3. keeping up to date on college and division curriculum requirements, including reviewing posted degree plans and accessing their program evaluation in Student Planner;
- 4. staying informed about academic policies, procedures and deadlines;
- 5. preparing for course selection for the following semester; and
- 6. consulting with advisors during pre-registration periods and at other times as needed

College/University Transfer students in A.A. and A.S. programs are assigned an Academic Advisor. Advisors are available on a walk-in basis to assist with course planning and selection, program requirements, and career goals.

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 who is available during regularly-scheduled office hours.

Associate in Applied Science (A.A.S.) students in degree, diploma, and certificate programs meet with an Academic Advisor or Student Success Counselor in their first semester. After that, students are assigned a Faculty Advisor who is available during regularly-scheduled office hours.

In addition, the Academic Advising Center offers these resources and services to support students in setting and attaining academic and career goals:

- First Year Experience: Academic Advisors provide a structured program of services for select first-time-in-college students. Services include academic advising, career exploration and goal-setting, and other activities designed to engage new students.
- 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 SUCCESS

The Student Success 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, Single Stop, and Wellness Services.

Fostering Bright Futures

Website: fosteringbrightfutures.waketech.edu

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

Fostering Bright Futures is located on Wake Tech's Main Campus in Room 128 of the Student Services Building.

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. OVAL provides leadership training and service experiences in support of Wake Tech's core values of accountability, respect, responsibility, and collaboration.

OVAL is located on Wake Tech's Main Campus in Room 128 of the Student Services Building.

Pathways Male Mentoring Services

Website: pathways.waketech.edu

The mission of <u>Pathways Male Mentoring Services</u> 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.

The Pathways office is located on Wake Tech's Main Campus in Room 128 of the Student Services Building. Services are also provided at the Northern Wake Campus.

Single Stop

Website: singlestop.waketech.edu

Wake Tech partners with <u>Single Stop</u>, a non-profit organization, to improve students' access to resources and benefits. Using specially-designed software, students can be screened quickly and conveniently; staff members then follow up to help with applications and to make sure students receive benefits they qualify for. Additional services include free tax preparation, benefits counseling, financial counseling, legal advice and representation, and referrals to other campus and community resources.

The Single Stop Office is located on Wake Tech's Main Campus in Room 21 of the Student Services Building. Services are also provided at the Northern Wake and Perry Health Sciences Campuses.

Wellness Services

Website: wellness.waketech.edu

<u>Wellness Services</u> 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 be interfering with their education. Wellness Services are provided to students on Wake Tech's Main, Northern Wake, and Perry Health Sciences Campuses.

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 become productive members of the global community. The division also provides insights into the world of work that help Wake Tech develop relevant education and workforce training.

Career and Employment Resources serves curriculum education students seeking employment: current students interested in part-time, temporary, or summer jobs; new graduates; and Wake Tech alumni. The division manages College Central Network, the official job posting board for students and alumni, and coordinates all employer and military recruiting on campus as well as other career events. Career and Employment Resources supports the development of relationships between curriculum programs and employers and the creation of employment opportunities for students and graduates. 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 five 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 complete a library application form and have a valid Wake Tech photo ID, in order to establish a library account.

Library Location	Hours of Operation	Library Location	Hours of Operation
Main (Howell) 9101 Fayetteville Rd. Raleigh, NC 27603 919- 866-5644	Mon. –Thur.: 7:30 a.m. – 9 p.m. Friday: 7:30 a.m. – 5 p.m. Saturday: Closed Sunday: Closed	Northern Wake 6600 Louisburg Rd. Raleigh, NC 27616 919- 532-5550	Mon. – Thur.: 7:30 a.m. – 9 p.m. Friday: 7:30 a.m. – 5 p.m. Saturday: Closed Sunday: Closed
Perry Health Sciences 2901 Holston Ln. Raleigh, NC 27610 919- 747-0002	Mon. –Thur.:7:30 a.m. – 9 p.m. Friday: 7:30 a.m. – 5 p.m. Saturday: Closed Sunday: Closed	Public Safety Education 321 Chapanoke Rd. Raleigh, NC 27603 919- 866-6107	Mon. – Friday: 9 a.m. – 3 p.m. Saturday: Closed Sunday: Closed
Western Wake Millpond Village Room #252 3434 Kildaire Farm Rd. Cary, NC 27518 919- 335-1029	Mon. –Thur.: 8 a.m. – 4 p.m. Friday: 8 a.m. – 3 p.m. Saturday: Closed Sunday: Closed		

Each library location offers the following services and resources:

- 1. Access to print (books, periodicals) and audiovisual materials (DVD, VHS, audio books)
- 2. Electronic databases (NC LIVE, SIRS, JSTOR, Science Direct, and more)
- 3. Interlibrary Loan
- 4. Online Renewals
- 5. Research Guides & Tutorials and Database Instruction
- 6. Ask-A-Librarian Services (Email, Instant Messaging, and NC KNOWS Virtual Reference)

Overdue Materials & Fines

Books - \$0.10 per day, per item (max. \$10.00)

Audiovisual & Special Reserve Items - \$1.00 per day (max. \$10.00)

Fines should be paid in a timely manner to avoid registration blocks. Students with outstanding library fines of \$5.00 or more will not be allowed to register for the next semester or obtain their semester grades. At this time, the final notice is mailed and **student records will be blocked** until all materials are returned and fines are paid.

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 the Writing /Study Skills Center, the Math/Computer Center, and the Health Sciences Center. 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.

Challenge exams for a limited number of Wake Tech courses are available with proper photo identification and pre-approved paperwork from the appropriate academic department. The ILC also offers a self-paced, independent study tutorial program for proficiency in high school-level chemistry. This program was designed to meet the admission requirements for certain Wake Tech Health Sciences Curriculum Education (for-credit) programs. It also satisfies the "CHM 090 or equivalent" prerequisite for some approved biology and chemistry Curriculum Education courses. It is offered online and carries no college credit or transfer options.

ILC services are available at five 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 Virtual Writing Center, and Smarthinking

ILC CAMPUS LOCATIONS

Main ILC Building – across from Student Services and the Bookstore 9101 Fayetteville Rd. Raleigh, NC 27603 919-866-5276	Northern Wake Building NF, Room 448 6600 Louisburg Rd. Raleigh, NC 27616 919-532-5548	Western Wake Learning Resource Center ILC, 200E 3434 Kildaire Farm Rd. Cary, NC 27518 919-335-1028	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
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Hours may vary within each skills center. Please call ahead to check availability.

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

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: Internet courses and hybrid courses. These alternatives allow students additional scheduling flexibility that is not possible in traditional, seated classes. Each course is taught by a qualified and competent instructor who develops the course to achieve learning outcomes comparable to those in a traditional, seated class. The instructor provides a syllabus and course guidelines and serves as a resource for the students. Costs, credit hours earned, and support services provided are the same as for traditional courses. Students interested in taking online courses should visit the Online Learning website, http://online.waketech.edu/.

Internet Courses

Students in Curriculum Education Internet 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 have knowledge of how to navigate the Internet and perform basic computer functions, including the use of any applicable word processing software. Wake Tech faculty develop and teach online courses.

Before enrolling in an Internet course, students must:

- Review the information posted 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.

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 have knowledge of how to navigate the Internet and perform basic computer functions, including the use of any applicable word processing software.

Before enrolling in a hybrid course, students must:

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

Students in Curriculum Education Internet and hybrid courses must complete the Course Entry Quiz during the first 10% of the course. The quiz can be found on the course site in Wake Tech's Learning Management System on the first day of class. Students who fail to complete the quiz within the required time frame will be immediately marked as "NA" (Never Attending) and dropped from the class.

Testing Centers

Internet and hybrid course instructors may require students to take tests on campus in a proctored environment. Distance Education Testing Centers are located on the Main, Northern Wake, Western Wake, and Perry Health Sciences campuses. Students must present a valid student identification badge, driver's license, or passport prior to taking a test. For additional information, visit the Distance Education Testing Center's web page: http://www.waketech.edu/student-services/online-learning/students/testing-center or call 919-335-1071

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 Distance Education Testing Center, Open Computer Labs, and the Media Production Department.

The Distance Education Testing Centers allow instructors teaching online Curriculum Education (for-credit) courses to provide tests to their students in a proctored environment. Students must present a valid student identification badge, driver's license, or passport prior to taking a test. The centers provide both paper and electronic testing. The centers also collaborate with Disability Support Services to provide testing for students who need extended time. Students have access to computers in the centers; each center has Internet access and is equipped with the Microsoft Office Suite. Centers are located on the Main, Health Sciences, Northern Wake, and Western Wake Campuses. For additional information, visit the Distance Education Testing Center's web page at http://www.waketech.edu/student-services/online-learning/students/testing-center or call 919-335-1071.

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

The Media Production Department creates educational videos to support student learning and classroom instruction. The department provides two Sony HD wireless microphone packages, three Apple computers, and Final Cut Pro editing software for students seeking to create educational multimedia projects. 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

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. WebAdvisor 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 main 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 Main Campus, Perry Health Sciences Campus, Northern Wake 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

(Effective January 1, 2016 and subject to change)

In-State (North Carolina) Students

16 credit hours or more: \$ 1216.00/term Less than 16 credit hours: \$76.00/credit hour

Out-of-State Students

16 credit hours or more: \$4,288.00/term Less than 16 credit hours: \$268.00/credit hour

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 Main, Perry Health Sciences, Western Wake, 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)

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

Graduation Fee (due when registering for the final term)

\$35.00 for degree and diploma students. No charge for certificate program students.

Official Transcript Fee

\$5.00 for each transcript, per request

Music Fee

\$240 per course for MUS 161, MUS 162, MUS 261, MUS 262

Supply Fees

Supply 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 COMPASS 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.

Self-Supporting Registration Fees

The fee for self-supporting classes, denoted by an "S" at the end of the section number, is \$83.00 per credit hour. There are no rate differences for in-state and out-of-state students and no waivers for senior citizens, dual enrollment students, staff, etc. No maximum cost, based on maximum number of credit hours, applies to self-supporting classes; for example, if you registered for 16 credit hours as an in-state student at the regular tuition rate, the tuition due would be \$1152.00. If you

added a three-credit-hour class at the self-supporting rate, your tuition would be \$1152.00 plus \$249.00 for the self-supporting registration fee.

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.

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 mailed to the student address on file at the college. It is therefore very important that students submit address changes to the Registration and Student Records Services Division promptly.

Refund checks are written only after the 10% date in the semester. This date is published as the drop deadline in class schedules and registration information each semester. Refunds are paid by check and mailed from the Accounting Office within four (4) weeks after the 10-percent date.

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:

- 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.

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.
- 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.

Registration Fee-Self-Supporting Classes

Registration fees for self-supporting classes are charged separately from (in addition to) tuition; therefore, refunds for these classes are also calculated separately. Otherwise, the above policies and deadlines also apply to self-supporting classes. To be eligible for a refund, a student must officially drop the class, using WebAdvisor.

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 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.
- 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.

COMPUTER & INTERNET ACCEPTABLE USE POLICY

College owned or operated computing resources are reserved for the educational, instructional, research, and administrative computing needs of the faculty, students, staff, and other individuals authorized by the College. The College's computing resources include, but are not limited to, all College computers and hardware, access to the Internet or access to any College intranet provided through College owned or operated computers, online and offline storage, network and communications facilities, telephone systems, and cellular telephone devices.. Access to these computing resources is a privilege and, therefore, it is essential that all users exercise responsible ethical behavior when using these resources. Users are expected to read, understand, and comply with the College's Acceptable Use Policy.

The College monitors access to these computing resources and reserves the right, without prior notice to users, to access the College's computing resources and to use any and all information retrieved from the computing resources. **Users do not have an expectation of privacy regarding their use of the computing resources, and by accessing and using the College's computing resources,** users expressly consent to such monitoring, access, and use by the College. Further, information contained on the College's computing resources and in College accounts, including but not limited to e-mail, **may be subject to inspection under the Public Records Law of the State of North Carolina.**

The College does not attempt to articulate all required or unacceptable behavior by its users. Therefore, each user's judgment on appropriate conduct must be relied upon. To assist in such judgment, users will follow this policy:

- College computing resources are to be used only for educational, research, or instructional purposes for which
 access is provided, and are not to be used for any unauthorized purpose, including but not limited to
 commercial purposes, unauthorized access to remote computers or non-College related activities.
- An access account assigned to a user must not be used by any other individual. Users are responsible for the proper use of their accounts, including proper password protection and appropriate use of the College's computing resources. Obtaining another user's password, allowing friends, family, co-workers, work-study students,

- student workers, or any other individual use of your or another user's account, or other unauthorized use of an access account, is a serious violation of this policy.
- 3. Users shall not create, display, transmit, or make accessible threatening, racist, sexist, obscene, offensive, annoying or harassing language, e-mail messages, and/or material, including broadcasting unsolicited messages, sending unwanted e-mail, or impersonating other users. Remember the College's policies against discrimination and harassment apply to communications through the College's computing resources.
- 4. All computer software is protected by federal copyright law. In addition, most software is proprietary and protected by legal licensing agreements. Users are responsible for knowledge of the licensing restrictions for any software used on the College's computing resources. Unless specifically granted permission, a user may not copy software, or use College-software on anything but College-owned equipment.
- 5. Users shall not download, reproduce and/or distribute copyrighted or licensed materials without proper authorization from the author or creator. Additionally, users shall not publish information, messages, graphics, or photographs on any web page, without the express permission of the author or creator.
- 6. Users shall not engage in activities to damage or disrupt the hardware, software, or any communication associated with the College's computing resources, such as virus creation and propagation, wasting system resources, overloading networks with excessive data, or any attempt to circumvent data protection schemes or uncover security loopholes.
- 7. **Users shall not waste, monopolize, interfere or misuse the College's computing resources** by, for example, requesting an excessive number of copies from a printer, playing games, or participating in chain letters or Ponzi schemes
- 8. **Users shall not access or damage any portion of the College's computing resources** or other College property, such as College records, or use the College's computing resources for illegal activities.
- Users may not connect personal or non-College-owned equipment to the campus network unless given specific authorization prior to the event. Users MAY connect laptops to smart classroom lecterns which were specifically designed for this purpose.
- Students may not use employee computers. Most employee computers have access to the faculty/staff
 networks, colleague, and other sensitive data. For this reason, students may not use employee computers.
- 11. Users learning of the misuse of the College's computing resources or violations of this Acceptable Use Policy should notify the Chief Information Officer or any employee of ITS immediately.

Enforcement

Failure to follow the Acceptable Use Policy and any misuse of the College's computing resources may result in the suspension or revoking of access accounts. Employees violating the policy are subject to disciplinary action as deemed appropriate by their immediate supervisor. Students violating the policy are subject to an immediate grade penalty of "F" and will not be allowed to further participate in the class. All College policies and procedures are applicable to users of the College's computing resources.

Any conduct, which violates local, state, or federal laws, will result in the immediate loss of all access to the College computing resources and will be referred to appropriate College offices and/or law enforcement authorities. Wake Technical Community College is not liable for actions of anyone connected to the Internet through the College's computing resources. All users will assume full liability: legal, financial or otherwise, for their actions.

WEBSITE POLICY

Official Public Website

WWW.WAKETECH.EDU (http://www.waketech.edu/) is the only official website of the college and as such must be administered by college officials and the college Webmaster (who manages content and design) on servers maintained by or external services approved by Wake Tech's Information Technology Services Division.

Blogs

Blogs may be provided to certain entities upon request. All blog websites must reside on Wake Tech's servers and must be the official responsibility of an employee with a key account. (Key accounts are used for login.) Blogs must be moderated by a faculty or staff member, although students may be permitted to edit blogs.

The Student Activities Department may request blogs for college clubs and organizations. Club advisors (faculty or staff) may request design services for their club's blog or add a student editor by submitting a work order. Club advisors are expected to review student posts to ensure appropriate content.

Social Networking/Supplemental Online Services

Use of such services must be arranged through the Digital Communications Specialist in the Communications Division, who will assist with establishing an account and record the employee's username and password. A college employee will be responsible for maintaining the service and may contact the Digital Communications Specialist for assistance as needed. The Digital Communications Specialist will maintain account records in case content needs review or someone other than the original user assumes responsibility for the service.

External Websites

Students, faculty, and staff are not permitted to use Wake Tech's name or official logos, graphics, or information or to state or imply any official association with the college in websites they create outside of Wake Tech's servers.

Violation of any of the above provisions will result in disciplinary action up to and including termination or expulsion.

STUDENT DRESS AND HYGIENE

Students are not allowed in any campus facility without shoes and shirts. Caps and hats should not be worn in any classroom. Underclothing must not be visible.

In addition, 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. Students in violation of dress policies may be subject to corrective action, including removal from the setting.

Students' overall personal appearance must reflect cleanliness and good grooming. If a student's dress or hygiene interferes with the learning process, the student's instructor will counsel the student. Repeat offenses will result in referral to the Conduct Officer.

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.

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 for students between downtown Raleigh and the Main Campus. The bus stop on Main Campus is located in front of the Pucher Lemay Building. A schedule can be obtained in Holding Hall, Student Services, or the Individualized Learning Center.

SKATE BOARDING/ROLLERBLADING

Skate boarding and rollerblading 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 Main Campus and the Northern Wake Campus in accordance with Wake Tech's solicitation policy. Requests for distributions on the Main Campus require the approval of the Dean of Student Development and requests for the Northern Wake Campus require the approval of the Sr. Dean of Strategic Innovations/Student Conduct Officer. See Campus Policies and Procedures chapter - Solicitation Policy.

STUDENT HANDBOOK

All regulations and policies pertaining to student conduct are listed in the student handbook. The handbook may be viewed online at http://handbook.waketech.edu. Students are responsible for reading the information in the student handbook. One of the conditions of enrollment is the student must follow the Student Code of Conduct, which is located in the Student Handbook.

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.

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. Main Campus: the paved area directly outside and adjacent to the north corner of the Pucher-LeMay building
- ii. 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.

- Advocating illegal conduct that is directed to inciting or producing imminent lawless action and is likely to
 incite or produce such action.
- 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.
- 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

The Board of Trustees of Wake Technical Community College has adopted policy statements in compliance with the dictates of the Jeanne Cleary 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, Main 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 Main 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;
- Intentionally damaging property;
- 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.

Reason for 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

Deminions	
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 and 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 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)
- Senior Vice President of Curriculum Education Services
- Vice President of Workforce Continuing Education Services
- General Counsel for the College
- Conduct Officers
- Chief Human Resources Officer
- 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 Chief of Police. 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 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
- Stalking, surveillance, or unwanted pursuit
- Mental health concerns, including voluntary or involuntary commitment
- Weapons on campus or recent acquisition of firearms
- Special interest in or identification with the military, survivalist groups, or weapons
- Homicidal/suicidal thoughts or actions
- Belligerent or angry outbursts, depression, or severe mood swings
- Preoccupation with violent themes
- Apparent obsession with someone
- Domestic disputes
- Intentional destruction of personal property
- Evidence of substance abuse
- Symptoms of paranoia
- 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
- suicidal ideations
- 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 <u>Behavior of Concern and Threat Report</u> 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 Behavior Assessment Team (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 in the Student Handbook, Section IV, Student Code of Conduct, subsection C.

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., Student Assistance Program, 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. See Student Handbook, Section VI, Subsection C, for the appeals process.

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 Dean of Student Development 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.

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 V 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 suspended or expelled from the college in accordance with the <u>Student Code of Conduct, Rights, and Responsibilities</u> policy or may be asked to or required to participate in a drug abuse assistance and rehabilitation program approved by the Board of Trustees. 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. All students will receive email notification of the program at the start of fall and spring semesters.
- 2. Each campus will present a seminar, workshop, or other information and awareness program at least once a year that will be open to all students, faculty, and staff.
- 3. Each campus will provide brochures and other materials for use by individuals for their own information and awareness. These materials will be available at the Enrollment and Student Services office at each campus.
- 4. The student portal will provide information about services available from the Student Assistance Program (SAP).
- 5. Providers and other services for persons with substance abuse issues are listed at Wake County Crisis and Assessment Alliance Behavioral Healthcare (http://www.wakegov.com/humanservices/behavioralhealth/outpatient/Pages/default.aspx) at 1-800-510-9132. Alliance Behavioral Healthcare will help students find providers who match their needs. A link to this agency is also available on the student portal.

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:

- Determine the effectiveness of the education program and implement needed changes. The Dean of Student
 Development will provide the AVP with information about attendance and about timeliness and relevance of
 content.
- 2. Ensure consistent enforcement of disciplinary sanctions for the unlawful possession or distribution of illicit drugs and alcohol as applicable under state or federal laws.
- 3. 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 (<u>dist-ed.waketech.edu</u>) 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.

Revised August 2015

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.

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.

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

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 within14 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 POLICY (SEXUAL MISCONDUCT)

Procedures:

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 is committed to providing a learning, working and living environment that promotes respect, responsibility, communication, collaboration, critical thinking, and accountability in an environment free of sexual misconduct and discrimination. Sexual discrimination violates an individual's fundamental rights and personal dignity.

Wake Technical Community College considers sexual discrimination in all its forms to be a serious offense. This plan refers to all forms of sexual discrimination, including: discrimination against pregnant and parenting students, sexual harassment, sexual assault, and sexual violence by employees, students, or third parties. (Title 20 U.S.C. Sections 1681-1688)

Wake Technical Community College has a responsibility to ensure compliance by demonstrating that our education programs and other activities are operated in a manner consistent with Title IX regulations and provisions. If you feel you have been subjected to sexual harassment or discrimination, you should seek assistance as soon as possible. Please review the **Sexual or Gender Misconduct Plan** and the related **Plan Explanations** listed below. Benita Clark, Associate Vice President of Human Resources, is the college's Title IX Coordinator. The Senior Vice President for Student Services, Rita Jerman and the Associate Vice President, Public Safety Education Campus, Anthony Caison, serve as deputy coordinators. They are responsible for implementing and monitoring Wake Technical Community College's Title IX compliance. Investigators are also trained to assist in carrying out Title IX duties.

Mrs. Rita Jerman 919-866-5701 whjerman@waketech.edu Ms. Benita Clark 919-866-7894 biclark@waketech.edu Mr. Anthony Caison 919-866-6101 amcaison@waketech.edu

When concerns are brought to their attention or when they suspect that sexual or gender discrimination may be present, they are bound to initiate and oversee timely investigations and provide updates to the accuser and the accused. Initial complaints must be completed within 30 days from the date of the report; therefore all faculty and staff are required to cooperate fully, truthfully, and expediently with investigations

More information about Title IX

Retaliation is Prohibited

You have the right to raise concerns, to ask questions about our policies prohibiting sex or gender discrimination, and to participate in investigations without fear of retaliation. You also have the right to submit a complaint about retaliatory acts under Title IX.

How Can We Help

Our plan helps to insure the Wake Technical Community College's community is free from discrimination based on sex or gender behavior. We are here to help assist you in an effective and efficient manner. If you feel you are experiencing sexual discrimination, the **most** important thing you can do is to get help. The contacts listed below will be able to guide you and provide important resources.

Who Should I Contact

If you think you have been a victim of sex or gender discrimination, or if you are aware of its existence in any of our

education programs or activities, or you have any questions about the sexual or gender misconduct policy, you can get help from any of the offices/individuals below:

Faculty or Staff: Contact the Chief Human Resource Officer and Title IX Coordinator, your supervisor, or Campus Security;

Students: Contact the Senior Vice President for Student Services, any Student Services Dean, Counseling Staff, Athletic Director, or Campus Security; and

Visitors, Applicants for employment: Contact Chief Human Resource Officer or Campus Security.

Sexual/Gender Misconduct Plan & Plan Expectations

I. PLAN STATEMENT

Members of the Wake Technical Community College's community, guests, and visitors have the right to be free from sexual violence. All members of the campus community are expected to conduct themselves in a manner that does not infringe upon the rights of others. Wake Technical Community College believes in zero tolerance sexual or gender-based misconduct. When an allegation of misconduct is brought to an appropriate administrator's attention, and a respondent is found to have violated this plan, serious sanctions will be imposed to reasonably ensure that such actions are never repeated.

This plan has been developed to reaffirm these principles and to provide recourse for those individuals whose rights have been violated. This plan is intended to define community expectations and to establish a mechanism for determining when those expectations have been violated.

II. EXPECTATIONS WITH RESPECT TO PHYSICAL SEXUAL MISCONDUCT

The expectations of our community regarding sexual misconduct can be summarized as follows: In order for individuals to engage in sexual activity of any type with each other, there must be clear, knowing and voluntary consent prior to and during sexual activity. Consent is sexual permission. Consent can be given by word or action, but non-verbal consent is not as clear as talking about what you want sexually and what you don't. Consent to one form of sexual activity cannot be automatically taken as consent to any other form of sexual activity. Silence--without actions demonstrating permission-cannot be assumed to show consent.

Additionally, there is a difference between seduction and coercion. Coercing someone into sexual activity violates this plan in the same way as physically forcing someone into sex. Coercion happens when someone is pressured unreasonably for sex.

Because alcohol or other drug use can place the capacity to consent in question, sober sex is less likely to raise such questions. When alcohol or other drugs are being used, a person will be considered unable to give valid consent if they cannot fully understand the details of a sexual interaction ("who, what, when, where, why, or how") because they lack the capacity to reasonably understand the situation. Individuals who consent to sex must be able to understand what they are doing. Under this plan, "No" always means "No," and "Yes" may not always mean "Yes." Anything less than a clear, knowing and voluntary consent to any sexual activity is equivalent to a "No."

III. EXPECTATIONS WITH RESPECT TO CONSENSUAL RELATIONSHIPS

There are inherent risks in any romantic or sexual relationship between individuals in unequal positions (such as teacher and student, supervisor and employee). These relationships may be less consensual than perceived by the individual whose position confers power. The relationship also may be viewed in different ways by each of the parties, particularly in retrospect. Furthermore, circumstances may change, and conduct that was previously welcome may become unwelcome. Even when both parties have consented at the outset to a romantic or sexual involvement, this past consent may not remove grounds for a later charge of a violation of applicable sections of the faculty/staff handbooks.

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. For the personal protection of members of this community, relationships in which power differentials are inherent (faculty-student, staff-student, administrator-student) are generally discouraged. Consensual romantic or sexual relationships in which one party maintains a direct supervisory or evaluative role over the other party are unethical.

Therefore, persons with direct supervisory or evaluative responsibilities who are involved in such relationships must bring those relationships to the timely attention of their supervisor; this will likely result in removing the employee from the supervisory or evaluative responsibilities, or shifting the student from being taught or evaluated by someone with whom they

have established a consensual relationship. While no relationships are prohibited by this plan, failure to self-report such relationships to a supervisor as required can result in disciplinary action for an employee.

IV. SEXUAL VIOLENCE -- RISK REDUCTION TIPS

Risk reduction tips can often take a victim-blaming tone, even unintentionally. With no intention to victim-blame, and with recognition that only those who commit sexual violence are responsible for those actions, these suggestions may nevertheless help you to reduce your risk of experiencing a non-consensual sexual act. Set out below are suggestions to avoid committing a non-consensual sexual act:

- 1. If you have limits, make them known as early as possible.
- 2. Tell a sexual aggressor "NO" clearly and firmly.
- 3. Try to remove yourself from the physical presence of a sexual aggressor.
- 4. Find someone nearby and ask for help.
- Take affirmative responsibility for your alcohol intake/drug use and acknowledge that alcohol/drugs lower your sexual inhibitions and may make you vulnerable to someone who views a drunk or high person as a sexual opportunity.
- 6. Take care of your friends and ask that they take care of you. A real friend will challenge you if you are about to make a mistake. Respect them when they do.

If you find yourself in the position of being the initiator of sexual behavior, you owe sexual respect to your potential partner. These suggestions may help you to reduce your risk for being accused of sexual misconduct:

- Clearly communicate your intentions to your sexual partner and give them a chance to clearly relate their intentions to you.
- 2. Understand and respect personal boundaries.
- 3. DON'T MAKE ASSUMPTIONS about consent; about someone's sexual availability; about whether they are attracted to you; about how far you can go or about whether they are physically and/or mentally able to consent. If there are any questions or ambiguity then you DO NOT have consent.
- 4. Mixed messages from your partner are a clear indication that you should stop, defuse any sexual tension and communicate better. You may be misreading them. They may not have figured out how far they want to go with you yet. You must respect the timeline for sexual behaviors with which they are comfortable.
- 5. Don't take advantage of someone's drunkenness or drugged state, even if they did it to themselves.
- 6. Realize that your potential partner could be intimidated by you, or fearful. You may have a power advantage simply because of your gender or size. Don't abuse that power.
- 7. Understand that consent to one form of sexual behavior does not automatically imply consent to any other forms of sexual behavior.
- 8. Silence and passivity cannot be interpreted as an indication of consent. Read your potential partner carefully, paying attention to verbal and non-verbal communication and body language.

In campus hearings, legal terms like "guilt, "innocence," and "burdens of proof" are not applicable, but the College never assumes a student is in violation of College policy. Campus hearings are conducted to take into account the totality of all evidence available, from all relevant sources.

The College reserves the right to take whatever measures it deems necessary in response to an allegation of sexual misconduct in order to protect students' rights and personal safety. Such measures include, but are not limited to, modification of class schedule, interim suspension from campus pending a hearing, and reporting the matter to the local police. Not all forms of sexual misconduct will be deemed to be equally serious offenses, and the College reserves the right to impose different sanctions, ranging from verbal warning to expulsion, depending on the severity of the offense. The College will consider the concerns and rights of both the complainant and the person accused of sexual misconduct.

V. SEXUAL MISCONDUCT OFFENSES INCLUDE, BUT ARE NOT LIMITED TO:

- 1. Sexual Harassment;
- 2. Non-Consensual Sexual Contact (or attempts to commit same);
- 3. Non-Consensual Sexual Intercourse (or attempts to commit same); and
- 4. Sexual Exploitation.

1. SEXUAL HARASSMENT:

Sexual Harassment is

- unwelcome, gender-based verbal or physical conduct that is,
- sufficiently severe, persistent or pervasive that,
- unreasonably interferes with, denies or limits someone's ability to participate in or benefit from the College's educational program and/or activities, and is
- based on power differentials (quid pro quo), the creation of a hostile environment, or retaliation.

Examples include: an attempt to coerce an unwilling person into a sexual relationship; to repeatedly subject a person to egregious, unwelcome sexual attention; to punish a refusal to comply with a sexual based request; to condition a benefit on submitting to sexual advances; sexual violence; intimate partner violence, stalking; gender-based bullying.

2. NON-CONSENSUAL SEXUAL CONTACT:

Non-Consensual Sexual Contact is

 any intentional sexual touching, however slight, with any object, by a man or a woman upon a man or a woman, that is without consent and/or by force.

Sexual Contact includes:

• Intentional contact with the breasts, buttock, groin, or genitals, or touching another with any of these body parts, or making another touch you or themselves with or on any of these body parts; any intentional bodily contact in a sexual manner, though not involving contact with/or/by breasts, buttocks, groin, genitals, mouth or other orifice.

3. NON-CONSENSUAL SEXUAL INTERCOURSE:

Non-Consensual Sexual Intercourse is

• any sexual intercourse, however slight, with any object, by a man or woman upon a man or a woman, that is without consent and/or by force.

Intercourse includes:

vaginal penetration by a penis, object, tongue or finger, anal penetration by a penis, object, tongue, or finger, and
oral copulation (mouth to genital contact or genital to mouth contact), no matter how slight the penetration or
contact.

4. SEXUAL EXPLOITATION:

Occurs when a person takes non-consensual or abusive sexual advantage of another for his/her own advantage or benefit, or to benefit or advantage anyone other than the one being exploited, and that behavior does not otherwise constitute one of the other sexual misconduct offenses. Examples of sexual exploitation include, but are not limited to:

- invasion of sexual privacy;
- prostituting another person;
- non-consensual video or audio-taping of sexual activity;
- going beyond the boundaries of consent (such as letting your friends hide in the closet to watch you having consensual sex);
- engaging in voyeurism;
- knowingly transmitting an STI or HIV to another student;
- exposing one's genitals in non-consensual circumstances; inducing another to expose their genitals; and
- sexually-based stalking and/or bullying may also be forms of sexual exploitation.

VI. ADDITIONAL APPLICABLE DEFINITIONS

- Consent: Consent is clear, knowing, and voluntary. Consent is active, not passive. Silence, in and of itself, cannot be interpreted as consent. Consent can be given by words or actions, as long as those words or actions create mutually understandable clear permission regarding willingness to engage in (and the conditions of) sexual activity.
- Consent to any one form of sexual activity cannot automatically imply consent to any other forms of sexual activity.
- Previous relationships or prior consent cannot imply consent to future sexual acts.
- Force is the use of physical violence and/or imposing on someone physically to gain sexual access. Force also includes threats, intimidation (implied threats), and coercion that overcome resistance or produce consent ("Have sex with me or I'll hit you. Okay, don't hit me, I'll do what you want.").
- Coercion is unreasonable pressure for sexual activity. Coercive behavior differs from seductive behavior based on the type of pressure someone uses to get consent from another. When someone makes clear to you that they do not want sex, 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.
- NOTE: There is no requirement that a party resist the sexual advance or request, but resistance is a clear demonstration of non-consent. The presence of force is not demonstrated by the absence of resistance. Sexual activity that is forced is by definition non-consensual, but non-consensual sexual activity is not by definition forced.
- In order to give effective consent, one must be of legal age.
- Sexual activity with someone who one should know to be -- or based on the circumstances should reasonably have known to be -- mentally or physically incapacitated (by alcohol or other drug use, unconsciousness or blackout), constitutes a violation of this plan.
 - Incapacitation is a state where someone cannot make rational, reasonable decisions because they lack the capacity to give knowing consent (e.g., to understand the "who, what, when, where, why or how" of their sexual interaction).
 - This plan also covers a person whose incapacity results from mental disability, sleep, involuntary physical restraint, or from the taking of rape drugs. Possession, use and/or distribution of any of these substances,

including Rohypnol, Ketomine, GHB, Burundanga, etc. is prohibited, and administering one of these drugs to another student is a violation of this plan. More information on these drugs can be found at: http://www.911rape.org/.

- Use of alcohol or other drugs will never function as a defense for any behavior that violates this plan.
- The sexual orientation and/or gender identity of individuals engaging in sexual activity is not relevant to allegations
 under this plan. For reference to the pertinent state statutes on sex offenses, please see Article 7A of Chapter 14
 of the North Carolina General Statutes.

VII. STATEMENT

- Any student found responsible for violating the plan on Non-Consensual or Forced Sexual Contact (where no
 intercourse has occurred) will likely receive a sanction ranging from probation to expulsion, depending on the
 severity of the incident, and taking into account any previous campus conduct code violations.*
- Any student found responsible for violating the plan on Non-Consensual or Forced Sexual Intercourse will likely face a recommended sanction of suspension or expulsion.*
- Any student found responsible for violating the plan on sexual exploitation or sexual harassment will likely receive a
 recommended sanction ranging from warning to expulsion, depending on the severity of the incident, and taking
 into account any previous campus conduct code violations.*

*The conduct body reserves the right to broaden or lessen any range of recommended sanctions in the case of serious mitigating circumstances or egregiously offensive behavior. Neither the initial hearing officers nor any appeals body or officer will deviate from the range of recommended sanctions unless compelling justification exists to do so.

COPYRIGHT INFRINGEMENT AND INTELLECTUAL PROPERTY

Title of the policy

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

Title of the Policy

Learning Management System Records 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.

View Full Policy*

Learning Management System Records Retention Schedule

*This PDF document is the official version of the policy.



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 (NON-CREDIT)

WORKFORCE CONTINUING EDUCATION

Website: http://workforce.waketech.edu

BIONETWORK

Website: http://www.ncbionetwork.org

Director: Rebel Umphlett Phone:919-513-2322

Email: rbumphlett@waketech.edu

1. Bionetwork Capstone Center Short Courses

2. Validation Academy

COLLEGE & CAREER READINESS PROGRAM

Website: http://ccr.waketech.edu

Dean: Tiffany Williams Phone: 919-334-1636

Email: tfwilliams4@waketech.edu

1. Adult Basic Education

2. High School Equivalency Preparation

3. Adult High School Diploma

4. ABE TOPS

5. English as a Second Language

CORPORATE & BUSINSESS SOLUTIONS

Website: http://corporatesolutions.waketech.edu

Executive Director: Barbara Brothers

Phone: 919-532-5587

Email: babrothers@waketech.edu

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.

- 1. Apprenticeship Training
- 2. Industry Training
- 3. Customized Training Program
- 4. Professional Development and Corporate Training
- 5. Small Business Center
- 6. Wake Tech/Wells Fargo Center for Entrepreneurship

EDUCATION SERVICES & TECHNOLOGY

Dean: Ray Tims. Ph.D. Phone: 919-532-5523 Email: rtims@waketech.edu

- Non-Credit Computer Education Human Resources Development Distance Learning Programs
- Special Projects & Educational Programs

OCCUPATIONAL SERVICES

Dean: Lonette Mims Phone: 919-866-5829

Email: lemims@waketech.edu

- 1. Corrections Education
- 2. Nurse Aide
- 3. Hospitality Programs
- 4. Biowork Program
- 5. Workforce Education Initiatives, Planning & Assessment

PROFESSIONAL SERVICES & VOCATIONAL TRAINING

Dean: Pamela Little Phone: 919-866-5805

Email: pmlittle@waketech.edu

- 1. Cosmetology 2. Barbering
- 3. Green Building
- International Learning & Vocational Education

PUBLIC SAFETY TRAINING

Website: http://publicsafety.waketech.edu

Dean: Jeffrey Robinson Phone: 919-866-6139

Email: jbrobinson@waketech.edu

- 1. Fire Service Training
- 2. Emergency Medical Services
- 3. Law Enforcement In-Service Training
- 4. Correction and Detention Training
- 5. Basic Law Enforcement Training

RECORDS AND REGISTRATION

Dean: Karen Holding-Jordan Phone: 919-334-1629

Email: khjordan@waketech.edu

- Records Registration
- Scheduling

WORKFORCE CONTINUING EDUCATION (NON-CREDIT)

WORKFORCE CONTINUING EDUCATION MISSION

The mission of Workforce Continuing Education (WCE) is to provide workforce training and opportunities for academic and professional development. WCE's first priority is preparing students for the workforce through education, training, and the enhancement of workplace skills that are in high demand. WCE strives to provide more highly-skilled employees for today's competitive labor force. The division also offers a wide range of courses for personal interest and enrichment.

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.

<u>Grade</u>	<u>Explanation</u>
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.

Adult High School

Adult High School classes use the A-F system*.

<u>Grade</u>	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

^{*}CEU's are not awarded with these grades.

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 <u>interactive online schedule</u>. 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.

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 \$50 total or \$10 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.

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 <u>Course Transfer Request</u> form (Wake Tech Form #980) or sending an email to the Workforce CE Registrar at <u>ceregistrar@waketech.edu</u>. 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), ABE Transitional Opportunities for Post-Secondary Success (TOPS), 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.

College & Career Readiness Ability to Benefit Policy

Adults wishing to enroll in College & Career Readiness programs must demonstrate the ability to benefit from the programs by taking the TABE, CASAS, or BEST pre-tests approved by the U.S. Department of Education. Students unable to complete a pre-test may be admitted to the program at a later date, once they have completed it.

Wake Tech offers College & Career Readiness programs for adults, 16 1/2 or older, who are out of school but do not have a high school diploma; or who have a high school diploma (or its equivalent) but are functioning below the post-secondary level with a valid score of 12.9 or below on a TABE test.

According to performance measures outlined in the Workforce Innovation and Opportunity Act of 2014, students in College & Career Readiness programs must demonstrate "improvements in literacy skills levels in reading, writing, and speaking the English language, numeracy, problem solving, English language acquisition, and other literacy skills." Improvements should be sufficient to move students to higher levels of educational functioning. Students who do not demonstrate sufficient improvement to move to higher placement levels on the TABE or BEST tests after one year will be dropped from the program and referred to more appropriate agencies. Students with documented intellectual disabilities who enroll in our College & Career Readiness programs must also demonstrate sufficient improvement on the CASAS or TABE test within two years.

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), ABE Transitional Opportunities for Post-Secondary Success (TOPS), 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

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 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 and scores on a standard battery of tests. 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.

ABE TOPS (Transitional Opportunities for Post-Secondary Success

ABE TOPS is designed for adults with intellectual disabilities or those who want to achieve a higher level of independence by building academic, social, vocational, and life skills. ABE TOPS is specifically for adults who need additional educational opportunities and employment readiness. This is a year-round program, and documentation of an intellectual disability is not required to enroll. All interested participants must demonstrate the ability to benefit from the program by taking the CASAS pre-test. Students unable to complete the pre-test may be admitted to the program at a future date after successfully completing it.

For more information or to make an appointment for orientation and testing, call 919-334-1507.

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. Classes are also offered in Expanding Reading and Vocabulary, Citizenship, Career Awareness, and Workplace.

High School Equivalency Program

The High School Equivalency Program (HEP) is funded by a grant from the U.S. Department of Education, Migrant Education Division, for the purpose of providing migrant and seasonal farm workers and their families the instruction needed to obtain a GED (high school equivalency certificate). The program is administered by Wake Tech in collaboration with other service organizations in the community.

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

CORPORATE AND BUSINESS SOLUTIONS

Corporate and Business Solutions provides training options that are virtually limitless, as they are designed by the client. Working with you and our staff, we will create a training plan to meet your company's unique needs – and get results you can measure. Training can range from highly-technical skill-building programs to broader professional development sessions.

Training is delivered in a variety of formats. Let our training solutions make a positive difference for your company or organization.

Wake Tech is an accredited institution of higher learning offering high-quality courses that qualify for company tuition assistance programs. If your company offers this generous benefit, please visit our website and explore the wide array of courses our Corporate and Business Solutions Division can offer.

Learn more: http://corporatesolutions.waketech.edu.

Apprenticeship Training

Wake Tech has been designated by the North Carolina Community College System as a center for formal apprenticeship training. We assist companies' customized apprenticeship training programs by providing the instructional component of the apprenticeship experience.

Industry Training

Wake Tech assists area industry with a full range of courses to train and retrain employees so that they remain competitive and up to date on industry standards. These courses are available at Wake Tech's Advanced Manufacturing Center or on site at company locations.

Customized Training Program (CIT)

Wake Tech's customized training programs support North Carolina's economic development initiatives by providing training assistance for eligible business and industries. The programs enhance the growth potential of these companies and increase retention of the existing industry base while equipping North Carolina's workforce with the skills for successful employment in emerging industries.

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

Employers: If you need to train a large group in one of these areas, Wake Tech's Corporate & Business Solutions can customize these courses to meet your needs. Contact Danielle Kroeger, Director of Corporate Professional Development, at dlkroeger@waketech.edu or - 919-532-5758 to discuss customized training options.

Wake Tech/Wells Fargo Center for Entrepreneurship

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.

Small Business Center (SBC)

Wake Tech's Small Business Center works to increase the number and success rate of small businesses in North Carolina by providing high quality, readily-accessible assistance to current and prospective business owners and their employees. The SBC provides education, training, information, and referrals.

The center maintains a resource library of print materials and videos to assist business owners with research and problem

solving. The SBC provides these resources, along with confidential counseling services, seminars, and workshops, free of charge.

Learn more at http://www.waketech.edu/programs-courses/non-credit/build-your-business/small-business-center.

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.

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.

OCCUPATIONAL SERVICES

Nurse Aide I Program (NA I)

NA I introduces students to basic nursing skills needed in a health care setting and is approved by the <u>NC Division of Health Service Regulation</u>. Topics include communication, safety, patient rights, personal care, vital signs, elimination, nutrition, emergencies, rehabilitation, and mental health. Upon completion, students will be able to demonstrate the skills necessary to perform as a nurse aide.

Additional classes offered to current Nurse Aides:

- Nurse Aide I Refresher Class
- Nurse Aide II
- Home Care Nurse Aide Specialty

Hospitality Programs

These programs train 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.

Programs and courses include:

- START (Skills, Tasks and Results Training) Hospitality Certification Program
- Servsafe
- Human Resources for Hospitality
- Night Auditors
- Housekeeping
- Certified Pool Operator
- Activity Coordinator for Long term Care Facility
- 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. 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 Development and Personal Enrichment

An ongoing priority of Wake Technical Community College is to offer programs that meet the needs of the working adult. These programs focus on assisting adult students in developing new skills, obtaining/maintaining employment, or changing career paths. Examples of courses offered are:

- Automotive Repair
- Automotive Safety
- Building Trades
- · Business Management
- Computer Skills
- Foreign Languages
- Internet-based Instruction
- Machine Trades and Welding
- Medical Terminology, Coding, and Transcription
- On-Board Diagnostic Emission Certification
- Plumbing
- Beer Brewing

Career Pathways Program

The Career Pathways Program provides training to students based on regional growth areas identified by labor market data. Credential preparation is conducted based on employer needs and the stated credentials for specific industries.

Workforce Education Initiatives, Planning & Assessment

These services provide support in attracting, recruiting, expanding, retaining, and developing new workforce education opportunities with potential and existing industry partners.

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.

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
- Introduction to Solar Photovoltaic Technology
- Agribusiness and Sustainable Farming for the Family
- Making Your Home Green: An Affordable Investment

- NC Barber Instructor Exam Prep
- Shampoo Technician Certification

Training for these WCE programs can be completed in six (6) months or less:

- Comprehensive Solar Training
- 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

International Learning & Vocational Education

The International Learning and Vocational Education 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.

Vocational training classes provide development in programs such as Electrical Wiring, HVAC, Apartment Maintenance, Automotive Detailing, Healthcare Facilities Manager and many others. International Learning also offers basic computer skills and software training classes taught in Spanish.

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 .011 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

WE ARE HERE TO HELP!

<u>Phone</u> 919- 866-5800 <u>Website</u>

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 <u>WebAdvisor</u> for the availability of classes. Click to see a list of Wake Tech's programs that can be completed fully <u>online</u>.

Program Name	Division to Contact	Program Code
Accounting – AAS Degree	Business & Public	A25100
Accounting – <i>Diploma</i>	Services	D25100
Accounting: Core – Certificate	Technologies	C25100C
Income Tax Preparer – <i>Certificate</i>	recimologies	C25100C
Downell Association Clark Continue		
Payroll Accounting Clerk - Certificate		C25100A
Accounting Software Applications - Certificate		C25100D
CPA Exam Preparation: Financial - Certificate		C25100E
CPA Exam Preparation: Regulation - Certificate		C25100F
CPA Exam Preparation: Audit - Certificate		C25100G
Advertising and Graphic Design – AAS Degree	Computer	A30100
Graphics Design – <i>Certificate</i>	Technologies	C30100A
Web and Graphic Design – Certificate		C30100B
Advanced Graphic Design - Certificate		C30100D
Design Basics- Certificate		C30100E
Design Portfolio- Certificate		C30100F
Agricultural Systems Technology – AAS Degree	Applied Engineering &	A60410
Agricultural Systems Technology – <i>Diploma</i>	Technologies	D60410
Air Conditioning, Heating, and Refrigeration Technology – AAS Degree	Applied Engineering &	A35100
Air Conditioning, Heating, and Refrigeration Technology - Diploma	Technologies	D35100A
Air Conditioning, Heating, and Refrigeration Technology - Certificate		C35100B
Commercial - Certificate		C35100C
Design - Certificate		C35100D
Architectural Technology – AAS Degree	Applied Engineering &	A40100
Architectural CAD – Certificate	Technologies	C40100A
Building Information Modeling - Certificate		C40100B
Architectural and Landscape Illustration – <i>Certificate</i>		C40100D
Landscape Design - <i>Certificate</i>		C40100E
Associate Degree Nursing – AAS Degree	Health Sciences	A45110
Associate Degree Nursing (LPN to RN Advanced Placement Option) – AAS	Health Sciences	A45110
Degree		
Associate of Arts – AA Degree	College Transfer	A10100
Associate in Fine Arts in Visual Arts – AFA Degree	College Transfer	A10600
Associate of Science – AAS Degree Associate of Engineering – AE Degree	College Transfer College Transfer	A10400 A10500
Automotive Systems Technology – AAS Degree	Applied Engineering &	A60160
with the control of t	Technologies	7100100
Baking and Pastry Arts – AAS Degree	Business & Public	A55130
Baking and Pastry Arts – <i>Diploma</i>	Services	D55130
Baking and Pastry Arts - Certificate	Technologies	C55130A
Biopharmaceutical Technology – AAS Degree	Applied Engineering &	A20180
Applied Biotechnology - Certificate	Technologies	C20180A
Biopharmaceutical Regulations - Certificate		C20180B
Biopharmaceutical Manufacturing and Quality - Certificate		C20180C
Advanced Biopharmaceutical Practices - Certificate		C20180D
Pharmaceutical Basics - Certificate		C20180E
Business Administration: General Business Administration – AAS Degree	Business & Public	A25120A
Business Core – Certificate	Services	C25120D
Career Success – Certificate	Technologies	C25120G
Customer Service – Certificate]	C25120B
Entrepreneurship – <i>Certificate</i>		C25120C
_eadership - Certificate		C25120F
Business Administration: Global Business Management – AAS Degree	Business & Public	A25120G
nternational Business - <i>Certificate</i>	Services	C25120G

Program Name	Division to Contact	Program Code
Business Administration: Human Resources Management – AAS Degre		A25120H
Human Resources Administration - Certificate	Technologies	C25120HA
Human Resources Management – Certificate		C25120HB
Public Administration - Certificate		C25120P
Business Administration: Marketing – AAS Degree Marketing and Sales - Certificate	Business & Public Services Technologies	A25120M C25120MM
Business Analytics – AAS Degree	Business & Public	A25350
Business Intelligence – Certificate	Services Technologies	C25350A
Business Analyst – Certificate Marketing Analytica Cortificate		C25350B
Marketing Analytics – <i>Certificate</i> Logistics Analytics – <i>Certificate</i>		
Finance Analytics - Certificate		
Collision Repair and Refinishing Technology – AAS Degree	Applied Engineering	A60130
Fundamentals – Certificate	& Technologies	C60130A
Fundamentals II – <i>Certificate</i>		C60130B
Civil Engineering Technology – AAS Degree	Applied Engineering	A40140
Office/CAD – Certificate	& Technologies	C40140A
Field Technician – Certificate		C40140A
Design - Certificate		C40140C
	Computer Technologies	
Computer Engineering - AAS Degree	Computer Technologies	A25590CE
Computed Tomography Technology - Certificate	Health Sciences	C45200
Computer Programming and Development – AAS Degree	Computer	A25590CP
IT Foundations - Certificate	Technologies	C25590F
JAVA Programming – Certificate		C25590JV
Visual BASIC Programming – <i>Certificate</i>		C25590VB
C++ Programming – <i>Certificate</i> Enterprise Java – <i>Certificate</i>		C25590CC C25590EJ
Programming Fundamentals - Certificate		C25990PF
	<u> </u>	02000011
Computer Technology Integration	Computer Technologies	125500D
Data Storage & Virtualization – AAS Degree Healthcare Business Informatics – AAS Degree		A25500D A25500H
Construction Equipment Systems Technology – AAS Degree	Applied Engineering &	A60450
Construction Equipment Systems Technology – Diploma	Technologies	D60450
Hydraulics, Engines, and Transmission – Certificate		C60450BB
Fuel Injection, Electrics, and Electronics – Certificate		C60450BC
Construction Management Technology – AAS Degree	Applied Engineering &	A35190
Construction Management Technology: Basic - Certificate	Technologies	C35190C
Basic Construction Estimating – Certificate		C35190D
Construction Safety Management - Certificate		C35190E
Cosmetology – AAS Degree	Business & Public	A55140
Cosmetology - <i>Diploma</i>	Services Technologies	D55140A
Criminal Justice Technology – AAS Degree	Business & Public	A55180
Principles of Correction – <i>Certificate</i> Introduction to Law Enforcement – <i>Certificate</i>	Services Technologies	C55180A C55180B
Homeland Security – <i>Certificate</i>		C55180H
Intelligence Analysis - Certificate		C55180I
Criminal Justice Technology/Forensic Science– AAS Degree	Business & Public	A5518A
Principles of Identification and Information – Certificate	Services Technologies	C5518A
Crime Scene Technician - <i>Certificate</i>		C5518C
Culinary Arts – AAS Degree	Business & Public	A55150
Culinary Arts – Diploma	Services Technologies	D55150
Culinary Arts - Certificate	_	C55150A
Cyber Security – AAS Degree Hacking and Forensics – Diploma	Computer Technologies	A25590CS D25590HF
Data Science and Programming Support – AAS Degree	Computer	A25590DS
IT Foundations - Certificate	Technologies	C25590F
Database Programing - General - Certificate		C25590GB
Database Programing - Microsoft - Certificate		C25590SQ
Database Programing – Oracle - Certificate		C25590OR
Database Programing - SAS - <i>Certificate</i>		C25590SS
Python Programming - <i>Certificate</i> Programming Fundamentals - <i>Certificate</i>		C25590PY C25990PF
Dental Assisting - Diploma	Health Sciences	D45240
Dental Hygiene – AAS Degree	Health Sciences	A45260

Program Name	Division to Contact	Program Code
Diesel and Heavy Equipment Technology – AAS Degree Diesel and Heavy Equipment Technology - Diploma Hydraulics, Engines, and Transmission Forklift – Certificate Fuel Injection, Electrical, and Electronics Forklift – Certificate	Applied Engineering & Technologies	A60460 D60460 C60460BB C60460BC
Early Childhood Education – AAS Degree Early Childhood Education – Diploma Early Childhood Education – Certificate School-Age – Certificate Preschool Foundation - Certificate Infant/Toddler Care - Certificate	Business & Public Services Technologies	A55220 D55220A C55220D C55220E C55220G C55290
Electrical Systems Technology – AAS Degree Electrical Systems Technology – Diploma Electrical Systems Technology – Certificate Residential Wiring – Certificate Commercial Wiring – Certificate Industrial Wiring – Certificate Wiring Methods – Certificate	Applied Engineering & Technologies	A35130 D35130 C35130 C35130A C35130B C35130C C35130D
Electronics Engineering Technology – AAS Degree Basic Electronics – Certificate PLC Programming – Certificate SCADA Systems – Certificate Instrumentation – Certificate Embedded Systems – Certificate	Applied Engineering & Technologies Health Sciences	A40200 C40200A C40200B C40200E C40200F C40200G
Emergency Medical Science – AAS Degree Esthetics Technology - Certificate	Business & Public Services Technologies	A45340 C55230
Facility Maintenance Technology – AAS Degree Facility Maintenance Technology: Electrical Systems – Certificate Facility Maintenance Technology: HVACR – Certificate Facility Maintenance Technology: Bosic Plumbing – Certificate Basic Facilities Technology I – Certificate	Applied Engineering & Technologies	A50190 C50190A C50190B C50190C C50190D
Basic Facilities Technology II – Certificate Fire Protection Technology – AAS Degree Fire Protection Technology: Basic – Certificate Loss Control/Investigation – Certificate Fire Management – Certificate	Business & Public Services Technologies	C50190E A55240 C55240A C55240B C55240C
Food Service Technology – <i>Diploma*</i> Food Service Technology – <i>Certificate*</i> *(Offered only to North Carolina Correctional Institute for Women)	Business & Public Services Technologies	D55250 C55250
Geomatics Technology – AAS Degree Geomatics CAD – Certificate Geomatics Field Technician – Certificate Geomatics Design – Certificate	Applied Engineering & Technologies	A40420 C40420A C40240B C40420C
Health and Fitness Science – AAS Degree Health and Fitness – Certificate	Health Sciences	A45630 C45630
Healthcare Business Informatics – AAS Degree Heavy Equipment Operator – Diploma Basic Heavy Equipment Operator – Certificate Advanced Heavy Equipment Operator – Certificate	Computer Technologies Applied Engineering & Technologies	A25590HB D35240 C32540A C35240B
Hospitality Management – AAS Degree Hospitality Management – Diploma Hospitality Restaurant Management – Certificate Procurement Management Certificate Hospitality Management Core Certificate Hospitality Event Coordinator– Certificate Hospitality Hotel Operations – Certificate Foodservice Entrepreneurship – Certificate	Business & Public Services Technologies	A25110 D25110 C25110D C25110E C25110F C25110G C25110H C25110J

Program Name	Division to Contact	Program
		Code
Human Services Technology	Health Sciences	A 45000
Human Services Technology – <i>AAS Degree</i> Human Services Technology/Mental Health – <i>AAS Degree</i>		A45380 A4538C
Human Services Technology/Mental Health – AAS Degree Human Services Technology /Substance Abuse – AAS Degree		A4538E
Mental Health – Certificate		C4538C
Substance Abuse Counseling - Certificate		C4538ECO
Substance Abuse Counseling - Certificate Substance Abuse Intervention - Certificate		C4538EI
nterior Design – AAS Degree	Applied Engineering &	A30220
	Technologies	
Residential Interior Design – <i>Certificate</i>	reciliologies	C30200A
Décor Focus Interior Design – <i>Certificate</i>		C30220B
Commercial Interior Design – Certificate		C30220C
_ateral Entry - Certificate	Business & Public Services Technologies	C55430
Magnetic Resonance Imaging - Diploma	Health Sciences	D45800
Mechanical Engineering Technology – AAS Degree	Applied Engineering &	A40320
Mechanical Design – Certificate	Technologies	C40320B
Thermal Mechanics - Certificate		C40320C
Materials Engineering – Certificate		C40320D
Additive Manufacturing – <i>Certificate</i>		C40320D C40320G
		C40320G
Mechanical Drafting – Certificate		
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	Computer	
Medical Office Professional – AAS Degree	Technologies	A25310P
Medical Billing and Coding – AAS Degree		A25310B
Healthcare and Administration – AAS Degree		A25310H
Medical Office Professional – <i>Diploma</i>		D25310P
Medical Office Professional - Certificate		C25310P
Minerian Critical Operations AAC Degrees	Applied Engineering &	A 40 400
Mission Critical Operations – AAS Degree	Technologies	A40430
ntroduction to MCO – <i>Certificate</i>	reclinologies	C40430A
Critical Electrical Systems – <i>Certificate</i>		C40430B
Critical Control Systems – Certificate		C40430C
Mission Critical Operations – Certificate		C40320D
Mobile Applications Developer – AAS Degree	Computer	A25590MA
Android Application Developer - Certificate	Technologies	C25590MA
Web Development Basics - Certificate		C25590WB
OS Application Developer - Certificate		C25590MI
Front-End Developer - Certificate		C25590DV
Web Designer - Certificate		C25590DM
Network Management – AAS Degree	Computer	A25590NM
Data Storage and Virtualization - <i>Diploma</i>	Technologies	D25590DV
Cisco Network Associate - Certificate	recimologics	C25590DV
Cisco Network Associate - Certificate		C25590CA
Microsoft Certified IT Professional - Certificate		C25590CF
Linux Certified Professional - Certificate		
		C255001 V
		C25590LX
inux Security Specialist – <i>Certificate</i>		C25590LS
Linux Security Specialist – <i>Certificate</i> Global Windows Security Administration – <i>Certificate</i>		C25590LS C25590WS
Linux Security Specialist – <i>Certificate</i> Global Windows Security Administration – <i>Certificate</i> Cisco Security - <i>Certificate</i>	Computer	C25590LS C25590WS
Linux Security Specialist – <i>Certificate</i> Global Windows Security Administration – <i>Certificate</i> Cisco Security - <i>Certificate</i> Office Administration	Computer Technologies	C25590LS C25590WS C25590CX
Linux Security Specialist – Certificate Global Windows Security Administration – Certificate Cisco Security - Certificate Office Administration Office Professional – AAS Degree	Computer Technologies	C25590LS C25590WS
Linux Security Specialist – Certificate Global Windows Security Administration – Certificate Cisco Security - Certificate Office Administration Office Professional – AAS Degree Office Finance – AAS Degree		C25590LS C25590WS C25590CX A25370P A25370F
Linux Security Specialist – Certificate Global Windows Security Administration – Certificate Cisco Security - Certificate Office Administration Office Professional – AAS Degree Office Finance – AAS Degree Office Software – AAS Degree		C25590LS C25590WS C25590CX A25370P A25370F A25370S
Linux Security Specialist – Certificate Global Windows Security Administration – Certificate Cisco Security - Certificate Office Administration Office Professional – AAS Degree Office Finance – AAS Degree Office Software – AAS Degree Legal Office – AAS Degree		C25590LS C25590WS C25590CX A25370P A25370F A25370S A25370L
Linux Security Specialist – Certificate Global Windows Security Administration – Certificate Cisco Security - Certificate Office Administration Office Professional – AAS Degree Office Finance – AAS Degree Office Software – AAS Degree		C25590LS C25590WS C25590CX A25370P A25370F A25370S A25370L D25370P
Linux Security Specialist – Certificate Global Windows Security Administration – Certificate Cisco Security - Certificate Office Administration Office Professional – AAS Degree Office Finance – AAS Degree Office Software – AAS Degree Legal Office – AAS Degree Office Professional - Diploma		C25590LS C25590WS C25590CX A25370P A25370F A25370S A25370L
Linux Security Specialist - Certificate Global Windows Security Administration - Certificate Cisco Security - Certificate Office Administration Office Professional - AAS Degree Office Finance - AAS Degree Office Software - AAS Degree Legal Office - AAS Degree Office Professional - Diploma Office Professional - Certificate Office Software - Certificate		C25590LS C25590WS C25590CX A25370P A25370F A25370S A25370L D25370P C25370P C25370S
Linux Security Specialist - Certificate Global Windows Security Administration - Certificate Cisco Security - Certificate Office Administration Office Professional - AAS Degree Office Finance - AAS Degree Office Software - AAS Degree Legal Office - AAS Degree Office Professional - Diploma Office Professional - Certificate Office Software - Certificate		C25590LS C25590WS C25590CX A25370P A25370F A25370S A25370L D25370P C25370P
Linux Security Specialist - Certificate Global Windows Security Administration - Certificate Cisco Security - Certificate Office Administration Office Professional - AAS Degree Office Finance - AAS Degree Office Software - AAS Degree Legal Office - AAS Degree Office Professional - Diploma Office Professional - Certificate Office Software - Certificate	Technologies	C25590LS C25590WS C25590CX A25370P A25370F A25370S A25370L D25370P C25370P C25370S C25370L

Program Name	Division to Contact	Program Code
Plumbing:	Applied Engineering &	
Plumbing: Residential – <i>Diploma</i>	Technologies	D35300A
Plumbing: Commercial - <i>Diploma</i>		D35300A
Plumbing Concepts I – <i>Certificate</i>		C35300D
Plumbing Concepts II – <i>Certificate</i>		C35300E
Radiography – AAS Degree	Health Sciences	A45700
Simulation and Game Development:	Computer	74-07-00
Simulation and Game Development - Art & Modeling – AAS Degree	Technologies	A25450A
Simulation and Game Development - Programming – AAS Degree		A25450P
Modeling and Animation – <i>Diploma</i>		D25450B
Modeling and Animation – <i>Certificate</i>		C25450A
Production - Certificate		C25450B
Mobile Game Development– Certificate		C25450C
Fundamentals I for Simulation and Game Development– Certificate		C25450D
Fundamentals II for Simulation and Game Development– Certificate		C25450E
Quality Assurance for Simulation and Game Development– Certificate		C25450F
Business for Simulation and Game Development– Certificate		C25450G
Programming for Simulation and Game Development– <i>Certificate</i>		C25450H
Level Design - Certificate		C25450I
Software and Web Development – AAS Degree	Computer	A25590SW
IT Foundations - Certificate	Technologies	C25590F
C# Programming - Certificate		C25590CZ
JavaScript - Certificate		C25590JS
.Net Programming - Certificate		C25590NE
Programming Fundamentals - Certificate		C25990PF
Storage & Virtualization – AAS Degree	Computer Technologies	A25590SV
Supply Chain Management (Distribution Management) – AAS Degree	Business & Public Services	A25620D
Distribution Management Core – <i>Certificate</i>	Technologies	C25620DA
Transportation Management - Certificate		C25620DB
Supply Chain Management (Global Logistics Technology)- AAS Degree	Business & Public Services	A25620G
Logistics Core – <i>Certificate</i>	Technologies	C25620GA
International Logistics - Certificate		C25620GB
Supply Chain - Certificate		C25620GC
Technical Support – AAS Degree	Computer	A25590TS
Hardware Support and Repair - Certificate	Technologies	C25590HW
IT Foundations - Certificate		C25590F
IT Help Desk Technician - Certificate		C25590HD
Cybersecurity Support - Certificate		C25590CS
Networking Support - Certificate		C25590NS
Therapeutic Massage - Diploma	Health Sciences	D45750
Web Designer – AAS Degree	Computer	A25590DM
Web Designer - Certificate	Technologies	C25590DM
Advanced Web Designer - Certificate		C25590AW
Front-End Developer - Certificate		C25590DV
Web Development Basics - Certificate		C25590WB
Web Developer – AAS Degree	Computer	A25590WD
Web Developer - Certificate	Technologies	C25590WD
Advanced Web Developer - Certificate		C25590AD
Front-End Developer - Certificate		C25590DV
Web Development Basics - Certificate		C25590WB
Wolding Technology AAS Degree	Applied Engineering &	Λ50420
Welding Technology – AAS Degree Welding Technology – Diploma	Technologies	A50420 D50420
Welding Technology – <i>Certificate</i>	recimologies	
		C50420B
Fabrication Design – <i>Certificate</i>		C50420C C50420D
Computer Controlled Welding - Certificate		

*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 (traditional-seated, online, or hybrid). Website: http://curred.waketech.edu/.

Professional Licensure

If you are considering a program at Wake Technical Community College that leads to licensure or certification and you do not live in North Carolina, please contact the respective licensing board in the state where you reside before beginning the program. It is the student's responsibility to contact the licensing board in the state in which they live or intend to practice.



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 Division

Dean Patti Godin Phone: 919-866-5170 Email: pagodin@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 <u>WebAdvisor</u> for the availability of classes. Click to see a list of Wake Tech's programs that can be completed fully <u>online</u>.

Program Name	Program Code
Agricultural Systems Technology – AAS Degree	A60410
Agricultural Systems Technology – <i>Diploma</i>	D60410
Air Conditioning, Heating, and Refrigeration Technology – AAS Degree	A35100
Air Conditioning, Heating, and Refrigeration Technology - <i>Diploma</i>	D35100A
Air Conditioning, Heating, and Refrigeration Technology - Certificate	C35100B
Commercial - Certificate	C35100C
Design - Certificate	C35100D
Architectural Technology – AAS Degree	A40100
Architectural CAD – Certificate	C40100A
Building Information Modeling - Certificate	C40100B
Architectural and Landscape Illustration – <i>Certificate</i>	C40100D
Landscape Design - Certificate	C40100F
Automotive Systems Technology – AAS Degree	A60160
Biopharmaceutical Technology – AAS Degree	A20180
Applied Biotechnology - Certificate	C20180A
Biopharmaceutical Regulations - Certificate	C20180B
Biopharmaceutical Manufacturing and Quality - Certificate	C20180C
Advanced Biopharmaceutical Practices - Certificate	C20180D
Pharmaceutical Basics - Certificate	C20180E
Civil Engineering Technology – AAS Degree	A40140
Office/CAD – Certificate	C40140A
Field Technician – Certificate	C40140B
Design - Certificate	C40140C
Collision Repair and Refinishing Technology – AAS Degree	A60130
Fundamentals – Certificate	C60130A
Fundamentals II – Certificate	C60130B
Construction Equipment Systems Technology – AAS Degree	A60450
Construction Equipment Systems Technology – <i>Diploma</i>	D60450
Hydraulics, Engines, and Transmission – Certificate	C60450BB
Fuel Injection, Electrics, and Electronics – Certificate	C60450BC
Construction Management Technology – AAS Degree	A35190
Construction Management Technology: Basic – Certificate	C35190C
Basic Construction Estimating – Certificate	C35190D
Construction Safety Management – Certificate	C35190E
Diesel and Heavy Equipment Technology – AAS Degree	A60460
Diesel and Heavy Equipment Technology - Diploma	D60460
Hydraulics, Engines, and Transmission Forklift – Certificate	C60460BB
Fuel Injection, Electrical, and Electronics Forklift - Certificate	C60460BC

Program Name's Continued					
Electrical Systems Technology – AAS Degree	Code A35130				
Electrical Systems Technology – <i>Diploma</i>	D35130				
Electrical Systems Technology – <i>Certificate</i>	C35130				
Residential Wiring – <i>Certificate</i>	C35130A				
Commercial Wiring – Certificate	C35130B				
Industrial Wiring – Certificate					
Wiring Methods – Certificate					
Electronics Engineering Technology – AAS Degree	C35130D A40200				
Basic Electronics – Certificate	C40200A				
PLC Programming – <i>Certificate</i>	C40200B				
SCADA Systems – <i>Certificate</i>	C40200E				
Instrumentation – Certificate	C40200F				
Embedded Systems – Certificate	C40200G				
Facility Maintenance Technology – AAS Degree	A50190				
Facility Maintenance Technology: Electrical Systems – <i>Certificate</i>	C50190A				
Facility Maintenance Technology: Electrical Systems – Certificate	C50190A C50190B				
	C50190B C50190C				
Facility Maintenance Technology: Basic Plumbing – <i>Certificate</i>					
Basic Facilities Technology I – <i>Certificate</i>	C50190D				
Basic Facilities Technology II – <i>Certificate</i>	C50190E				
Geomatics Technology – AAS Degree	A40420				
Geomatics CAD – Certificate	C40420A				
Geomatics Field Technician – Certificate	C40240B C40420C				
Geomatics Design – Certificate					
Heavy Equipment Operator – Diploma	D35240				
Basic Heavy Equipment Operator – Certificate	C32540A				
Advanced Heavy Equipment Operator – Certificate	C35240B				
Interior Design – AAS Degree	A30220				
Residential Interior Design – Certificate	C30200A C30220B				
Décor Focus Interior Design – <i>Certificate</i>					
Commercial Interior Design – Certificate					
Mechanical Engineering Technology – AAS Degree	A40320				
Mechanical Design – <i>Certificate</i>	C40320B				
Thermal Mechanics - Certificate	C40320C				
Materials Engineering – Certificate	C40320D				
Additive Manufacturing- Certificate	C40320G				
Mechanical Drafting – <i>Certificate</i>	C40320H				
Mechatronics – Certificate	C40320I				
Mission Critical Operations – AAS Degree	A40430				
Introduction to MCO – <i>Certificate</i>	C40430A				
Critical Electrical Systems – <i>Certificate</i>	C40430B				
Critical Control Systems – Certificate	C40430C				
Mission Critical Operations – <i>Certificate</i>	C40320D				
Plumbing: Residential – Diploma	D35300A				
Plumbing: Commercial – Diploma	D35300B				
Plumbing Concepts I – Certificate	C35300D				
Plumbing Concepts II – Certificate	C35300E				
Welding Technology – AAS Degree	A50420				
Welding Technology – <i>Diploma</i>	D50420				
Welding Technology – Certificate	C50420B				
Fabrication Design – <i>Certificate</i>	C50420C				
Computer Controlled Welding - Certificate	C50420D				

*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 course work 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.

Agricultural Systems Technology Diploma - D60410

Program Sequence

First S	Semeste	er
TRN	110	Intro to Transportation Tech2
TRN	120	Basic Transportation Electricity5
TRN	120A	Basic Transportation Electricity Lab1
TRN	140	Transportation Climate Control2
TRN	170	PC Skills for Transportation2
ENG	110	Freshman Composition3
HUM	121	The Nature of America3
Electiv	∕e List I	2
Secor	nd Semo	ester
HET.	110	Diesel Engines6
HET	134	Mechanical Fuel Injection3
PME	112	Consumer Products
MAT	110	Math Measurement & Lit3
Electiv	e List II	2
Third	Semest	tor
		2
-		-1
HET	h Seme	Ster Power Trains5
HYD PME	134 121	Hyd/Hydrostatic Const
COM	121	Component Controls
PSY	118	Intro Interpersonal Com
F31	110	interpersonal Esychology3
Fifth S	Semeste	
ELN	112	DC/AC Electricity4
PME	111	Planters and Sprayers4
PME	122	Agricultural Telematics3
Electiv	e List I	4
112, E PME	NG 110	icultural Systems Technology Diploma (D60410): ELN 1, HET 110, HET 114, HET 134, HYD 134, PME 111, E 121, PSY 118, TRN 110, TRN 120, TRN 120A, TRN
Electiv	e List I	(Select 6 hours from the following courses):
ELN	110	Survey of Electronics3
ELN	113	Electronic Fuel Injection2
HET	115	Electronic Engines3
HET	128	Med/Heavy Duty Tune-up2
HET	192	Selected Topics2

Gradu	Graduation Requirements70 Credit Hours			
WLD	112	Basic Welding Processes	2	
WBL	112	Work-Based Learning I	2	
WBL	111	Work-Based Learning I	<i>'</i>	
Electiv	/e List I	II (Select 2 hours from the following courses):		
HYD	112	Hydraulics/Med/Heavy Duty	2	
HYD	111	Mobile Hydraulic Systems	3	
HYD	110	Hydraulics/Pneumatics I	3	
Electiv	e List I	I (Select 2 hours from the following courses):		
PME	211	Adv Equipment Repair	4	

AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY

Air Conditioning, Heating, and Refrigeration Technology Degree - A35100

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.

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.

Air Conditioning, Heating, and Refrigeration Technology 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.

Design Certificate - C35100D

The Air Conditioning, Heating, and Refrigeration Technology Design Certificate is designed for individuals interested in the basics of how to design residential and commercial AHR systems. Topics include building codes, principles and concepts of conventional residential heating and cooling system design, principles of designing heating and cooling systems for commercial buildings, and common business and customer relation practices. Certificate graduates should be able to assist in the design of residential and commercial AHR systems, and the mechanical codes that apply toward system installation.

Building Automation Certificate – C35100E

Commercial Refrigeration Certificate – C35100F

Program Sequence

First	Semest	ter	
AHR AHR	111	HVACR Electricity	
Saco	nd Sem	postor	
AHR		Introduction to Refrigeration	5
AHR	112	Heating Technology	4
AHR	113L	Comfort Cooling	2
PSY	118	Interpersonal Psychology	3
Third	Semes	ster	
AHR	114	Heat Pump Technology	4
AHR	125	HVACR Electronics	
AHR		HVAC Servicing	
ENG	110	Freshman Composition	3
		IR Evening Certificate (C35100B): AHR 111, AHR 112 IR 125, AHR 133	,
Fourt	h Seme	ester	
AHR	115	Refrigeration Systems	2
AHR	213	HVACR Building Code	2
AHR	-	HVAC Duct Systems I	
AHR		Residential System Design	
Electi	ve List I		1
Comp	olete AF	HR Diploma (D35100A): AHR 110, AHR 111, AHR 112	,
		AHR 113L, AHR 114, AHR 115, AHR 125, AHR 133,	
AHR	151, AF	HR 213, ENG 110, PSY 118	
Fifth	Semest	ter	
AHR	180	HVAC Customer Relations	1
AHR	215	Commercial HVAC Controls	2
BAT	111	Building Automation Systems	
REF	116	Commercial Systems I	
COM	120	Interpersonal Communication	3
		ommercial Refrigeration Certificate (C35100F): AHR 1, AHR 115, REF 116	
Sixth	Semes	ster	
AHR		Advanced Comfort Systems	4
AHR	225	Commercial System Design	3
AHR	250	HVAC System Diagnostics	2
AHR		Energy Management	
HUM		The Nature of America	
MAT	110	Mathematical Measurement and Lit	3
Comp 225, 7	olete De AHR 23	sign Certificate (C35100D): AHR 211, AHR 213, AHR 5, AHR 263	
		ilding Automation Certificate (C35100E): AHR 111, IR 215, AHR 225, AHR 263, BAT 111	
Electi	ve List I	(Select 1 hour from the following courses):	
AHR		Refrigerant Certification	1
AHR		Refrigeration Design	3
WBL	111	Work-Based Learning I	1
Grad	uation I	Requirements72 Credit Hour	S

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.

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.

Building Information Modeling (BIM) Certificate – C40100B

Architectural and Landscape Illustration Certificate – C40100D

Landscape Design Certificate – C40100F

Program Sequence

First	Semes	ter	
ARC	111	Introduction to Architectural Technology	3
ARC	112	Construction Materials and Methods	4
ARC	114	Architectural CAD	
ARC	114A	Architectural CAD Lab	1
ARC	250	Survey of Architecture	3
Seco	nd Sem	nester	
ARC	113	Residential Architectural Technology	
ARC	212	Commercial Construction Technology	
ARC		Architectural BIM I	
	225A	Architectural BIM I Lab	1
ARC	264	Digital Architecture	
MAT	121	Algebra and Trigonometry	3
Third	Semes		
ENG	111	Expository Writing	3
HUM	115	Critical Thinking	3
Fourt	h Seme	ester	
ARC	131	Building Codes	3
ARC	132	Specifications and Contracts	2
ARC	211	Light Construction Technology	3
ARC	220	Advanced Architectural CAD	2

ARC 23		Elective List IV (Select 5 hours from the following courses): ARC 261 Solar Technology
ARC 24	0 Site Planning3	LAR 120 Sustainable Development
Complete	e Architectural CAD Certificate (C40100A): ARC 111, ARC	WBL 111 Work-Based Learning I1
112, ARC	C 113, ARC 114, ARC 114A, ARC 220	WBL 112 Work-Based Learning I2
Fifth Sen	nester	WBL 113 Work-Based Learning I3
ARC 14		Graduation Requirements72 Credit Hours
ARC 21	3 Design Project4	·
SST 14		ALITOMOTIVE EVETEME
ENG 11	4 Professional Research and Reporting	AUTOMOTIVE SYSTEMS
LIECTIVE I	151 (C1005e 110111 1 01 4 tracks)	TECHNOLOGY
Elective 1	1 Track 1: Complete Building Information Modeling	
	e (C40100B): Choose CIV 125, ARC 226, ARC 226A +	Automotive Systems Technology Degree
ARC 212	, ARC 225, ARC 225A, ARC 264	- A60160
Elective 2	2 Track 2: Complete Architectural Planning Design	The Automotive Systems Technology curriculum prepares
	e (C40100C): Choose LAR 211, LAR 241, LAR 242 + ARC	individuals for employment as automotive service technicians. It
213, ARC	C 240, ARC 264	provides an introduction to automotive careers and increases
Flective :	3 Track 3: Complete Architectural and Landscape	student awareness of the challenges associated with this fast and ever-changing field.
	n Certificate (C40100D): Choose ARC 231, ARC 235, LAR	over changing note.
235 + AF	2C 264	Classroom and lab experiences integrate technical and academic
Clastina (Tural, 4. Commista I andreama Basism Contificata	coursework. Emphasis is placed on theory, servicing and
	2 Track 4: Complete Landscape Design Certificate F): Choose HOR 114, HOR 160, LAR 111, LAR 113, LAR	operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/
•	C 114, ARC 114A	transaxles, engine repair, climate control, and manual drive trains.
	2 Track 5: Complete Plant Identification Certificate G): Choose HOR 160, HOR 161, HOR 162, LAR 231	Upon completion of this curriculum, students should be prepared
(0401000	3). Choose fick 100, fick 101, fick 102, LAR 231	to take the ASE exam and be ready for full-time employment in dealerships and repair shops in the automotive service industry.
Sixth Se	mester	dealeremps and repair chepe in the automotive connect industry.
PSY 15	0 General Psychology3	First Semester
Elective	List I (Salact 5 hours from the following courses):	AUT 116 Engine Repair3 AUT 116A Engine Repair Lab1
ARC 22	List I (Select 5 hours from the following courses): Architectural BIM II	AUT 116A Engine Repair Lab1 TRN 110 Intro to Transportation Tech2
ARC 22		TRN 120 Basic Transport Electricity5
CIV 12	, 0	TRN 120A Basic Transport Electricity Lab1
CIV 23	9	TRN 170 PC Skills for Transp
WBL 11	•	MAT 110 Math Measurement & Lit3
WBL 11	3	Second Semester
		AUT 123 Powertrain Diagn & Serv2
	List II (Select 5 hours from the following courses):	AUT 181 Engine Performance 1
HOR 11:	, ,	AUT 181A Engine Performance 1 Lab
HOR 16	•	AUT 231 Man Trans/Axles/Drtrains
HOR 16		ENG 110 Freshman Composition3
HOR 16:		HUM 121 The Nature of America3
LAR 11	•	Third Semester
LAR 12		TRN 140 Transport Climate Control2
LAR 21	1 Commercial Site Design3	TRN 140A Transport Climate Control Lab2
LAR 23		Faculty Comments
LAR 23 LAR 24	,	Fourth Semester AUT 141 Suspension & Steering Sys
LAR 24:		AUT 141A Suspension & Steering Sys
LAR 25		AUT 151 Brake Systems3
WBL 11	1 Work-Based Learning I1	AUT 151A Brake Systems Lab1
WBL 11:	•	AUT 281 Adv Engine Performance
WBL 11	o work-based Learning I3	PSY 118 Interpersonal Psychology3
	List III (Select 5 hours from the following courses):	Fifth Semester
ARC 23		AUT 114 Safety and Emissions
ARC 23: LAR 11		AUT 183 Engine Performance II
LAR 23	·	AUT 221A Auto Transm/Transax Lab
WBL 11	1 Work-Based Learning I1	COM 120 Interpersonal Communication3
WBL 11:	3	Graduation Requirements
vvoi il.	a vvoin-Daseureaumur 3	Graduation Reduirements ob Gredit 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

Biopharmaceutical Regulations Certificate - C20180B

This is an introduction to regulatory and applied science course work. This certificate is the first of three "stackable" certificates embedded within the Biopharmaceutical Technology Program.

Biopharmaceutical Manufacturing and Quality Certificate - C20180C

The courses in this certificate emphasize manufacturing processes and quality control procedures applicable to the biopharmaceutical industry and is the second of the "stackable" certificates.

Advanced Biopharmaceutical Practices Certificate - C20180D

The courses in this certificate provide more detail and very specific applications within the industry. This certificate is the third of the three "stackable" certificates of the Biopharmaceutical Technology Program.

Pharmaceutical Basics Certificate - C20180E

Program Sequence

First Semester

PTC ENG MAT	131 131A 110 111 121	Bioprocess Practices	.3 .1 .3
Seco	nd Sem	nester	
BIO		Principles of Biology	4
CHM		Organic and Biochemistry	. 4
_	121	Envir Health & Safety	
	120	Pharmaceutical Quality Control	. 4
ENG	114	Professional Research and Reporting	
Third	Semes	ster	
ENV	212	Instrumentation	. 4
PTC	210	Pharmaceutical Industrial Processes	. 4
PTC	222	Pharmaceutical Process Control	. 3
HUM	110	Technology and Society	. 3
PSY	118	Interpersonal Psychology	.3
		opharmaceuticals Manufacturing & Quality Certificate CHM 132, PTC 120, PTC 210, PTC 222	
	h Seme		
PTC	212	Applied Microbiology	. 4

PTC	214	Parenteral Processes	4
PTC	226	Validation	3
PTC	228	Pharmaceutical Issues	1
Electi	ve List		3

Complete Advanced Biopharmaceutical Practices Certificate (C20180D): PTC 212, PTC 214, PTC 226, PTC 228

Complete Pharmaceutical Basics Certificate (C20180E): BPM 110, ISC 121, PTC 110, PTC 120, PTC 228

Elective List I (Select 3 hours from the following courses):			
CIS	110	Intro to Computers	3
EGR	115	Introduction to Technology	3
		Principles of Industrial Management	
ISC	237	Quality Management	3
WBL	111	Work-Based Learning I	1
		•	

Graduation Requirements68 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 computeraided 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.

Civil Engineering Technology: Office/CAD - C40140A

The Civil Engineering Technology Certificate allows students to complete the certificate in two to three semesters. Students are then able to work in the civil field. This certificate is designed to address the all-time high demand for technicians, and to train for jobs in these fields with just a small amount of college. This certificate is for students that are not sure which path they would like to follow. The Civil Design certificate will allow you to work as an engineering technician in engineering offices throughout the country. One job function would be to place ideas down on the computer by working directly with an engineer.

Civil Engineering Technology: Field Technician – C40140B

Civil Engineering Technology: Design – C40140C

Program Sequence

First Semester			Program Sequence			
ACA 115	Success & Study Skills1			- 4		
CEG 115	Intro to Tech and Sustainability3	First 9	Semeste	er		
CEG 115A	Tech and Sustainability Lab1	AUB	131	Structural Damage I	2	
CEG 151	CAD for Engineering Technology3	TRN	110	Intro to Transportation Tech	2	
ENG 111	Expository Writing3	TRN	140	Transportation Climate Control		
HUM 110	Technology and Society3	TRN	140A	Transportation Climate Control Lab		
MAT 121	Algebra and Trigonometry3	ENG	140A 110			
	7 agosta and 1 agonomouy	ENG	110	Freshman Composition	3	
Second Sen		Secor	nd Seme	ester		
CEG 111	Introduction to GIS and Gnss4	AUB	121	Non Structural Damage I	3	
CIV 125	Civil/Surveying CAD3	AUB	132	Structural Damage II		
EGR 251	Statics3	TRN	120	Basic Transportation Electricity		
SRV 110	Surveying I4	MAT	110	Math Measurement & Lit		
COM 120	Intro to Interpersonal Communication3				Ŭ	
		Third	Semest	ter		
	fice/CAD Certificate (C40140A): CEG 111, CEG 115,	TRN	180	Basic Welding for Transportation	3	
CEG 151, CI	V 125, EGR 251	TRN	180A	Basic Welding for Transportation Lab		
		PSY	118	Interpersonal Psychology	3	
Third Semes				, , , ,		
SRV 111	Surveying II4	Fourtl	h Seme	ster		
SRV 260	Field and Office Practices2	AUB	111	Painting and Refinishing I	4	
		AUB	122	Non Structural Damage II		
Fourth Sem		AUB	136	Plastics & Adhesives		
CEG 211	Hydrology and Erosion Control3	COM	110	Intro to Communication		
CEG 212	Intro to Environmental Technology	OOW	110	THE to Communication	٠	
CIV 111	Solis and Foundations4	Comp	lete Fun	ndamentals Certificate (C60130A): AUB 111, AUB 13	1	
EGR 252	Strength of Materials			N 120, TRN 140	١,	
PSY 118	Interpersonal Psychology3	1141	10, 111	V 120, 11(1V 140		
	. , , ,	Fifth S	Semeste	er		
Fifth Semes	ter	AUB	112	Painting and Refinishing II	4	
CEG 210	Construction Materials and Methods3	AUB	114	Special Finishes		
CEG 230	Subdivision Planning and Design3	AUB	162	Autobody Estimating		
CEG 235	Project Mgmt and Estimating3	HUM	110	Technology & Society	3	
CIV 215	Highway Technology3	110111	110	roomology & coolety	Ŭ	
Elective List	2	Comp	lete Fun	ndamentals II Certificate (C60130B): AUB 111,AUB		
				, AUB 131		
Complete Fie	eld Technician Certificate (C40140B): CEG 210, CIV		100 12 1	, , 102 101		
111, CIV 215		Sixth	Semest	ter		
		AUB	150	Automotive Detailing	2	
Complete De	sign Certificate (C40140C): CEG 211, CEG 212, CEG	ACA	220	Professional Transitions		
230, CEG 23		_	e List I	Troisectorial Transaction		
•		Licotiv	CLIST		_	
	I (Select 2 hours from the following courses):	Electiv	e List I	(Select 2 hours from the following courses):		
CST 131	OSHA/Safety Certification3	TRN	130	Introduction to Sustainable Transport	3	
WBL 112	Work-Based Learning I2	TRN	170	PC Skills for Transportation		
		WBL	111	Work-Based Learning I		
Graduation	Requirements 70 Credit Hours	WBL	112	Work-Based Learning I		
		WBL	121	Work-Based Learning II		
		WID	121	CTAM (TIC) Ploto		

COLLISION REPAIR AND REFINISHING TECHNOLOGY

Collision Repair and Finishing 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.

Fundamentals Certificate - C60130A

Fundamentals II Certificate - C60130B

CONSTRUCTION EQUIPMENT SYSTEMS TECHNOLOGY

Construction Equipment Systems Technology Degree - A60450

Graduation Requirements65 Credit Hours

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 course work 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.

Construction Equipment Systems Technology Diploma - D60450

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.

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 110	Intro to Transportation Tech	2	
TRN 120	Basic Transportation Electricity	5	
TRN 120A	Basic Transportation Electricity Lab	1	
TRN 140	Transportation Climate Control	2	
TRN 170	PC Skills for Transportation	2	
ENG 110	Freshman Composition		
Elective List			
Second Ser	mester		
HET 110	Diesel Engines	6	
PME 118	Undercarriage Components	2	
PME 221	Construction Equipment Servicing	2	
MAT 110	Math Measurement & Lit	3	
Flective List	II	2	
	.	∠	
Liodivo Liot		∠	
Third Seme	ester		
Third Seme			
Third Seme	ester		

Fourth Semester			
HET	114	Power Trains	.5
HYD	134	Hydraulic/Hydrostatic Construction	4
PME	117	Equipment Braking Systems	.3
COM		Interpersonal Communication	
PSY	118	Interpersonal Psychology	.3

Complete Hydraulics, Engines, and Transmission Certificate (C60450BB): Choose 2 hours from Elective List 2 + HET 110, HET 114

Fifth Semester

HET	125	Preventative Maintenance	.2
HET	134	Mechanical Fuel Injection	.3
		Advanced Equipment Repair	
HUM	121	The Nature of America	.3
Elective List I			

Complete Fuel Injection, Electrical, and Electronics Certificate (C60450BC): Choose 4 hours from Elective List 1 + HET 134, TRN 120

Complete Construction Equipment Systems Technology Diploma (D60450): Choose 4 hours from Elective List 1 + ENG 110, HET 110, HET 114, HET 134, HYD 134, PME 117, PME 118, PME 221, PSY 118, TRN 110, TRN 120, TRN 120A, TRN 140, TRN 170

Elective List I (Select 6 hours from the following courses):

ELN	110	Survey of Electronics	2
	-		
ELN	112	Diesel Electronics System	4
ELN	113	Electronic Fuel Injection	2
HET	115	Electronic Engines	3
HET	128	Medium/Heavy Duty Tune-up	
HET	192	Selected Topics	2
Elect	ive List	II (Select 2 hours from the following courses):	
HYD	110	Hydraulics/Pneumatics I	3
HYD	111	Mobile Hydraulic Systems	3
HYD	112	Hydraulics/Medium/Heavy Duty	2
		• •	

Elective List III (Select 2 hours from the following courses):

NBL	111	Work-Based Learning I	1
		Work-Based Learning I	
		Basic Welding Processes	
	–	Table 11 statistics	_

Graduation Requirements68 Credit Hours

CONSTRUCTION MANAGEMENT TECHNOLOGY

Construction Management Technology Degree - A35190

The Construction Management Technology curriculum is designed to provide training for persons 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.

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.

Construction Management Technology: Basic Construction Estimating – C35190D

Construction Management Technology: Construction Safety Management – C35190E

Program Sequence

First S BPR BPR CMT CMT CMT MAT	Semest 130 230 112a 210 212 121	er Blueprint Reading/Const	2 3 3	
Seco	nd Sem	ester		
CMT	112b	Construction Management I, Pt 2	3	
CMT	214	Planning and Scheduling	3	
CMT	218	Human Relations Issues	3	
CST	131	OSHA/Safety/Certification		
ENG	111	Expository Writing	3	
		sic Certificate (C35190C): BPR 130, BPR 230, CMT 2, CMT 214, CMT 218		
		fety Management Certificate (C35190E): BPR 130, IT 210, CMT 212, CMT 218, CST 131		
Third	Semes	ter		
CMT	120	Codes and Inspections	3	
COM	120	Intro Interpersonal Com	3	
PSY	150	General Psychology	3	
Fourt	h Seme	ester		
CMT	193A	Selected Topics	3	
CST	150	Building Science		
CST	241	Planning/Estimating I	3	
SST	140	Green Building and Design Concepts		
HUM	110	Technology and Society	3	
Fifth 5	Semest	er		
ACC	120	Prin of Financial Acct	4	
BUS	139	Entrepreneurship I	3	
CMT	226	Applications Project*	3	
CST	242	Planning/Estimating II	4	
Complete Basic Construction Estimating Certificate (C35190D): BPR 130, BPR 230, CMT 193A,CMT 210, CST 241,CST 242				
Gradı	uation F	Requirements70 Credits Hours	3	

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.

Diesel and Heavy Equipment Technology Diploma - D60460

Hydraulics, Engines, and Transmission Forklift Certificate - C60460BB

Fuel Injection, Electrical, and Electronics Forklift Certificate - C60460BC

Program Sequence

First 9	Semeste	er		
TRN	110	Intro to Transportation Tech2		
TRN	120	Basic Transportation Electricity5		
TRN	120A	Basic Transportation Electricity Lab1		
TRN	140	Transportation Climate Control		
TRN	170	PC Skills for Transportation2		
ENG	110	Freshman Composition3		
Electiv	ve List I	2		
Seco	nd Seme	ester		
HET	110	Diesel Engines6		
HET	233	Suspension and Steering4		
MAT	110	Math Measurement & Lit3		
Electiv	ve List II	2		
	_			
	Semest			
Electiv	∕e List III	2		
F	h Seme	o4o#		
	n Seme: 114			
HET		Power Trains		
HYD HET	134 231	Hyd/Hydrostatic Const		
HET	231	Medium/Heavy Duty Brake System		
COM	232 120	Medium/Heavy Duty Brake System Lab		
PSY	118	Interpersonal Communication		
F31	110	interpersonal Esychology		
Complete Hydraulics, Engines, and Transmission Forklift Certificate				
		Choose HYD 111 or HYD 112 + HET 110, HET 114		
(0007	. (<i>0000).</i> (311003C111D111D112+11E1110,11E1114		
Fifth	Semeste	er		
HET		Preventative Maintenance2		
HET		Mechanical Fuel Injection3		
	044	Advanced Feedings at Densin		

Advanced Equipment Repair.....4

PME

211

HUM 121 The Nature of America 3 Elective List I 4	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.
Complete Fuel Injection, Electrical, and Electronics Forklift Certificate (C60460BC): Choose 4 hours from Elective List 1 + HET 134, TRN 120	Electrical Systems Technology Certificate – C35130
Complete Diesel and Heavy Equipment Technology Diploma (D60460): Choose 4 hours from Elective List 1 and 2 hours from Elective List 2 + ENG 110, HET 110, HET 114, HET 125, HET 134, HET 231, HET 232, HYD 134, PSY 118, TRN 110, TRN 120, TRN	Residential Wiring Certificate – C35130A
120A, TRN 140, TRN 170	Commercial Wiring Certificate – C35130B
Elective List I (Select 6 hours from the following courses):	•
ELN 110 Survey of Electronics 3 ELN 112 Diesel Electronics System 4 ELN 113 Electronic Fuel Injection 2	Industrial Wiring Certificate – C35130C
HET 115 Electronic Engines 3 HET 128 Medium/Heavy Duty Tune-up 2 HET 192 Selected Topics 2	Wiring Methods Certificate - C35130D
Elective List II (Select 2 hours from the following courses):	Program Sequence
HYD 110 Hydraulics/Pneumatics I	First Ossesstan
HYD 111 Mobile Hydraulic Systems3	First Semester ELC 112 DC/AC Electricity5
HYD 112 Hydraulics/Medium/Heavy Duty2	ELC 113 Residential Wiring4
Elective List III (Select 2 hours from the following courses):	ELC 118 National Electrical Code2
WBL 111 Work-Based Learning I	ELC 127 Software for Technicians2
WBL 112 Work-Based Learning I2	Second Semester
WLD 112 Basic Welding Processes2	ELC 114 Commercial Wiring4
Graduation Requirements68 Credit Hours	ELC 117 Motors and Controls4
oradation requirements	ELC 119 NEC Calculations2
ELECTRICAL SYSTEMS TECHNOLOGY	Complete Electrical Systems Technology Certificate (C35130): ELC 113, ELC 114, ELC 118, ECL 119
	Complete Wiring Methods Certificate (C35130D):ELC 113, ELC 114, ELC 118, ELC 119
Electrical Systems	
Technology Degree - A35130	Third Semester ELC 115 Industrial Wiring4
The Electrical Systems Technology curriculum is designed to	ELC 115 Industrial Wiring4 ELC 128 Introduction to PLC3
provide training for persons interested in the installation and maintenance of electrical systems found in residential, commercial,	Elective List I or II
and industrial facilities.	Complete Electrical Systems Technology Diploma (D35130): Choose ALT 120 + ELC 112, ELC 113, ELC 114, ELC 115, ELC
Training, most of which is hands-on, will include such topics as photovoltaic AC/DC theory, basic wiring practices, programmable	117, ELC 118, ELC 119, ELC 128, ENG 110, PSY 118
logic controllers, industrial motor controls, the National Electrical	Fourth Semester BPR 130 Print Reading-Construction3
Code, and other subjects as local needs require.	ISC 121 Envir Health and Safety3
Graduates should qualify for a variety of jobs in the electrical field as an on-the-job trainee or apprentice assisting in the layout,	MAT 110 Math Measurement and Literacy3 Elective List I or II
installation, and maintenance of electrical systems.	Complete Residential Wiring Certificate (C35130A): BPR 130, ELC
Electrical Systems	112, ELC 113, ELC 118
· · · · · · · · · · · · · · · · · · ·	
Technology Diploma - D35130	Fifth Semester ELC 121 Electrical Estimating2
The Electrical Systems Technology curriculum is designed to	ELC 121 Electrical Estimating
provide training for persons interested in the installation and	Elective List I or II
maintenance of electrical systems found in residential, commercial, and industrial facilities.	Complete Commercial Wiring Certificate (C35130B): ELC 114, ELC
Training most of which is hands on will include such tonics	117, ELC 119, ELC 121
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.	Complete Industrial Wiring Certificate (C35130C): ELC 115, ELC 128, ELC 134, ISC 121
	General Education Academic Core Requirements
	COM 120 Interpersonal Communications3

ENG	110	Freshman Composition	3
HUM	121	The Nature of America	3
PSY	118	Interpersonal Psychology	
Electi	ive Lis	I – Renewable Energy Track (Select 9hours from)
the fo	llowin	g courses):	
ALT	120	Renewable Energy Tech	3
	220		3
ELC	221	Adv Photovoltaic Sys Designs	3
Electi	ive List	t II - Business Track (Select 9 hours from the	
		ourses):	
BUS	110	Introduction to Business	3
BUS	115	Business Law I	3
	139		3
Gradi	uation	Requirements	urs

ELECTRONICS ENGINEERING TECHNOLOGY

Electronics Engineering Technology Degree -A40200

The Electronics Engineering Technology curriculum prepares 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.

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.

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.

SCADA Systems Certificate - C40200E

Instrumentation Certificate - C40200F

Embedded Systems Certificate – C40200G

Program Sequence

First S EGR ELC ELN ENG MAT	131 133	Intro to Electronics Technology 2 Circuit Analysis I 4 Digital Electronics 4 Expository Writing 3 Algebra and Trigonometry* 3	
Seco	nd Sem	nester	
ELN ELN ELN HUM PSY	131 260 275 110 118	Analog Electronics I 4 Prog Logic Controllers 4 Troubleshooting 2 Technology and Society 3 Interpersonal Psychology 3	
		sic Electronics Certificate (C40200A): EGR 131, ELC 1, ELN 133, ELN 275	
Third	Semes	ster	
ELN ELN		Analog Electronics II	
CSC ELN ELN	234	C Programming 3 Introduction to Microprocessors 4 Communication Systems 4 3 3	
Fifth :	Semes	ter	
ELN ELN ELN ENG	152 233 235 114	Fabrication Techniques	
Complete PLC Programming Certificate (C40200B): Choose ATR 214, ATR 215 + ELN 231, ELN 260			
		CADA Systems Certificate (C40200E): Choose ATR	

214, PCI 170, PCI 172 + ELN 260

Complete Instrumentation Certificate (C40200F): Choose ATR 215, PCI 172, PCI 262 + ELN 260

Complete Embedded Systems Certificate (C40200G): CSC 133, ELN 133, ELN 152, ELN 233

Elective List I (Select 3 hours from the following courses):			
ATR	214	Advanced PLCs	4
ATR	215	Sensors and Transducers	3
ELN	236	Fiber Optics and Lasers	4
PCI	170	DAQ and Control	4
PCI	172	SCADA Systems	4
PCI	262	Intro to Process Control	4
WBL	111	Work-Based Learning I	1
		-	

Graduation Requirements69 Credit Hours

FACILITY MAINTENANCE TECHNOLOGY

Facility Maintenance Technology – 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 carpentry, interior and exterior finishes, plumbing, electrical, masonry, air conditioning, heating, welding, machining, blueprint reading, building codes, and OSHA regulations, as well as computer applications.

Graduates should qualify for positions as general building mechanics or maintenance technician.

Facility Maintenance Technology: Electrical Systems Certificate – C50190A

Facility Maintenance Technology: HVACR Certificate – C50190B

Facility Maintenance Technology: Basic Plumbing Certificate – C50190C

Basic Facilities Technology I Certificate – C50190D

Basic Facilities Technology II Certificate – C50190E

Program Sequence

First Semes	ster	
AHR 113	Comfort Cooling	4
ELC 113	Residential Wiring	4
PLU 115	Basic Plumbing	4
PLU 140	Intro to Plumbing Codes	2
WLD 112	Basic Welding Processes	
	-	
Second Ser	mester	
AHR 111	HVACR Electricity	3
AHR 112	Heating Technology	4
ELC 114	Commercial Wiring	
ELC 127	Software for Technicians	2
Complete Fa	acility Maintenance Technology: HVACR Certificate	
(C50190B):	AHR 111, AHR 112, AHR 113, WLD 112	

Complete Basic Facilities Technology I Certificate (C50190D): AHR 111, AHR 112, AHR 113, ELC 113

Complete Basic Facilities Technology II Certificate (C50190E): ELC 114, ELC 127, PLU 115, PLU 140, WLD 112

HUM	110	Technology and Society	. 3
PSY		Interpersonal Psychology	
Fourt	h Sem	ester	
AHR	120	HVACR Maintenance	. 2
BPR	130	Print Reading Construction	. 3
ISC	121	Envir Health & Safety	
MNT	110	Intro to Maint Procedures	. 2
MAT	110	Math Measurement & Literacy	. 3
0		ald Tables is in Constitution (Odd 400D), ODIV 440, ODIV	

Complete Field Technician Certificate (C40420B): SRV 110, SRV 111, SRV 210, SRV 260

Fifth Semester

CAR	140	Basic Carpentry	. 4
		Intro to Masonry	
		Intro Interpersonal Comm	

Elective List I	8	3
Elective List II	1	l

Complete Facility Maintenance Technology: Electrical Systems Certificate (C50190A): Choose ELC 112 + ELC 113, ELC 114, ELC 127, ISC 121

Complete Facility Maintenance Technology: Basic Plumbing Certificate (C50190C): Choose PLU 211 + ELC 127, PLU 115, PLU 140, WLD 112

Electi	ve List	I (Select 8 hours from the following courses):	
AHR	133	HVAC Servicing	4
ELC	112	DC/AC Electricity	5
ELC	119	NEC Calculations	
MNT	150	Basic Building Maintenance	2
PLU	120	Plumbing Applications	
PLU	211	Commercial/Ind Plumbing	
PLU	214	Backflow Preventer Install	
Electi	ve List	II (Select 1 hour from the following courses):	
ACA	115	Success & Study Skills	1
ACA	122	College Transfer Success	
ACA	220	Professional Transitions	
WBL	111	Work-Based Learning I	1
Grad	uation	Requirements69 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.

Geomatics Technology: CAD Certificate – C40420A

Geomatics Technology: Field Technician Certificate – C40420B

Geomatics Technology: Design Certificate – C40420C

Program Sequence

First Semester

ACA	115	Success & Study Skills	1
		Intro to Tech and Sustainability	
		Intro to Tech and Sustainability Lab	
SRV	110	Surveying I	4
		Algebra and Trigonometry	

PSY	118	Interpersonal Psychology3		
	Second Semester CEG 111 Introduction to GIS/GNSS			
CEG CEG	111 151	CAD for Engineering Tech		
COM	-	Into to Interpersonal Communication		
ENG	111	Writing and Inquiry		
SRV	111	Surveying II		
Oitt		Carroying in		
	Semes			
CIV	125	Civil/Surveying CAD3		
SRV	260	Field and Office Practices2		
Fourt	h Sem	ester		
CEG	211	Hydrology and Erosion Control3		
COM	120	Intro to Interpersonal Communication3		
HUM	110	Technology and Society3		
GIS	121	Georeferencing and Mapping3		
SRV	210	Surveying III4		
SRV	250	Advanced Surveying4		
		AD Certificate (C40420A): CEG 111, CEG 115, CEG 5, GIS 121		
		eld Technician Certificate (C40420B): SRV 110, SRV 0, SRV 260		
Fifth	Semes	ter		
	CEG 230 Subdivision Planning and Design			
GIS	121	Principles of Property Mapping		
SRV	220	Surveying Law3		
SRV	240	Topo/Site Surveying4		
Electi	ve List			
	olete De SRV 25	esign Certificate (C40420C): CEG 211, CEG 230, SRV		
Sixth	Semes	ster		
		II2		
		I (Select 3 hours from the following courses):		
CEG	-	Construction Materials & Methods		
CEG		Project Management and Estimating		
EGR		Statics		
GIS	231	Geo Positioning System Methods3		
Elect	ive List	II (Select 2 hours from the following courses):		
CSC	121	Python Programming		
CSC	134	C++ Programming3		
CSC	139	Visual BASIC Programming3		
CST	131	OSHA/Safety/Certification3		
WBL	112	Work-Based Learning I2		
Grad	uation	Requirements68 Credit Hours		

HEAVY EQUIPMENT OPERATOR

Heavy Equipment Operator Diploma – D35240

Basic Heavy Equipment Operator Certificate – C35240A

Advanced Heavy Equipment Operator Certificate – C35240B

Program Sequence

HEO ISC ISC PSY	115 121 118	Heavy Equipment Operations I
HEÖ 1	11, ISC	ic Heavy Equipment Operator Certificate (C35240A): C115, ISC 121
	d Sem	
HEO		rioury =quiprilorit operations imminiminimini i=
	113	
ENG	192	Selected Topics
ENG	110	rieshman Composition3
		ranced Heavy Equipment Operator Certificate EO 112, HEO 113, HEO 192
Third	Semes	ter
Electiv	e List I	2
Electiv	e List l	(Select 2 hours from the following courses):
WBL		Work-Based Learning I2
MAT	110 I	Math Measurement and Lit3
Gradu	ation R	equirements42 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.

Residential Interior Design Certificate – C30200A

Décor Focus Interior Design Certificate – C30200B

Commercial Interior Design Certificate – C30200C

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 Graphic Presentation I .2

DES 135 Principles & Elements of Design4
Second Semester ARC 264 Digital Architecture 2 DES 193A Selected Topics 3 DES 220 Principles of Interior Design 3 DES 235 Products 3 DES 255 History of Interior & Furnishings I 3 Elective List I 3
Third Semester
ENG 111 Expository Writing 3 HUM 110 Technology and Society 3
Fourth Semester ARC 225 Architectural BIM I 2 ARC 225A Architectural BIM I Lab 1 DES 230 Residential Deign I 3 DES 240 Commercial and Contract Design 3 DES 256 History of Int Design II 3 DES 280 Codes and Standards/Int Design 3 Complete Residential Interior Design Certificate (C30200A): ARC
111, ARC 114, ARC 114A, DES 112, DES 125, DES 220, DES 230
Fifth SemesterDES 210Business Practices for Interior Design2DES 265Lighting and Interior Design2DES 285Capstone4ENG 114Professional Research and Reporting3PSY 150General Psychology3
Complete Décor Focus Interior Design Certificate (C30200B): DES 135, DES 225, DES 235, DES 255, DES 256, DES 265
Complete Commercial Interior Design Certificate (C30220C): DES 210, DES 220, DES 240, DES 265, DES 280, DES 285
Sixth Semester MAT 110 Math Measurement and Literacy
Elective List I (Select 3 hours from the following courses): ARC 220 Advanced Architectural CAD 2 DES 225 Textiles and Fabrics 3
Elective List II (Select 2 hours from the following courses): BUS 151 People Skills 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 Completion Requirements 72 Credit Hours

Mechanical Engineering Technology

Mechanical Engineering Technology Degree - A40320

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.

Mechanical Design Certificate - C40320B

Study of design elements for CAD users.

Thermal Mechanics Certificate - C40320C

The Thermal Mechanics Certificate provides a refresher or a concentration in thermal sciences.

Materials Engineering Certificate - C40320D

The Materials Engineering Certificate will provide students with an understanding of engineering materials and processes.

Additive Manufacturing Certificate - C40320G

The Additive Manufacturing Certificate will help students understand modeling and manufacturing processes used in additive manufacturing such as 3D printing.

Mechanical Drafting Certificate - C40320H

Mechatronics Certificate – C40320I

Program Sequence

First Compoter

First	Semes	ter	
DFT	151	CAD I	3
EGR	115	Introduction to Technology	3
MEC	161	Manufacturing Processes I	3
ENG	111	Expository Writing	3
MAT	121	Algebra/Trigonometry I	
Seco	nd Sen	nester	
DFT	152	CAD II	3
DFT	153	CAD III	3
MEC	130	Mechanisms	
ENG	114	Professional Research and Reporting	3
PHY	131	Physics-Mechanics	4
Third	Semes		
TDP	110		3
PSY	118	Interpersonal Psychology	3
Fourt	h Seme		
DFT	154	Intro to Solid Modeling	3
EGR	251	Statics	
MEC	180	Manufacturing Materials	3
MEC	265	Fluid Mechanics	
Electi	ve List I	l	3

Complete Mechanical Design Certificate (C40320B): DFT 151, DFT 154, MEC 130, MEC 180

Complete Materials Engineering Certificate (C40320D): DFT 151, MEC 130, MEC 161, MEC 180

Complete Additive Manufacturing Certificate (C40320G): DFT 151, DFT 154, MEC 161, MEC 180, TDP 110

Complete Mechanical Drafting Certificate(C40320H): DFT 151, DFT 152, DFT 153, DFT 154, TDP 110

Complete Mechatronics Certificate (C40320I): ELN 260 + MEC 130, MEC 161, MEC 265

Fifth Semester

EGK	252	Strength of Materials	J
EGR	285	Design Project	2
		Env Health and Safety	
		Thermal Systems	
		Technology and Society	

Complete Thermal Mechanics Certificate (C40320C): DFT 154, MEC 180, MEC 265, MEC 267

Electi	ive List	I(Select 3 hours from the following courses))
ARC	225	Architectural BIM I2	2
ARC	225A	Architectural BIM I Lab1	
CEG	111	Introduction to GIS and Gnss4	ŀ
ELC	128	Introduction to PLC	3
ELN	260	Prog Logic Controllers4	ļ
ISC	255	Engineering Economy3	
WBL	111	Work-Based Learning I1	
WBL	112	Work-Based Learning I	
		9	

Graduation Requirements......66 Credit Hours

MISSION CRITICAL OPERATIONS

Mission Critical Operations Degree - A40430

The Mission Critical Operations curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, industrial and technology managers, or research technicians.

The Mission Critical Operations curriculum prepares graduates for employment in a wide range of positions in specific mission critical environments, operations technology, and maintenance. Course work includes the development of a student's ability to maintain technically sophisticated systems for business continuity and near continuous uptime using engineering, information technology, and industrial management and maintenance skills. The course work emphasizes analytical and problem-solving skills required to sustain high availability national security interests and includes instruction in electromechanical systems, networking, automation, cybersecurity, emergency management and systems integration. Graduates should qualify for employment as entry-level technicians with businesses, industries, educational systems, and governmental agencies in national critical infrastructure areas including, but not limited to, communications, emergency services, energy, financial services, healthcare, information technology, and transportation.

Introduction to MCO Certificate - C40430A

Critical Electrical Systems Certificate – C40430B

Critical Control Systems Certificate – C40430C

Mission Critical Operations Certificate – C40430D

Program Sequence

	,
First Semester	
BAT 117 P	rinciples of Heat and Fluids3
ISC 112 In	dustrial Safety2
	tro to MCO3
	/riting and Inquiry3
MAT 121 A	lgebra/Trigonometry3
Second Semest	or.
	oftware for Technicians2
	ircuit Analysis I
	ICO Infrastructures
MNT 222 In	dustrial Sys Schematics2
HUM 110 Te	echnology and Society3
Complete Introdu 112, MCO 110, N	nction to MCO Certificate (C40430A): BAT 117, ISC MCO 115, MNT 110
Third Semester	
PSY 118 Inte	erpersonal Psychology3
WBL 112 Wo	rk-Based Learning I2
Fourth Semester	r
	o to Automation3
	Iding Automation Systems2
	a Communication Systems4
	ical Power Systems4
MCO 210 Crit	ical Site Operations3
Complete Critical 131, ELC 250, EL	Electrical Systems Certificate (C40430B): ELC LN 235
Fifth Semester	
	ical Facility Infrastructures4
MCO 265 Crit	ical Facility Management3
MCO 266 ICS	S Cyber Security3
	ADA Systems4
ENG 114 Pro	f Research & Reporting3
Complete Critical MCO 266, MNT 2	Control Systems (C40430C): ATR 112, BAT 111, 222, PCI 172

PLUMBING

127, MCO 210, MCO 260, MCO 265

Plumbing: Residential Diploma - D35300A

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.

Complete Mission Critical Operations Certificate (C40430D): ELC

Graduation Requirements68 Credit Hours

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.

Plumbing: Commercial Diploma - D35300B

Plumbing Concepts I Certificate - C35300D

The Plumbing 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.

Plumbing Concepts II Certificate - C35300E

The Plumbing 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 – Plumbing: Residential Diploma (D35300A)

First S	Semes	ter	
BPR	130	Blueprint Reading/Construction	3
PLU	110	Modern Plumbing	9
PLU	124	Plumbing Business Operations	2
PLU	145	Plumbing Measure Calculations	2
Secor	nd Sen	nester	
ENG	110	Freshman Composition	3
PLU	120	Plumbing Applications	9
PLU	140	Introduction to Plumbing Codes	2
PLU	150	Plumbing Diagrams	
PLU	160	Plumbing Estimates	
SST	140	Green Building and Design Concepts	3
0	DI		

Complete Plumbing Concepts I Certificate (C35300D): BPR 130, PLU 110, PLU 140

Complete Plumbing Concepts II Certificate (C35300E): PLU 120, PLU 150. PLU 160

Third Semester

PLU	130	Plumbing Systems6	i
		Selected Topics2	
PSY	118	Interpersonal Psychology3	,
Electiv	es I	1	

Electives List I (Choose 1 hour from the following):

SST	140	Green Building and Design Concepts3	
PLU	192	Selected Topics in Plumbing2	

Graduation Requirements44 Credit Hours

Program Sequence – Plumbing: Commercial Diploma (D35300B)

First	Semester
IIIOL	Jennester

BPR 130 Blueprint Reading/Construction......3

PLU PLU PLU PSY	120 140 211 118	Plumbing Applications 9 Intro to Plumbing Codes 2 Commercial/Industrial Plumbing 3 Interpersonal Psychology 3
BPR PLU PLU PLU	110 124 145	Nester 2 Commercial Blueprints 2 Modern Plumbing 9 Plumbing Business Operations 2 Plumbing Measure/Calculations 2 I 3
	olete Plu 110, PL	ımbing Concepts I Certificate (C35300D): BPR 130, U 140
Third	Semes	ter
PLU	214	Backflow Preventer Install
PLU	230	Slab Rough-In4
	110 ves List	
Liecti	ves List	II
Electi	ives Lis	et I (Choose 3 hours from the following):
	220	Commercial Rough-In Plumbing4
PLU	225	Commercial Trim-Out Procedures4
Electi	ives Lis	at II (Choose 1 hour from the following):
	140	Green Building and Design Concepts3
WBL	111	Work-Based Learning I1
Grad	uation I	Requirements 48 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.

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.

Welding Technology Certificate - C50420B

Instruction includes an introduction to consumable and nonconsumable 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.

Fabrication Design Certificate - C50420C

Instruction includes an introduction to fabrication design as it applies to welding technology.

Computer Controlled Welding Certificate - C50420D

Instruction includes an introduction to computer controlled welding.

Program Sequence

First S	emeste	
ENG	110	Freshman Composition3
ELC	127	Software for Technicians2
WLD	110	Cutting Processes
WLD	115	SMAW (Stick) Plate
WLD	141	Symbols and Specifications3
Secon	d Seme	ester
COM	110	Intro to Communication3
MAT	110	Math Measurement and Literacy3
WLD	116	SMAW (Stick) Plate/Pipe4
WLD	131	GTAW (TIG) Plate4
Third 9	Semest	er
WLD	132	GTAW (TIG) Plate/Pipe3
WLD	261	Certification Practices2
WLD	262	Inspection and Testing3
Elective	e List I	2
Fourth	Some	otor
MEC	Semes	Manufacturing Processes I3
PSY	118	Interpersonal Psychology3
WLD	121	GMAW (MIG) FCAW/Plate4
		(-,
		3
		ding Technology Certificate (C50420B): WLD 110,
WLD 1	15, WLL	D 121, WLD 141
Comple	ata Com	puter Controlled Welding Certificate (C50420D):
		D 115, WLD 121, WLD 131, WLD 141
	10, 1122	5 116, WEB 121, WEB 161, WEB 111
Fifth S	emeste	
ACA	220	Professional Transition1
HUM	110	Technology and Society3
ISC	112	Industrial Safety2
WLD	151	Fabrication I4
WLD	122	GMAW (MIG) Plate3
Comple	ete Fabr	rication Design Certificate (C50420C): Choose DFT
		1, WLD 141, WLD 151
	_	
		puter Controlled Welding Certificate (C50420D):
WLD 1	10, WLL	D 115, WLD 121, WLD 131, WLD 141
Comple	ete Weld	ding Technology Diploma (D50420): ENG 110, MAT
		WLD 115, WLD 116, WLD 121,WLD 122, WLD
		WLD 141, WLD 151, WLD 261, WLD 262
		(Select 5 hours from the following courses):
BUS DFT	110 151	Introduction to Business
DFT	152	CAD II
DFT	170	Engineering Graphics
MEC	180	Engineering Materials
PHY	121	Applied Physics I4
WBL	111	Work-Based Learning I1
Our de		05 O 45 U
uradua	mon Ke	equirements 65 Credit Hours

BUSINESS & PUBLIC SERVICE TECHNOLOGIES

Business & Public Services Technologies Division

Dean Tanya Scott
Phone: 919-866-7106
Email: tescott1@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 <u>WebAdvisor</u> for the availability of classes. Click to see a list of Wake Tech's programs that can be completed fully <u>online</u>.

Program Names	Program Code
Accounting – AAS Degree	A25100
Accounting – Diploma	D25100
Accounting: Core – Certificate	C25100C
Income Tax Preparer – Certificate	C25100B
Payroll Accounting Clerk - Certificate	C25100A
Accounting Software Applications - Certificate	C25100D
CPA Exam Preparation: Financial - Certificate	C25100E
CPA Exam Preparation: Regulation - Certificate	C25100F
CPA Exam Preparation: Audit - Certificate	C25100G
Baking and Pastry Arts – AAS Degree	A55130
Baking and Pastry Arts – Diploma	D55130
Baking and Pastry Arts - Certificate	C55130A
Business Administration: General Business Administration – AAS Degree	A25120A
Business Core – Certificate	C25120A
Career Success – Certificate	C25120D
Customer Service – Certificate	C25120G C25120B
	C25120B
Entrepreneurship – <i>Certificate</i> Leadership – <i>Certificate</i>	C25120C C25120F
Public Administration - Certificate	C25120P
Business Administration: Global Business Management – AAS Degree	A25120G
International Business - Certificate	C25120GB
Business Administration: Human Resources Management – AAS Degree	A25120H
Human Resources Administration - Certificate	C25120HA
Human Resources Management - Certificate	C25120HB
Business Administration: Marketing – AAS Degree	A25120M
Marketing and Sales - Certificate	C25120MM
Business Analytics – AAS Degree	A25350
Business Intelligence – <i>Certificate</i>	C25350A
Business Analyst – <i>Certificate</i>	C25350B
Marketing Analytics – Certificate	C25350C
Logistics Analytics – Certificate	C25350E
Finance Analytics - Certificate	C25350F
Cosmetology – AAS Degree	A55140
Cosmetology - <i>Diploma</i>	D55140A
Criminal Justice Technology – AAS Degree	A55180
Principles of Correction – Certificate	C55180A
Introduction to Law Enforcement – Certificate	C55180B
Homeland Security – Certificate	C55180H
Intelligence Analysis - Certificate	C55180I
Criminal Justice Technology/Forensic Science – AAS Degree	A5518A
Principles of Identification and Information – <i>Certificate</i>	C5518A
Crime Scene Technician - Certificate	C5518C

BUSINESS & PUBLIC SERVICE TECHNOLOGIES

Program Names Continued	Program Code
Culinary Arts – AAS Degree	A55150
Culinary Arts – Diploma	D55150
Culinary Arts - Certificate	C55150A
Early Childhood Education – AAS Degree	A55220
Early Childhood Education – <i>Diploma</i>	D55220A
Early Childhood Education - Certificate	C55220D
School-Age – Certificate	C55220E
Preschool Foundation - Certificate	C55220G
Infant/Toddler Care - Certificate	C55290
Esthetics Technology - Certificate	C55230
Fire Protection Technology – AAS Degree	A55240
Fire Protection Technology: Basic - Certificate	C55240A
Loss Control/Investigation - Certificate	C55240B
Fire Management – Certificate	C55240C
Food Service Technology – Diploma	D55250
Food Service Technology - Certificate	C55250
Hospitality Management – AAS Degree	A25110
Hospitality Management – <i>Diploma</i>	D25110A
Hospitality Restaurant Management – Certificate	C25110D
Procurement Management – Certificate	C25110E
Hospitality Management Core – Certificate	C25110F
Hospitality Event Coordinator – Certificate	C25110G
Hospitality Hotel Operations – Certificate	C25110H
Foodservice Entrepreneurship – Certificate	C25110J
Lateral Entry - Certificate	C55430
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
Logistics Core – Certificate	C25620GA
International Logistics - Certificate	C25620GB
Supply Chain - Certificate	C25620GC

*Collaborative Agreements

None at this time

BUSINESS & PUBLIC SERVICES TECHNOLOGIES

ACCOUNTING

Accounting Degree - A25100

-Day, Evening, and Online

The Accounting curriculum is designed to provide students with the knowledge and the 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 practice, 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.

Accounting Diploma - D25100

-Day, Evening, and Online

The Accounting Diploma provides students with a basic accounting skill set and overall knowledge enhanced by selected accounting electives and a potential cooperative education experience. After the Accounting Diploma is started, 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.

Payroll Accounting Clerk Certificate - C25100A

-Day, Evening and Online

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.

Income Tax Preparer Certificate - C25100B

-Day, Evening, Online

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.

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.

Accounting Core Certificate - C25100C

-Day, Evening, and Online

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 and 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.

Accounting Software Applications Certificate C25100D

-Day, Evening, and Online

This certificate program will assist in preparing accounting students to take the MOS Excel certification test with the goal of increasing the marketability of accounting students upon entering the workforce. In addition to Excel, QuickBooks, and other general ledger software applications are explored through this certificate.

CPA Exam Preparation: Financial Certificate C25100E

-Day, Evening, and Online

This certificate program is designed to provide classes to meet the 30 semester hour requirement for individuals to sit for the CPA exam in the state of North Carolina. A CPA candidate in North Carolina must also have a bachelor's degree from a four year college/university. Acceptance of these courses is solely at the discretion of the North Carolina State Board of Certified Public Accountant Examiners.

CPA Exam Preparation: Regulation Certificate C25100F

-Day, Evening, and Online

This certificate program is designed to provide classes to meet the 30 semester hour requirement for individuals to sit for the CPA exam in the state of North Carolina. A CPA candidate in North Carolina must also have a bachelor's degree from a four year college/university. Acceptance of these courses is solely at the discretion of the North Carolina State Board of Certified Public Accountant Examiners.

CPA Exam Preparation: Audit Certificate C25100G

-Day, Evening, and Online

This certificate program is designed to provide classes to meet the 30 semester hour requirement for individuals to sit for the CPA exam in the state of North Carolina. A CPA candidate in North Carolina must also have a bachelor's degree from a four year college/university. Acceptance of these courses is solely at the discretion of the North Carolina State Board of Certified Public Accountant Examiners.

PROGRAM SEQUENCE

First Semester ACC 120 Principles of Financial Accounting4 CIS 111 Basic PC Literacy2 ENG 111 Writing and Inquiry.....3 Math Elective List3 Major Elective I3 **Second Semester** Principles of Managerial Accounting4 ACC 121 ACC 140 Payroll Accounting.....2 BUS 115 Business Law I3

BUSINESS & PUBLIC SERVICES TECHNOLOGIES

ENG 1	14 Professional Research and Reporting3					
_	29 Individual Income Taxes					
OR						
ACC 1	31 Federal Income Taxes					
*See No	ote 1					
	ete Income Tax Preparer Certificate (C25100B): 0, CIS 111, BUS 115, ACC 129 OR ACC 131					
Third S	<u>emester</u>					
ACA 2						
ACC 1						
ACC 1						
ACC 2						
HUM 1	15 Critical Thinking3					
PSY 1						
Econom	ics Elective					
	ete Payroll Accounting Clerk Certificate (C25100A): 0, CIS 111, ACC 140, ACC 149, ACC 150					
	-, ,,,					
	te Accounting Core Certificate (C25100C):					
ACC 12 elective	0, ACC 121, BUS 115, ENG 111, +Choose one ECO					
Fourth	Semester					
ACC 2						
ACC 2	21 Intermediate Accounting II					
ACC 2						
Major E	ective II8					
	lective 2 Track 1:					
	ete Accounting Software Application Certificate					
(C2510						
ACC 12	0, CIS 111, ACC 149, ACC 150, + Choose ACC 152					
Maior F	lective 2 Track 2:					
	te CPA Exam Preparation/Financial Certificate					
(C2510						
ACC 12	20, ACC 220, ACC 221, + Choose ACC 240					
Major E	lective 2 Track 3:					
Comple	te CPA Exam Preparation/Audit Certificate (C25100F):					
ACC 12	9, BUS 115, ACC 215, + Choose ACC 130					
Comple	te Accounting Diploma (D25100):					
	0, BUS 115, BUS 121, CIS 111, ACC 121, ACC 131, ACC					
	C 150, ENG 11, PSY 150, ACC 140, +5 CREDITS FROM					
	lective II					
•						
Math El						
	credit hours from the following courses:					
MAT 1						
MAT 1	43 Quantitative Literacy					
Econon	nics Elective					
ECO 1						
ECO 2						
ECO 2						
-	,					
	lective List I					
	credit hours from the following courses:					
BUS 1						
BUS 1	Personal Finance					
Maior F	Major Elective List II					
•	credit hours from the following courses:					
ACC 1	Principles of Financial Accounting II					
	30 Business Income Taxes					
	32 NC Business Taxes2					
ACC 1	52 Advanced Software Applications					

ACC	225	Cost Accounting	3
ACC	227	Practices in Accounting	3
ACC	240	Governmental & Not-for-Profit Accounting	3
ACC	269	Auditing and Assurance Services	3
BUS	225	Business Finance	3
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning I	2
WBL	121	Work-Based Learning II	1

Graduation Requirements66 Credit Hours

Note 1: ACC 129 is a comprehensive course covering individual income taxes. For students who want an in depth coverage of this material, such as pre-MAC or CPA examination candidates, this would be the preferred choice, along with the elective ACC 130 that provides an in depth coverage of Business Income Taxes. ACC 131 is a one-semester survey course of individual and business income taxes, and would be the more appropriate course for students who desire an introduction to key tax topics, but who do not need an in depth coverage. Students should choose the one course that is the most appropriate for their needs.

BAKING & PASTRY ARTS

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.

Baking and Pastry Arts Diploma - D55130

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 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.

Baking and Pastry Arts Certificate - C55130A -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 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.

BUSINESS & PUBLIC SERVICES TECHNOLOGIES

PROGRAM SEQUENCE

First	Semes		
CUL	110	Sanitation and Safety	
CUL	140	Culinary Skills I	
CUL	160	Baking I	
_	111	Writing and Inquiry	
MAT	110	Math Measurement & Literacy	3
Seco	nd Sen	nester	
BPA	150	Artisan & Specialty Breads	4
BPA	210	Cake Design & Decorating	3
CUL	260	Baking II	
CUL	170	Garde-Manger I	3
		aking and Pastry Arts Certificate (C55130A)	
	edit ho	urs: JL 140, CUL 160, + Choose two of the following	
		A 150, BPA 210, or CUL 260	
	Semes		_
CUL		Nutrition for Foodservice	.3
HRM	-	Human Resources Management Hosp	
PSY	118	Interpersonal Psychology	3
Fourt	h Sem		
BPA	120	Petit Fours & Pastries	
BPA	130	European Cakes & Tortes	
BPA	220	Confection Artistry	
WBL	112	Work-Based Learning I	2
Fifth	Semes	ter	
BPA	230	Chocolate Artistry	3
BPA	230A	Chocolate Artistry Lab	
BPA	240	Plated Desserts	
BPA	250	Dessert & Bread Production	5
BPA	260	Pastry & Baking Marketing	3
Comi	olete B	aking & Pastry Arts Diploma (D55130) 44 Credit	
Hour		(===============================	
		JL 140, CUL 160, ENG 111, MAT 110, BPA 150, BPA	
210. (CUL 26	0, CUL 112 or HRM 245, BPA 120 or BPA 130 or BPA	
220, I	3PA 23	0, BPA 230A, BPA 250, BPA 220 or BPA 240.	
Sixth	Semes	ster	
FNG	112	Writing/Research in the Disc	3
		Fine Arts Elective	
		Fine Arts Electives Critical Thinking	_
ART	115	Art Methods and Materials	3
AKI	113	Art iviethous and iviaterials	3
Grad	uation	Requirements71 Credit Hou	rs

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, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in marketing, management operations, and some graduates have started up their own small businesses.

Customer Service Certificate - C25120B

-Day, Evening, and Online

This certificate provides a broad foundation of communication and interpersonal skills designed to prepare the individual for customer contact roles within a business organization. Employment opportunities include customer service representative, customer services manager, consumer relations credit analyst, credit card specialist, credit and collections specialist, retail sales, accounts control analyst, administrative assistant, authorizations analyst, and telephone sales representatives in both production and service-oriented businesses.

Entrepreneurship Certificate - C25120C

-Day, Evening, and Online

This program enables students to recognize business opportunities and develop a business plan for the purpose of securing financing for an entrepreneurial start-up as well as to understand how to effectively operate a small business. Students will learn practical skills and some of the best business practices in establishing and operating a business.

Business Core Certificate - C25120D

-Day, Evening, and Online

This certificate provides students who are earning the Business Administration A.A.S., Business Administration/Human Resources Management A.A.S., and/or Associate in Art two-year degree, or simply to improve their skills in a specific area, to earn a certificate comprised of our Business Core courses. In as little as one semester, one can earn a certificate that validates an area of expertise, which can set an individual apart in the interview and selection process. If pursuing an Associate in Art degree or transferring to a four-year university, all of these classes will qualify to transfer.

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.

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.

Public Administration Certificate - C25120P

-Day, Evening, and Online

This certificate is designed to be an overview of the skills needed to be successful in a career in public administration. Focus is placed on ethics, decision-making, forming strong work relationships, communication, developing public policy, and other government functions to be a successful public administrator in government and/or non-profit organizations.

PROGRAM SEQUENCE

First	Semes	ter	
BUS		Introduction to Business	
BUS	137	Principles of Management	3
CIS	111	Basic PC Literacy	
Socia	I Sciend	ce Elective	
ENG	111	Writing and Inquiry	3
MKT	120	Principles of Marketing	3
	<u>nd Sen</u>		
ACC		Principles of Financial Accounting	
BUS		Business Law I	
BUS	. — .	Business Math	
BUS		Entrepreneurship I	
BUS	151	People Skills	3
_			
		usiness Core Certificate (C25120D):	
	,	JS 110, BUS 115, BUS 137, + One Social Science	
Electi	ve		
Third	Samar	nto.r	
_	Semes 153		2
	114		
INT		. rereceionai rececaren ana repening illinini	
		International Business	
		ministration Major Elective	
MKT	223	Customer Service	. 3

Complete Customer Service Certificate (C25120B): BUS 110, BUS 151, BUS 137, MKT 223

Business Administration Major Elective Track 1: Complete Entrepreneurship Certificate (C25120C): BUS 110, BUS 139, MKT 120, + Choose 245

Business Administration Major Elective Track 2: Complete Leadership Certificate (C2520F): BUS 137, BUS 153, BUS 151, + Choose BUS 240

Business Administration Major Elective Track 3: Complete Career Success Certificate (C25120G): BUS 110, BUS 151, + Choose BUS 125 and BUS 240

Fourth	Semester
ı oului	Ochhoster

ACC	121	Principles of Managerial Accounting	4
		Business Law II	
HUM	115	Critical Thinking	3
Mathe	ematics	s Elective	3
MKT	221	Consumer Behavior	3
Socia	al Scie	nce Elective	
ECO	151	Survey of Economics	3
ECO	251	Principles of Microeconomics	3
		Principles of Macroeconomics	

General Education Courses

MAT	143	Quantitative Literacy	3
Busin	ess A	dministration Major Electives	
BUS	125	Personal Finance	3
BUS	240	Business Ethics	. 3
BUS	245	Entrepreneurship II	. 3
INT	180	Travel Study Abroad	. 3
LOG	110	Introduction to Logistics	. 3
MKT	232	Social Media Marketing	. 4
PAD	151	Intro to Public Admin	. 3
WBL	111	Work-Based Learning 1	. 1

MAT 110 Mathematical Measurement & Literacy3

Completion Requirements64 Credit Hours

Work-Based Learning 12

Work-Based Learning 13

Business Administration: Global Business Management Degree - A25120G

-Day, Evening, and Online

WBL 112

WBL 113

Global Business Management (A.A.S degree) is a concentration within the Business Administration curriculum. It is designed to meet the demands of today's international economy. Businesses today are truly interconnected and working in business may require an understanding of different cultures as businesses often operate outside of the United States. By learning key business concepts as well as global literacy skills, students will be prepared for employment opportunities in government agencies, financial institutions, and large to small business or industry. Skills related to the application of these concepts are developed through the study of computer literacy, communication, team-building, and decision-making.

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 global literacy, students begin their coursework with basic business concepts. The degree is fully online and can be completed in four full-time semesters.

International Business Certificate - C25120GB

-Day, Evening, and Online

This certificate is intended to provide students with a better understanding of how businesses are continually globally connected. Coursework includes a basic understanding of business, as well as understanding business from an international perspective, how international trade impacts business, importing and exporting, the economics of international businesses, and how marketing is impacted by delivering products and services to and from different parts of the world.

PROGRAM SEQUENCE

First Semester BUS 110 Introduction to Business 3 BUS 137 Principles of Management 3 CIS 111 Basic PC Literacy 2 Social Science Elective 3 ENG 111 Writing and Inquiry 3 MKT 120 Principles of Marketing 3 Second Semester

Principles of Financial Accounting......4

Business Math......3

ACC 120 BUS 115

BUS 121

BUS 151 INT 110	People Skills	curriculum prepares students to perform these roles in organizations of varying size and type and, depending on individual and
	Business Core Certificate (C25120D): BUS 110, BUS 115, BUS 137, + One Social Science	organizational factors, roles can be performed at the administrative support, individual contributor / 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,
Third Sem	nester_	students are prepared to begin careers in both disciplines. The
ENG 114	Professional Research and Reporting3	degree is fully online and can be completed in four full-time
HUM 115	Critical Thinking3	semesters.
INT 210		
INT 220 INT 230		Business Administration: Human Resources Administration Certificate - C25120HA
	International Business Certificate (C25120GB): ence Elective, INT 110, INT 210, INT 220	-Day, Evening, and Online
		This certificate is intended to provide formal classroom training in Human Resources (HR) to individuals interested in careers in HR.
Fourth Se		Ideally, students entering this program should already have a
ACC 270		college degree in another field, should be working in the field of
BUS 139		Human Resources, or should be business owners looking for
BUS 153	Human Resources Management	specific training in Human Resources. Course work includes studies
	cs Elective	in human resource management, records management, recruitment and selection or compensation and benefits or training and
Complete	Administration Major Elective Track 1: Customer Service Certificate (C25120B):	development, people skills or customer service, and word processing or office software applications.
BUS 110,	BUS 151, BUS 137, MKT 223	Business Administration: Human Resources
Complete	Administration Major Elective Track 2: Leadership Certificate (C2520F): BUS 153, BUS 151, + Choose BUS 240	Management Certificate- C25120HB -Day, Evening, and Online
Complete	Administration Major Elective Track 3: Career Success Certificate (C25120G): BUS 151, + Choose BUS 125 and BUS 240	This program is intended to provide formal classroom training in Human Resources Management to individuals interested in careers in Human Resources. Ideally, students entering this program should be a college deeper in another field, thould be warting in
Social Sci	ence Elective	already have a college degree in another field, should be working in the field of Human Resources, or should be business owners looking for specific training in Human Resources. Course work
ECO 151		includes studies inhuman resources, management, employment law,
ECO 251		recruitment and selection, training and development, and
ECO 252	Principles of Macroeconomics3	compensation and benefits.
General F	ducation Courses	
MAT 110		PROGRAM SEQUENCE
MAT 143		
	,	First Semester
	Administration/ Global Business Management Major	BUS 110 Introduction to Business
Electives		BUS 137 Principles of Management3
BUS 12		CIS 111 Basic PC Literacy2
BUS 24		Social Science Elective3
INT 18	•	ENG 111 Writing and Inquiry3
LOG 110 MKT 223		MKT 120 Principles of Marketing3
MKT 23		
WBL 11		Second Semester
WBL 11:		ACC 120 Principles of Financial Accounting4
WBL 11:		BUS 115 Business Law I
****	TYOIN BUOOD Essenting 1	BUS 121 Business Math3
Completio	on Requirements65 Credit Hours	BUS 153 Human Resources Management
		BUS 217 Employment Law and Regulations*
D	oo Administration. Ulumor December	Complete Business Core Certificate (C25120D):
	ss Administration: Human Resources	ACC 120, BUS 110, BUS 115, BUS 137, + One Social Science
Manage	ement Degree - A25120H	Elective
-Day, Evenir	ng, and Online	
		Third Semester
	source Management (HRM) is the organizational function	BUS 234 Training and Development*3
	e for creating and supporting the systems that are used to	BUS 240 Business Ethics
	manage an organization's employees. HRM managers,	BUS 256 Recruit Select & Per Plan*3
	als and support staff work in areas such as compensation,	BUS 258 Compensation and Benefits*
benefits, st	affing and training.	ENG 114 Professional Research and Reporting3

The Business Administration / Human Resources Management

Complete Human Resources Management Certificate (C25120HB):

BUS 153, BUS 217, BUS 234, BUS 256, BUS 258

Four	th S	Sem	es	ter

ACC	121	Principles of Managerial Accounting	. 4		
		HRM Applications			
		Critical Thinking			
Mathematics Elective					
HRM	HRM Major Elective3				

Human Resources Major Elective Track 1: Complete Leadership Certificate (C2520F): BUS 137, BUS 153, BUS 240, + Choose BUS 151

Human Resources Major Elective Track 2: Complete Public Administration Certificate (C25120P): BUS 153, BUS 240, + Choose 2 HRM Major Electives: BUS 151 and PAD 151

Human Resources Management Elective Track 3: Complete Human Resources Administration Certificate (C25120HA): BUS 153 + Choose 3 HRM Major Electives: BUS 151, MKT 223, and BUS 260

Human Resources Management Elective Track 4: Complete Customer Service Certificate (C25120B): BUS 110, BUS 137, + Choose BUS 151 and MKT 223

Social Science Elective

ECO	151	Survey of Economics	3
ECO	251	Principles of Microeconomics	3
ECO	252	Principles of Macroeconomics	3

MAT 110 Mathematical Measurement & Literacy......3

Mathematics Electives

	,		
BUS	151	People Skills	3
BUS	260	Business Communications	3
INT	180	Travel Study Abroad	3
MKT	223	Customer Service	3
MKT	232	Social Media Marketing	4
PAD	151	Intro to Public Admin	3
WBL	111	Work-Based Learning 1	1
WBL	112	Work-Based Learning 1	2
WBL	113	Work-Based Learning 1	3

^{*}Indicates non-waiverable prerequisite for BUS 259, HRM Applications.

Completion Requirements......64 Credit Hours

Business Administration: Marketing Degree - A25120M

-Day, Evening, and Online

Business Administration has a new concentration in Marketing (A.A.S. degree), a concentration within the Business curriculum. The program helps students develop skills in advertising and sales, marketing research and applications, social media marketing, marketing in an international landscape, customer service 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 are developed through the study of computer literacy, communication, team-building, and decision-making.

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, customer service, and social media marketing.

PROGRAM SEQUENCE

First Semester

BUS	110	Introduction to Business	3			
BUS	137	Principles of Management	3			
CIS	111	Basic PC Literacy	2			
Socia	l Sciend	ce Elective	3			
ENG	111	Writing and Inquiry	3			
MKT	120	Principles of Marketing	3			
		•				
Seco	Second Semester					

Second Semeste

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
MKT	223	Customer Service	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		
	Marketing Elective				
		Marketing Research			
MKT	227	Marketing Applications	3		
MKT	232	Social Media Marketing	4		

Complete Marketing and Sales Certificate (C25120MM): MKT 120, MKT 232, MKT 220, MKT 223

Marketing Elective Track 1:

Complete Customer Service Certificate (C25120B): BUS 110, BUS 137, MKT 223, + Choose BUS 151

Marketing Elective Track 2:

Entrepreneurship Certificate (C25120C): Choose BUS 245

Marketing Elective Track 3:

Complete Career Success Certificate (C25120G):

BUS 110, + Choose 3 MKT Electives: BUS 151, BUS 125, BUS 240

Fourth Semester

ACC	121	Principles of Managerial Accounting	4
		Business Law II	
BUS	139	Entrepreneurship I	3
		Critical Thinking	
		Elective	

Complete Entrepreneurship Certificate (C25120C)

BUS 110, BUS 139, MKT 120, + choose BUS 245 from Marketing Flectives

Marketing Elective Track 2: Complete Entrepreneurship Certificate (C25120C): BUS 110, BUS 139, MKT 120, +Choose BUS 245

Socia	ıl Scien	ce Elective	
ECO	151	Survey of Economics	(
ECO	251	Principles of Microeconomics	,
ECO	252	Principles of Macroeconomics	;
Mathe	ematics	s Electives	
MAT	110	Mathematical Measurement & Literacy	(
MAT	143	Quantitative Literacy	
Marke	eting El	lectives	
BAS	120	Intro to Analytics	(
BUS	125	personal Finance	;
BUS	151	People Skills	;
BUS	240	Business Ethics	
BUS	245	Entrepreneurship II	
WBL	111	Work-Based Learning I	
WBL	112	Work-Based Learning I	2
WBL	113	Work-Based Learning I	
		Ŭ	

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.

Completion Requirements65 Credit Hours

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.

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.

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.

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 will learn business analytics practices and how they apply in the marketing industry.

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 will learn business analytics practices and how they are applicable in distribution, transportation, and manufacturing organizations.

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 will learn business analytics practices and how they are applicable in the financial sector.

PROGRAM SEQUENCE

First Semester					
BAS	120	Intro to Analytics3			
BAS	150	Intro to Analytical Program 3			
BUS	110	Introduction to Business 3			
CIS	110	Introduction to Computers3			
ENG	111	Writing and Inquiry3			
MAT	143	Quantitative Literacy3			
<u>Seco</u>	nd Sen	<u>nester</u>			
BAS	121	Data Visualization3			
BAS	220	Appl. Analytical Program 3			
MAT	152	Statistical Methods I4			
BUS		Principles of Management3			
Electi	ve List	l3			
	Complete Business Intelligence Certificate (C25350A): BAS 120, BAS 121, BAS 150, BAS 220				
Elective 1 Track 1: Complete Marketing Analytics Certificate (C25350C): Choose MKT 120 + BAS 120, BAS 121, BUS 110					
Elective 1 Track 2: Finance Analytics Certificate (C25350F): choose ACC 120					
Elect	Elective 1 Track 3: Logistics Analytics Certificate (C25350E):				

Elective 1: Business Core (C25120D): Choose ACC 120

Intro to Predictive Analytics 3

choose LOG 110

BAS 221

BAS	240	Data Structures for Analytics	3
ENG	114	Prof Research and Reporting	.3
		Business Law I	
Electi	ve List I	l	.3
			_

Elective 2 Track 2: Complete Finance Analytics Certificate (C25350F), choose BUS 225 + BAS 120, BAS 121, ACC 120

Elective 2 Track 3: Complete Logistics Analytics Certificate (C25350E), choose LOG 215 + BAS 120, 121, LOG 110

<u>Fourt</u>	h Sem	<u>ester</u>	
HUM	115	Critical Thinking	.3
ECO	251	Prin of Microeconomics	.3
BAS	250	Analytical Tools and Methods	.3
BAS	270	Adv Analytical Tools and Methods	.3
BAS	230	Applied Predictive Modeling	.3
		st II	

Elective 3 Track 4:

Complete Business Analyst Certificate (C25350B): Choose BAS 230 + BAS 220, BAS 240, BAS 250, BAS 270

Complete Business Core Certificate (C25120D): BUS 110, BUS 137, BUS 115, ECO 151or 251 or ECO 252, * See A25120 + Choose ACC 120.

Elective List I (Select 3 hours from the following courses):

MKT	120	Principles of Marketing	3
ACC	120	Prin of Financial Acct	1
LOG	110	Introduction to Logistics	
Elect	ive List	II (Select 3 hours from the following courses)	
MKT	221	Consumer Behavior	3
BUS	225	Business Finance	3
LOG	215	Supply Chain Management	3
Elect	ive List	III (Select 3 hours from the following courses)):
BUS	210	Investment Analysis	3
LOG	225	Logistics Systems	1

Completion Requirements64 Credit Hours

COSMETOLOGY

Cosmetology Degree - A55140

-Day, Online

The Cosmetology curriculum is designed to provide competencybased 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, multicultural 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

-Evening

The Cosmetology curriculum is designed to provide competencybased 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, multicultural 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 Semes COS 111 COS 112 COS 224	ter 4 Cosmetology Concepts I
Second Sen COS 113 COS 114 COS 115a	Cosmetology Concepts II
First Summ ENG 110 PSY 118 MAT 110	er Term Freshman Composition
Third Seme COS 115b COS 116b COS 117 COS 118 COS 223	ŕ
Complete C	osmetology Diploma –D55140A (47 Credits) OS 112, ENG 110, PSY 118, COS 113, COS 114, COS 16, COS 117, COS 118
Fourth Sem COM 120 HUM 121 COS 240 COS 225	ester Intro Interpersonal Communication 3 The Nature of America 3 Contemporary Design 2 Adv Contemp Hair Coloring 2

CRIMINAL JUSTICE TECHNOLOGY

Total Graduation Requirement 64 Credit Hours

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.

Principles of Corrections Certificate - C55180A

-Day & Online

The Principles of Corrections certificate is designed to provide entry level competencies in the field of contemporary corrections as they apply to criminal justice systems and operations. Study will focus on the history, structure, functions, and philosophy of the criminal justice system with regard to corrections; juvenile justice systems and related issues; corrections alternatives, treatment programs, inmate control; statutory/case law as it applies to correctional concepts, facilities, and related practices; and the study of offenders, diversion, house arrest, restitution, community service, probation and parole. Upon completion of this certificate, employment opportunities exist in a variety of local, state, and federal corrections facilities.

Introduction to Law Enforcement Certificate - C55180B

-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.

Homeland Security Certificate - C55180H

-Day & Online

The Homeland Security certificate program is designed to increase knowledge for personnel working in the areas of public administration, public safety, security management and law enforcement, and for executives in corporations responsible for overseeing in-house security programs. It provides an introduction to the threats posed by domestic and international terrorism, as well to strategies for countering those threats. Students will explore the best practices behind successful security planning and thereat assessment, while learning the key principles in homeland security.

Intelligence Analysis Certificate – C55180l -Day & Online

The Intelligence Analysis (IA) certificate promotes excellence in the study, examination, and assessment of threats, risks, and adversaries in all intelligence sectors. The IA certificate is designed to recognize essential intelligence analysis skill sets in those currently seeking a career in criminal justice system. These skill sets include performing analysis, interpreting analysis, planning and organizing, conducting research, tapping sources of intelligence, working with technology, and communicating and writing.

PROGRAM SEQUENCE

First Semester

CJC	111	Intro to Criminal Justice	3
CJC	112	Criminology	3
CJC	121	Law Enforcement Operations	
CJC	122	Community Policing	3
CJC	131	Criminal Law	3
ENG	111	Writing and Inquiry	3
Comp	olete li	ntroduction to Law Enforcement Certificate	
(C551	80B):	CJC 111, CJC 112, CJC 121, CJC 122, CJC 131	
Seco	nd Se	<u>mester</u>	
CJC	113	Juvenile Justice	3

CJC 113 Juverlies dustice 3 CJC 132 Court Procedure and Evidence 3 CJC 141 Corrections 3 CJC 225 Crisis Intervention 3 CJC 233 Correctional Law 3 COM 120 Intro Interpersonal Com 3 OR ENG 114 Prof Research and Reporting 3

Complete Principles of Corrections Certificate (C55180A): CJC 111, CJC 112, CJC 141, CJC 225, CJC 233

HIIIU	Semes	oter_	
CJC	212	Ethics and Community Relations	3
CJC	221	Investigative Principles	4
CJC	231	Constitutional Law	3
BIO	161	Intro to Human Biology	3
HUM	121	The Nature of America	3
Fourt	h Seme	<u>ester</u>	
CJC	161	Introduction to Homeland Security	3

Fourt	h Sem	<u>ester</u>	
CJC	161	Introduction to Homeland Security	3
CJC	162	Intel Analysis & Security Management	3
CJC	163	Transportation & Border Security	3
PSY	118	Interpersonal Psychology	3
WBL OR	111	Work-based Learning	1
CJC	255	Issues in CJ Application	3

Complete Homeland Security Certificate (C55180H): CJC 111, CJC 161, CJC 162, CJC 163

Complete Intelligence Analysis Certificate (C55180I): CJC 111, CJC 221, CJC 161, CJC 162, CJC 163

Total Graduation Requirement......65-67 Credit Hours

CRIMINAL JUSTICE TECHNOLOGY/ FORENSIC SCIENCE

Forensic Science Degree - A5518C

-Day, Hybrid, & Online

Third Somostor

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.

Principles of Identification & Information Certificate - C5518A

-Day & Online

Crime scene investigation is a complex process that includes the initial response; evaluation, processing, and documentation of the scene. Throughout the investigation process it is vital to maintain the integrity of the investigation. This is done through, crime scene processing, investigative skills, interview and interrogation of the suspects, proper documentation, which includes written documentation, diagrams and sketches, crime scene photography and basic friction ridge analysis.

Crime Scene investigators can pursue a number of professional accreditations in order to meet basic and advanced standards. The competent CSI will seek continuing education opportunities through attendance at conferences and training seminars, as well as advanced educational programs such as this certificate with Wake Technical Community College.

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	Semes	ter_	
CJC	111	Introduction to Criminal Justice	3
CJC	112	Criminology	3
CJC	115	Crime Scene Photography	
CJC	131	Criminal Law	
CJC	245	Friction Ridge Analysis	3
ENG	111	Writing and Inquiry	
Seco	nd Sen		
CJC	113	Juvenile Justice	3
CJC	244	Footwear and Tire Imprint	3
CJC	246	Advanced Friction Ridge Analysis	3
PSY	118	Interpersonal Psychology	3
COM	120	Intro Interpersonal Com OR	3
ENG	114	Prof Research and Reporting	
<u>Third</u>	Semes	<u>ster</u>	
CJC	146	Trace Evidence	3
CJC	212	Ethics and Community Relations	3
CJC	221	Investigative Principles	4
CJC	231	Constitutional Law	
BIO	161	Intro to Human Biology	3
Fourt	h Seme	<u>ester</u>	
CJC	132	Court Procedure & Evidence	3
CJC	144	Crime Scene Processing	

CJC	250	Forensic Biology I	3
		Forensic Chemistry I	
		The Nature of America	
WBL		Work-based Learning	
OR			
CJC	255	Issues in CJ Application	3

Complete Principles of Identification & Information Certificate (C5518A): CJC 221, CJC 144, CJC 146, CJC 245, CJC 246

Complete Crime Scene Technician (C5518C): CJC 115, CJC 144, CJC 146, CJC 244, CJC 250

Total Graduation Requirement......65-67 Credit Hours

CULINARY ARTSCulinary 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 Onl

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 Inquiry3 MAT 110 **Second Semester** CUL 160 Baking I3 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 CUL 112A Nutrition for Fdsv Lab......1 ENG 112 Writing/Research in the Disc......3 HRM 260 Procurement for Hospitality......3 Humanities/Fine Arts Elective3 Fourth Semester CUL 135 Food and Beverage Service2 CUL 135A Food and Beverage Service Lab1 CUL 250 Classical Cuisine.....5 WBL 112 Fall Elective List I5 Fifth Semester CUL 230 Global Cuisines5 HRM 220 Cost Control-Food and Beverage3 Spanish for the Workplace......3 Spring Elective List II2 Complete Baking and Pastry Arts certificate (C55130A): CUL 110, CUL 140, CUL 160 + Choose CUL 160 from Fall Elective List, + Choose BPA 150 or BPA 210 from Spring Elective List II Sixth Semester Interpersonal Psychology......3 Complete Culinary Arts Diploma (D55150): CUL 110, CUL 140, ENG 111, MAT 110, CÚL 160, CUL 170, CUL 250, and HRM 245, + Select six credits from HRM 260, HRM 220, and CUL 112, and select ten credits from BPA 150, BPA 210, CUL 130, CUL 260 or CUL 270. Spring Elective List I (Select one course from the following): Menu Design2 CUL 130 CUL 214 Wine Appreciation2 CUL 287 Cultural Experience......3 Fall Elective List (Select one set from the following): Artisan Breads......4 **BPA 150** BPA 210 Cake Design & Decorating3 CUL 260 CUL 270 Garde-Manger II......3 Spring Elective List II (Select one course from the following): BPA 150 Artisan & Specialty Bread4 Cake Design & Decorating......3 BPA 210 WBL 122 Work-Based Learning II2 **Humanities Elective** HUM 115 Critical Thinking......3 Art Methods and Materials3 Graduation Requirements......72 Credit Hours

EARLY CHILDHOOD EDUCATION

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.

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.

ECE 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. Students will combine learned theories with practice through a practicum experience with young children under the supervision of qualified teachers.

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. Students will combine learned theories with practice through a practicum experience with young children under the supervision of qualified teachers.

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.

PROGRAM SEQUENCE

First Semes	<u>ster</u>
EDU 119	Introduction to Early Childhood Education4
EDU 131	Child, Family, and Community3
EDU 144	Child Development I3
EDU 153	Health, Safety, and Nutrition3
ENG 111	Writing and Inquiry3
Second Ser	<u>nester</u>
EDU 145	
EDU 146	Child Guidance3
EDU 184	Early Child Intro Practicum2
EDU 234	Infants, Toddlers, & Twos3
ENG 112	Writing/Research in the Disc3
	nfant/Toddler Care Certificate (C55290): DU 131, EDU 144, EDU 153, EDU 234, EDU 184
Complete E	arly Childhood Education ECE Certificate (C55220D):

Complete Preschool Foundation Certificate (C55220G): EDU 119, EDU 131, EDU 144, EDU 145, EDU 146

EDU 119, EDU 131, EDU 153, EDU 145, EDU 146, EDU 184

Third Seme	<u>ster</u>
EDU 151	Creative Activities3
EDU 157	Active Play3
SOC 210	Introduction to Sociology3
ENG 111, EI	arly Childhood Education Diploma (D55220A): NG 112, SOC 210, EDU 119, EDU 131, EDU 144, EDU 16, EDU 151, EDU 153, EDU 234, EDU 157, EDU 184
Fourth Sem	<u>ester</u>

Educational Technology......3

282	Early Childhood Literature	. 3
115	Critical Thinking	. 3
	-	
240	Introduction to Ethics	. 3
111	Art Appreciation	. 3
110	Math Measurement & Literacy	
	·	
143	Quantitative Literacy	. 3
	Elective I (choose a minimum of 3 credit)	
Semes		
251		
251A	Exploration Activities Lab	. 1
221	Children with Exceptionalities	. 3
280	Language and Literacy Experiences	. 3
284	Early Child Capstone Prac	. 4
	Elective II (choose a minimum of 3 credit)	. 3
	115 240 111 110 143 ———————————————————————————————————	115 Critical Thinking

Complete Early Childhood Education School Age Certificate (C55220E): EDU 119, EDU 131, EDU 145 + EDU 163, EDU 235, and EDU 263 from elective list

Elect	ive I an	d II (Choose a minimum of 6 credit hours)	
EDU	114	Intro to Family Childcare	3
		Classroom Mgt & Intruct	
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	3
EDU	287	Leadership/Early Child Education	3

*EDU 262 has a prerequisite of 261. Take EDU 261 as Elective 1 and EDU 262 as Elective 2.

Graduation Requirements70-71 Semester 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 Semes	ster	
COS 119	Esthetics Concepts I	2
COS 120	Esthetics Salon I	6
Second Ser	nester Esthetics Concepts II	2
	Esthetics Salon II	
Total Gradu	ation Requirements	16 Credit Hours

FIRE PROTECTION TECHNOLOGY

Fire Protection Technology Degree - A55240

The Fire Protection Technology curriculum is designed to provide individuals with technical and professional knowledge to make decisions regarding fire protection for both public and private sectors. It also provides a sound foundation for continuous higher learning in fire protection, administration, and management.

Course work includes online classroom and laboratory exercises to introduce the student to various aspects of fire protection. Students will learn technical and administrative skills such as hydraulics, hazardous materials, arson investigation, fire protection safety, fire suppression management, law, and codes.

Graduates should qualify for employment or advancement in governmental agencies, industrial firms, insurance rating organizations, educational organizations, and municipal fire departments. Employed persons should have opportunities for skilled and supervisory-level positions within their current organizations.

Fire Protection Technology: Basic Certificate -

- Online

The General Certificate in Fire Protection is designed to develop a student's appreciation and understanding of fire service as a career. Concentrated studies in firefighting strategies, building construction, and fire prevention prepare a student for an entrylevel position in fire service.

Loss Control/Investigation Certificate -C55240B

The Loss Control/Investigation certificate prepares students to function effectively and lead within a fire department's inspections and investigations division. The program provides an overview into the theories, practices, and scope of the fire prevention function, including the study of fire cause investigation, fire protection law, model fire codes, life safety, public education, fire protection systems, employee supervision and expository writing. Upon completion, certificate holders may qualify for supervisory or entry-level management positions in fire prevention, training, or fire suppression. Additional employment opportunities in fire and life safety protection may also be found in hospitals, colleges, manufacturing facilities or insurance companies.

Fire Management Certificate - C55240C -Online

The Fire Service Management Certificate develops the student's team leadership skills in preparation for the effective mitigation of incidents that pose serious loss or hazard to citizens and property. The course work will provide the student with an overview into the theories, practices, and scope of fire service management in action. Course work includes personnel supervision, report writing, administration, public relations, finance, and planning. Upon completion certificate holders may qualify for supervisory or entry-level management positions in fire suppression, fire prevention, or training.

PROGRAM SEQUENCE

First	Seme	<u>ster</u>	
=110		110	

ENG 111	Writing and Inquiry	3

FIP FIP FIP FIP	120 124 132 220 229	Intro to Fire Protection	.3 .3 .3
Seco	nd Sen	nester	
FIP	128	Detection & Investigation	. 3
FIP	152	Fire Protection Law	. 3
FIP	232	Hydraulics & Water Distribution	. 3
BIO	161	Introduction to Human Biology	. 3
COM OR	120	Intro Interpersonal Com	. 3
ENG	114	Professional Research & Reporting	. 3
Third	Seme	<u>ster</u>	
FIP	136	Inspection and Codes	. 3
FIP	176	HazMat Operations	. 4
FIP	228	Local Government Finance	. 3
FIP	240	Fire Service Supervision	3
FIP	277	Fire and Social Behavior	. 3
HUM	121	The Nature of America	. 3

Complete Fire Protection Technology Certificate (C55240A): FIP 120, FIP 124, FIP 132, FIP 220

Complete Fire Management Certificate (C55240C): ENG 111, FIP 152, FIP 228, FIP 240

Four	h Sem	<u>nester</u>	
EPT	140	Emergency Management	3
FIP	229	Fire Dynamics and Combust	3
FIP	244	Fire Protection Project	3
FIP	260	Fire Protect Planning	3
FIP	276	Managing Fire Services	3
PSY	118	Interpersonal Psychology	3

Complete Loss Control/Investigation Certificate (C55240B): FIP 124, FIP 164, FIP 128, FIP 152, FIP 276

Total Graduation Requirement...... 67 Credit Hours

LATERAL ENTRY

Lateral Entry Certificate - C55430 -Evening

The Lateral Entry curriculum provides a course of study leading to the development of the general pedagogy knowledge needed to become certified to teach by the North Carolina Department of Public Instruction. Prospective lateral entry candidates are required to meet with the program coordinator prior to entry into the program. They are required to obtain a plan of study from a designated regional alternative licensing center (RALC) prior to applying for admissions to this program.

Course work includes human growth and development, learning theory, instructional technology, school policies and procedures, home, school, and community collaborations, and classroom organization and management to enhance learning. Courses offered by partnering senior institutions include instructional methods, literacy, and exceptionalities in the classroom. Additional courses may be required based on the review of transcripts completed by the RALC and documented in an individual plan of study.

Upon completion of the program, graduates should meet the general pedagogical competencies within the first three years of teaching, including a minimum of six semester hours per school

year. Additional requirements, such as pre-service training and passing the PRAXIS, are required for licensure.

PROGRAM SEQUENCE

First Semester

_	163 245	Classroom Mgt & Instruct Policies and Procedures	
EDU		nester Human Growth/Development Educational Technology	
EDU	Semes 131 243	Child, Family, & Community	
Cour	se Requ	uired at Senior Institution	
		Literacy/Reading Methods	3(+)
		Instructional Methods	3(+)
		Meeting Special Learning Needs, Exceptionalities,	
		Diversity	3(+)

Total Community College Requirements = 18 Sem. Credit Hours

Total Completion Requirements 27 (++) Semester 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 entrylevel 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

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

Procurement Management Certificate – C25110E

-Day

The procurement management certificate provides students with skills specific to positions in food ordering industry. Couse work includes procurement, sanitation, culinary skills, and accounting. Upon completion, graduates should qualify for entry-level supervisory or management training positions in food procurement.

Hospitality Management Core Certificate – C25110F

-Online only

The hospitality management core certificate provides students an understanding of management and practical skills for the hospitality industry. Course work includes guest services, human resource management, leadership 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 Event Coordinator Certificate -C25110G

-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.

Foodservice Entrepreneurship Certificate -C25110J

The entrepreneur certificate gives students basic business skills specific to the hotel and restaurant industry. Course work includes guest services, human resource management, basic business and entrepreneurship studies, and other areas critical to the success of industry professionals. Upon completion, graduates should have a good understanding of the basics of setting up a business in the hospitality industry.

PROGRAM SEQUENCE

	Semes		
CUL	110	Sanitation and Safety2	

ENG 111 HRM 110 MAT 110 PSY 118	Writing and Inquiry 3 Introduction to Hosp & Tourism 3 Math Measurement & Literacy 3 Interpersonal Psychology 3 *Elective List I 2
Second Ser CUL 135 CUL 135A CUL 142 OR CUL 140 HUM 115	nester Food and Beverage Service 2 Food and Beverage Service Lab 1 Fundamentals of Food 5 Culinary Skills I 5 Critical Thinking 3 *Elective List II 2
Third Seme HRM 220 HRM 275 HRM 240 HRM 235	Ster Cost Control - Food and Beverage
Fourth Sem WBL 112 HRM 245 HRM 280 SPA 120	ester Work-Based Learning I 2 Human Resources Management-Hosp 3 Management Problems - Hospitality 3 Spanish for the Workplace 3 *English Elective 3 *Elective List III 3
Fifth Semes ACC 175 HRM 140	Hotel and Restaurant Accounting
Complete H (C25110D): CUL 135 and	*Elective List IV
	rocurement Management certificate (C25110E): JL 110, CUL 140 OR CUL 142, HRM 220 and HRM
ACC 175, Cl 260.	
ACC 175, Cl 260. Complete H HRM 110, H	JL 110, CUL 140 OR CUL 142, HRM 220 and HRM ospitality Management Core certificate (C25110F):
ACC 175, CI 260. Complete H HRM 110, H Complete H HRM 110, F Complete H	ospitality Management Core certificate (C25110F): RM 140, HRM 245, HRM 275 and HRM 280. ospitality Event Coordinator certificate (C25110G):
ACC 175, Cl 260. Complete H HRM 110, H Complete H HRM 110, F Complete H CUL 110, HF	ospitality Management Core certificate (C25110F): RM 140, HRM 245, HRM 275 and HRM 280. ospitality Event Coordinator certificate (C25110G): IRM 140, HRM 240, HRM 235, HRM 125 and HRM 210 ospitality Hotel Operations certificate (C25110H):
ACC 175, Cl 260. Complete H HRM 110, H Complete H HRM 110, F Complete H CUL 110, HF Complete F BUS 139, Cl Complete H CUL 110, EN HRM 220, H HRM 225; C CUL 135A, C	ospitality Management Core certificate (C25110F): RM 140, HRM 245, HRM 275 and HRM 280. ospitality Event Coordinator certificate (C25110G): IRM 140, HRM 240, HRM 235, HRM 125 and HRM 210 ospitality Hotel Operations certificate (C25110H): RM 110, HRM 120,HRM 210 and HRM 245. oodservice Entrepreneurship certificate (C25110J):
ACC 175, Cl 260. Complete H HRM 110, H Complete H CUL 110, HF Complete F BUS 139, Cl Complete F BUS 139, Cl Complete H CUL 110, EN HRM 220, H HRM 225, C CUL 135A, CHRM 120, H	ospitality Management Core certificate (C25110F): RM 140, HRM 245, HRM 275 and HRM 280. ospitality Event Coordinator certificate (C25110G): IRM 140, HRM 240, HRM 235, HRM 125 and HRM 210 ospitality Hotel Operations certificate (C25110H): RM 110, HRM 120,HRM 210 and HRM 245. oodservice Entrepreneurship certificate (C25110J): JL 110, HRM 245HRM 140, HRM 220 and HRM 240. ospitality Management diploma (D25110): US 111, HRM 110, MAT 110, HRM 140, HRM 240, RM 245; Take one course from BUS 139, CUL214, or hoose 8 credits from ACC 175, CUL 130, CUL 135, CUL 142, HRM 260; Choose 8 credits from WBL 112,
ACC 175, Cl 260. Complete H HRM 110, H Complete H HRM 110, F Complete H CUL 110, HF Complete F BUS 139, Cl Complete H CUL 110, EN HRM 220, H HRM 225; C CUL 135A, C HRM 120, H English Elee ENG 112 ENG 114	ospitality Management Core certificate (C25110F): RM 140, HRM 245, HRM 275 and HRM 280. ospitality Event Coordinator certificate (C25110G): IRM 140, HRM 240, HRM 235, HRM 125 and HRM 210 ospitality Hotel Operations certificate (C25110H): RM 110, HRM 120,HRM 210 and HRM 245. oodservice Entrepreneurship certificate (C25110J): JL 110, HRM 245HRM 140, HRM 220 and HRM 240. ospitality Management diploma (D25110): NG 111, HRM 110, MAT 110, HRM 140, HRM 240, RM 245; Take one course from BUS 139, CUL214, or hoose 8 credits from ACC 175, CUL 130, CUL 135, CUL 142, HRM 260; Choose 8 credits from WBL 112, RM 210, SPA 120 ctives (Select one course from the following list): Writing/Research in the Disc

Elective Lis	t II (Select one or both course(s)from the following
CUL 130 HRM 225	Menu Design
Elective Lis	t III: (Select one or both course(s) from the st):
BUS 139 HRM 210	
Elective List	IV (Select 3 credits from the following list):
BUS 139	Entrepreneurship I3
BUS 230	Small Business Management3
CUL 130	Menu Design2
CUL 214	Wine Appreciation2
HRM 120	Front Office Procedures3
HRM 125	Etiquette for Hospitality1
HRM 210	Meetings & Event Planning3
HRM 215	Restaurant Management3
HRM 225	Beverage Management3
HRM 260	Procurement for Hospitality3
Graduation	Requirements71 Credit Hours

SUPPLY CHAIN MANAGEMENT (GLOBAL LOGISTICS TECHNOLOGY)

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

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 will also 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 will understand the basics of distribution management.

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 will also 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 will understand the basics of distribution management.

PROGRAM SEQUENCE

First Semester

CIS	111	Basic PC Literacy	2
BUS	137	Principles of Management	3
ENG	111	Writing & Inquiry	3
LOG	110	Introduction to Logistics	j
MAT HUM	121 115	Algebra/ Trigonometry 1 Critical Thinking	0
ПОІИ	115	Childar Hilliking	٠
Seco	nd Sen	nester	
ACC		Principles of Financial Accounting	4
ENG	114	Professional Research and Reporting	
LOG	-	Global Logistics	3
LOG		Distribution Management	
LOG	215	Supply Chain Management	3
Com	olete Di	stribution Management Core Certificate	
(C256	20DA):	:	
		OG 110, LOG 120, LOG 215	
-	_		
ECO	Semes		_
MKT		Principles of Microeconomics	3
LOG	-	Fleet Management	3
LOG	-	Logistics Systems	4
		*Major Elective	3
		·	
		ansportation Management Certificate (C25620DB):	
LOG	211, LC	OG 215, LOG 210, LOG 225	
Fourt	h Seme	ester	
BUS		Business Law I	:
LOG	-	Logistics Management	
LOG	230	Transportation Management	3
LOG	245	Logistics Security	3
		*Major Elective	
^	.1.4. 1 .	- winding Amelydian Condition (COECECE)	
		ogistics Analytics Certificate (C25350E): DG 215, +BAS 120 and BAS 121 from major elective lis	_
LOG	110, LC	213, +BAS 120 and BAS 121 nontinajor elective is	>
Majo	Electi	ves (choose a minimum of 3 credit hours)	
BUS	153	Human Resources Management	3
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based learning I	2
WBL		Work-Based learning II	1
LOG	-	Purchasing Logistics	3
BAS BAS	120 121	Business Ānalytics I	
BAS	121	Analytics iviethous I	٥
Total	Gradua	ation Requirement 64 Semester Credit Hour	S

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 logisticsrelated positions in government agencies, manufacturing, and service organizations. Employment opportunities include entrylevel 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.

Logistics Core Certificate - C25620GA

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 will understand the basics of logistics management

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 will understand the global supply chain.

Supply Chain Certificate – C25620GC

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 will understand the supply chain.

PROGRAM SEQUENCE

First	Semes	ster	
CIS	111	Basic PC Literacy	2
BUS	137	Principles of Management	
ENG	111	Writing & Inquiry	3
LOG	110	Introduction to Logistics	3
LOG	125	Transportation Logistics	3
MAT	121	Algebra/ Trigonometry 1	3
Seco	nd Ser	<u>mester</u>	
ACC	120	Principles of Financial Accounting	4
MKT	120	Principles of Marketing	3
ENG	114	Professional Research and Reporting	3
LOG	211	Distribution Management	3

LOG	215	Supply Chain Management3
Comp LOG	olete Lo 110, LO	ogistics Core Certificate (C25620GA): DG 125, LOG 211, BUS 137
		upply Chain Certificate (C25620GC): DG 125, LOG 211, LOG 215
Third	Semes	ster
ECO	251	Principles of Microeconomics
INT	110	International Business3
LOG	-	Logistics Systems4
LOG		Import/Export Management3
LOG	240	Purchasing Logistics3
LOG		ternational Logistics Certificate (C25620GB): T 110, LOG 235, LOG 240
BUS		Business Law I3
HUM		Critical Thinking
LOG	-	Logistics Security3
LOG		Advanced Global Logistics4
		*Major Elective3
Maior	Floctiv	ves (Select 3 credit hours)
BUS		Human Resources Management3
WBL		Work-Based Learning I1
WBL		Work-Based learning I2
WBL	121	Work-Based learning II1
BAS	120	Business Analytics I
BAS	121	Analytics Methods I3
BAS ?	120, BA	ogistics Analytics Certificate (C25350E) see A25350: S 121, LOG 110, LOG 215
ıotai	Gradua	ation Requirement 65 Semester Credit Hours

The course sequence outlined below is suggested for **full-time students** pursuing an **Associate of Arts (AA) Degree**, who have placed out of all developmental courses. Part-time students should seek advising to determine the best course sequence to meet their educational goals. To earn the **AA** degree, all students are required to complete:

- 6 credits of UGETC English Composition
 - o 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 Humanities/Fine Arts, from at least 2 subjects
 - ART-111, ART-114, ART-115, COM-231, 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
 - o 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

Click to view the complete list of <u>UGETC</u>, <u>General Education Core</u>, and <u>Transferrable</u> courses required for the A.A and A.S degrees.

FIRST SEMESTER	Credit Hours	SECOND SEMESTER	Credit Hours
ENG-111	3	ENG 112	3
UGETC Mathematics	3-4	UGETC Social/Behavioral Science Be sure to choose at least 2 subjects	3
UGETC Natural Sciences	4	UGETC Humanities/Fine Arts Be sure to choose at least 2 subjects	3
UGETC Social/Behavioral Science	3	General Education Course	3
	3	General Education Course	3
UGETC Humanities/Fine Arts	3	ACA-122	1
Total Number of Credit Hours	16 – 17	Total Number of Credit Hours	16

THIRD SEMESTER	Credit Hours	FOURTH SEMESTER	Credit Hours
UGETC Humanities/Fine Arts Be sure to choose at least 2 subjects	3	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
UGETC Social/Behavioral Science Be sure to choose at least 2 subjects	3	Elective - from the list of transferable courses	3
General Education Course	3	Elective - from the list of transferable courses	3
General Education Course	3	Elective - from the list of transferable courses	3
General Education Course	3	Elective - from the list of transferable courses	3
Total Number of Credit Hours	15	Total Number of Credit Hours	15
		APPLY FOR ASSOCIATE IN ARTS DEGREE	60 - 61

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* 4-semester outline based upon no pre-requisites classes required; students may elect to take courses during summer pending availability

^{*}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.

The course sequence outlined below is suggested for **full-time students** pursuing an **Associate in Fine Arts in Visual Arts**, who have placed out of all developmental courses. Part-time students should seek advising to determine the best course sequence to meet their educational goals.

Note: To earn the **AFA** – **Visual Arts** degree, all students are required to complete:

- 6 credits of UGETC English Composition
 - o ENG-111 & ENG-112
- 3 4 credits of UGETC Mathematics
 - o 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 Humanities/Fine Arts, from at least 2 subjects
 - o COM-231, 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
 - o ART-114, ART-115, ART-121, ART-122, and ART-131
- 1 credit of ACA-122
- 19 credits of electives, chosen from the list of UGETC, General Education Core, or Transferable Courses

Click to view the complete list of <u>UGETC</u>, <u>General Education Core</u>, and <u>Transferrable</u> courses.

FIRST SEMESTER	Credit Hours	SECOND SEMESTER	Credit Hours
ENG-111	3	ENG-112	3
UGETC Mathematics	3 - 4	UGETC Social/Behavioral Science	3
Required ART course: ART-121	3	Required ART course: ART-122	3
Required ART course: ART-114	3	Required ART course: ART-115	3
Required ART course: ART-131	3	Floative (ART 122 December ded)	2
ACA-122	1	Elective (ART-132 Recommended)	3
Total Number of Credit Hours	16 - 17	Total Number of Credit Hours	15

• Students may also elect to take courses during the summer, pending availability.

THIRD SEMESTER	Credit Hours	FOURTH SEMESTER	Credit Hours
UGETC Social/Behavioral Science Be sure to choose at least 2 subjects	3	Humanities/Fine Arts Be sure to choose at least 2 subjects	3
Humanities/Fine Arts	3	UGETC Natural Science	4
Elective (ART-231 Recommended)	3	Elective (ART-232, ART-241, or ART-282 Recommended)	3
Elective (ART-240 or ART-281 Recommended)	3	Elective (ART-281, ART-244, or ART-171 Recommended)	3
Elective (ART-171 or ART-275 Recommended)	3	Elective (ART-214 Recommended)	1-3
Total Number of Credit Hours	15	Total Number of Credit Hours	14-16
		APPLY FOR ASSOCIATE IN FINE ARTS DEGREE	60*

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*** 4-semester outline based upon no pre-requisites classes required; students may elect to take courses during summer pending availability

^{*}Note* Students choosing 3 hour General Education and Elective courses may exceed the required 60 credits

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. Part-time students should seek advising to determine the best course sequence to meet their educational goals.

To earn the **AS** degree, all students are required to complete:

- 6 credits of UGETC English Composition
 - o ENG-111 and ENG-112
- 8 credits of UGETC Mathematics
 - o MAT-171, MAT-172, MAT-263, or MAT-271
- 8 credits of UGETC Natural Sciences as a one year sequence in one discipline area
 - o BIO-111 & BIO-112, CHM-151 & CHM-152, PHY-151 & PHY-152, PHY-251 & PHY-252, or AST-151, AST-151A & GFI -111
- 6 credits of UGETC Humanities/Fine Arts, from two different subjects
 - ART-111, ART-114, ART-115, COM-231, 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

Click to view the complete list of <u>UGETC</u>, <u>General Education Core</u>, and <u>Transferrable</u> courses required for the A.A and A.S degrees.

FIRST SEMESTER	Credit Hours	SECOND SEMESTER	Credit Hours
ENG-111	3	ENG 112	3
UGETC Mathematics	4	UGETC Mathematics	4
UGETC Social/Behavioral Science	3	UGETC Natural Sciences	4
UGETC Humanities/Fine Arts	3	UGETC Social/Behavioral Science Make sure to choose a different subject	3
ACA-122	1	UGETC Humanities/Fine Arts Make sure to choose at least 2 subjects	3
Total Number of Credit Hours	14	Total Number of Credit Hours	17

THIRD SEMESTER	Credit Hours	FOURTH SEMESTER	Credit Hours
UGETC Natural Sciences	4	Communications Take COM-110, COM-120, or COM-231 if not previously selected If COM-110, COM-120, or COM-231 were previously selected, then choose an elective from the list of transferable courses	3
General Education Course	3	Elective - from the list of transferable courses	3
General Education Course	3	Elective - from the list of transferable courses	3
General Education Course	3	Elective - from the list of transferable courses	3
General Education Course	3	Elective - from the list of transferable courses	3
Total Number of Credit Hours	16	Total Number of Credit Hours	15
		APPLY FOR ASSOCIATE IN SCIENCE DEGREE	60**

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* 4-semester outline based upon no pre-requisites classes required; students may elect to take courses during summer pending availability

^{*}Note* Students choosing 3 hour General Education and Elective courses may exceed the required 60 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.

The course sequence outlined below is suggested for **full-time students** pursuing an **Associates of Engineering Degree** (AE), who have placed out of all developmental and pre-requisite courses. Part-time students should seek advising to determine the best course sequence to meet their educational goals. To earn the 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-110^t
- 3 credits of Fine Arts/Communications from
 - o ART-111, ART-114, ART-115, COM-231, MUS-110, or MUS-112
- 3 credits of Microeconomics
 - o ECO-251
- 3 credits of Social/Behavioral Sciences from
 - o 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
 - o CHM-151, PHY-251, and PHY-252
- 1 credit of ACA-122
- 2 credits of EGR-150
- 15 credits of approved *Engineering electives from
 - BIO-111, CHM-152, COM-110, CSC-134, CSC-151, DFT-170, ECO-252, EGR-212, EGR-220, EGR-225, 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

'REL-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.

FIRST SEMESTER	Credit Hours	SECOND SEMESTER	Credit Hours
MAT-271	4	MAT-272	4
CHM-151	4	PHY-251	4
ENG-111	3	ENG-112	3
ACA-122	1	ECO-251	3
EGR-150	2		
Total Number of Credit Hours	14	Total Number of Credit Hours	14

THIRD SEMESTER	Credit Hours	FOURTH SEMESTER	Credit Hours
MAT-273	4	PHY-252	4
Humanities ENG-231, ENG-232, PHI-215, PHI-240, or REL-110'	3	Social/Behavioral Science HIS-111, HIS-112, HIS-131, HIS-132, POL-120, PSY-150, or SOC-210	3
Fine Arts/Communication ART-111, ART-114, ART-115, COM-231, MUS-110, or MUS-112	3	* Engineering Elective	3
* Engineering Elective	3	* Engineering Elective	3
* Engineering Elective	3	* Engineering Elective	3
Total Number of Credit Hours	16	Total Number of Credit Hours	16
		APPLY FOR ASSOCIATE IN ENGINEERING DEGREE	60**

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 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.

^{*}Note* 4-semester outline based upon no pre-requisites classes required; students may elect to take courses during summer pending availability

Computer Technologies (CT) Division

Dean Angela Bequette Phone: 919-866-5394

Email: albequette@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 <u>WebAdvisor</u> for the availability of classes. Click to see a list of Wake Tech's programs that can be completed fully <u>online</u>.

Program Name	Program Code
Advertising and Graphic Design – AAS Degree	A30100
Graphics Design - Certificate	C30100A
Web and Graphic Design – Certificate	C30100B
Advanced Graphic Design - Certificate	C30100D
Design Basics- Certificate	C30100E
Design Portfolio- Certificate	C30100F
Computer Engineering – AAS Degree	A25590CE
Computer Programming and Development – AAS Degree	A25590CP
IT Foundations - Certificate	C25590F
JAVA Programming – Certificate	C25590JV
Visual BASIC Programming – Certificate	C25590VB
C++ Programming – Certificate	C25590CC
Enterprise Java – Certificate	C25590EJ
Programming Fundamentals - Certificate	C25990PF
Cyber Security – AAS Degree	A25590CS
Hacking and Forensics – <i>Diploma</i>	D25590HF
Data Science and Programming Support – AAS Degree	A25590DS
IT Foundations - Certificate	C25590F
Database Programing - General - Certificate	C25590GB
Database Programing - Microsoft - Certificate	C25590SQ
Database Programing – Oracle - Certificate	C25590OR
Database Programing - SAS - <i>Certificate</i>	C25590SS
Python Programming - Certificate	C25590PY
Programming Fundamentals - Certificate	C25990PF
Healthcare Business Informatics – AAS Degree	A25590HB
Medical Office Administration	
Medical Office Administration – Medical Office Professional – <i>AAS Degree</i>	A25310P
Medical Office Administration – Medical Billing and Coding – <i>AAS Degree</i>	A25310B
Medical Office Administration – Healthcare Administration – AAS Degree	A25310H
Medial Office Professional – <i>Diploma</i>	D25310P
Medical Office Professional – Certificate	C25310P
Mobile Applications Developer – AAS Degree	A25590MA
Android Application Developer - Certificate	C25590MA
Web Development Basics - Certificate	C25590WB
iOS Application Developer - Certificate	C25590MI
Front-End Developer - Certificate	C25590DV
Web Designer - Certificate	C25590DM

Program Name Continued	Program Code
Network Management – AAS Degree	A25590NM
Data Storage and Virtualization - Diploma	D25590DV
Cisco Network Associate - Certificate	C25590CA
Cisco Network Professional - Certificate	C25590CP
Microsoft Certified IT Professional - Certificate	C25590MS
Linux Certified Professional – Certificate	C25590LX
Linux Security Specialist – Certificate	C25590LS
Global Windows Security Administration - Certificate	C25590WS
Cisco Security – Certificate	C25590CX
Office Administration	
Office Administration – Office Professional – AAS Degree	A25370P
Office Administration – Office Finance – AAS Degree	A25370F
Office Administration – Office Software – AAS Degree	A25370S
Office Administration – Legal Office – AAS Degree	A25370L
Office Professional – <i>Diploma</i>	D25370P
Office Professional – Certificate	C25370P
Office Administration – Office Software – Certificate	C25370S
Office Administration – Legal Office - Certificate	C25370L
Simulation and Game Development	0200.02
Simulation and Game Development - Art & Modeling – AAS Degree	A25450A
Simulation and Game Development - Programming - AAS Degree	A25450P
Modeling and Animation – Diploma	D25450B
Modeling and Animation – <i>Diploma</i> Modeling and Animation – <i>Certificate</i>	C25450A
Production - Certificate	C25450A C25450B
Mobile Game Development– <i>Certificate</i>	C25450B
Fundamentals I for Simulation and Game Development– <i>Certificate</i>	C25450C C25450D
Fundamentals II for Simulation and Game Development– <i>Certificate</i>	C25450E
Quality Assurance for Simulation and Game Development– <i>Certificate</i>	C25450E
Business for Simulation and Game Development– Certificate	C25450F
Programming for Simulation and Game Development– Certificate	C25450G C25450H
Level Design - Certificate	C2545011 C25450I
Software and Web Development – AAS Degree	A25590SW
IT Foundations - Certificate	C25590F
C# Programming - Certificate	C25590CZ
JavaScript - Certificate	C25590JS
.Net Programming - Certificate	C25590NE
Programming Fundamentals - Certificate	C25990PF
Storage & Virtualization – AAS Degree	A25590SV
Technical Support – AAS Degree	A25590TS
Hardware Support and Repair - Certificate	C25590HW
IT Foundations - Certificate	C25590F
IT Help Desk Technician - Certificate	C25590HD
Cybersecurity Support - Certificate	C25590CS
Networking Support - Certificate	C25590NS
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
	020000110
Front-End Developer - Certificate	C25590DV

Collaborative Agreements

None at this time

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.

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.

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.

Advanced Graphic Design Certificate - C30100D

-Online

Certificate in graphic design, advertising, and social media concepts.

Design Basics Certificate - C30100E

-Online

Introduction to the principles of design and applying them using industry standard tools.

Design Portfolio Certificate - C30100F

-Day

Certificate leads to creation of an online and physical graphic design portfolio.

Program Sequence

First Semester

GRD 110	Typography I3
GRD 121	Drawing Fundamentals I2
GRD 141	Graphic Design I4
GRD 151	Computer Design Basics3
GRD 167	Photographic Imaging I3

SECOND SEMESTER

ENG	111	Writing and Inquiry	
GRD	142	Graphic Design II	. 4
GRD	152	Computer Design Technology I	. 3
GRD	282	Advertising Copywriting	. 2
WEB	140	Web Development Tools	. 3
GRD	145	Design Applications I	
SUMI	MER SE	EMESTER	
WEB		Social Media	3
		ART 111 or HUM 230	.3
		MAT 121 or MAT 110 or MAT 143	. 3
THIRI	D SEMI	ESTER	
GRD	230	Technical Illustration	. 2
GRD	241	Graphic Design III	
WEB	210	Web Design	
		ECO 252 or PSY 150	. 3
GRD	265	Digital Print Production	
GRD		Design Applications II	
FOUF	RTH SE	MESTER	
GRD	263	Illustrative Imaging	. 3
GRD	271	Multimedia Design 1	. 2
GRD	280	Portfolio Design	
GRD		Client/Media Relations	
_		COM 120 ort COM 231	. 3
		WBL 111 or GRD 246 or WBL 112	. 1

COMPUTER ENGINEERING

Computer Engineering AAS Degree – A25590CE

-Day and Evening

The Information Technologies – Computer Engineering A.A.S. degree provides students with the skills required to install, service, and maintain computers, peripherals, networks, and microprocessor and computer controlled equipment. It includes training in both hardware and software, emphasizing operating system and electronics concepts.

Graduation Requirements......71 Credit Hours

Course work includes operating systems, hardware support and repair, analog electronics, digital circuit analysis, programming, and customer service, with an emphasis on the operation, use, and interfacing of memory and devices to the CPU. Additional topics may include networking, databases, communication, professional practices and cybersecurity concepts.

Graduates should qualify for employment and entrepreneurial opportunities in electronics technology, computer service and support, computer networking, server administration, programming, and other areas requiring a knowledge of electronic and computer system repair. Graduates may also qualify to take industry certification exams in the electronic, computer, and networking fields.

Program Sequence

FIRST SEMESTER

CTI	110	Web, Pgm, & Db Foundation	3
CTI	120	Network and Security Foundations	3
ENG	111	Writing and Inquiry	
MAT	143	Quantitative Literacy	
NOS	110	Operating Systems Concepts	

SECOND SEMESTER			
CTS 120	Hardware/Software Support		
ELC 131	Circuit Analysis I	4	
ELC 131A NOS 130	Circuit Analysis I Lab		
NOS 130	Windows Single UserWindows Admin I		
1100 250	Wildows Admiri	0	
SUMMER S	EMESTER		
ELN 131	Analog Electronics I	4	
THIRD SEM	ECTED		
CSC 133	C Programming	3	
CTS 115	Info Sys Business Concepts	3	
CTS 118	IS Professional Comm	2	
ELN 133	Digital Electronics	4	
OMT 154	Customer Satisfaction	2	
	Social and Behavioral Sciences Elec	3	
FOURTH SE	MESTED		
CTS 288	Professional Practices in IT	3	
CTS 220	Advanced Hardware/Software Support		
ENG 114	Professional Research and Reporting		
	Major Elective		
	HUM/FA Elective	3	
General Edi	ucation Electives		
Ochiciai Ea	doddon Elddived		
	and Fine Arts Electives		
(Choose 3 c	redit hours)		
ART 111	Art Appreciation	3	
HUM 115	Critical Thinking		
MUS 110	Music Appreciation	3	
PHI 240	Introduction to Ethics	3	
Social and I	Behavioral Sciences Electives		
(choose 3 cr			
(,		
ECO 151	Survey of Economics	3	
ECO 251	Principles of Microeconomics		
POL 120	American Government		
PSY 118 PSY 150	Interpersonal PsychologyGeneral Psychology	ა ა	
SOC 210	Introduction to Sociology		
200 2.0		•	
Major Electi			
(choose a m	inimum of 2 credit hours)		
CSC 116	Introduction to Functional Programming	3	
CSC 120	Computing Fundamentals I		
CSC 121	Python Programming		
CSC 134	C++ Programming	3	
CSC 139	Visual BASIC Programming		
CSC 151	Java Programming		
DBA 110	Database Concepts		
DBA 115 NET 125	Database Applications		
NOS 120	Linux/UNIX Single User		
SEC 110	Security Concepts		
WBL	Work Based Learning (all numbers accepted)		
	n		
Graduation	Requirement 64 Credit Hou	ırs	

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 will be proficient in Java, MVC, REST, unit testing, server-side JavaScript, and SQL. Graduates will 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 will 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.

IT Foundations Certificate - C25590F

-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

Java Programming Certificate - C25590JV

-Dav

Designed for individuals interested in acquiring programming skills necessary to design and implement Java programs

Visual Basic Programming Certificate - C25590VB

-Online

Designed for individuals interested in acquiring programming skills necessary to design and implement Visual BASIC programs.

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.

Enterprise Java Certificate - C25590EJ

-Day

The Enterprise Java certificate offers courses for students interested in upgrading their programming skills for Java in the enterprise and mobile areas. (**Prerequisites required: C25590JV**)

Programming Fundamentals Certificate - C25590PF

-Day

ENG 111

The Fundamentals of Computer Programming Certificate will give students the opportunity to achieve programming literacy.

Program Sequence

Writing and Inquiry......3

	MAT 143 or Higher3	
		Graduation Requirements 68 Credit Hours
SECOND S		
CSC 151 DBA 120	JAVA Programming	
DBA 120 CSC 154	Database Programming I	
CTI 120	Network & Sec Foundations	
NOS 110	Operating System Concepts3	
SUMMER S	-	
CSC 174	Server-Side JavaScript	
	Major Elective I3	
THIRD SEM	FSTER	
THIND SEW	Major Elective II	
ECO 251	Prin of Microeconomics	
CSC 251	Adv JAVA Programming3	
CSC 258	JAVA Enterprise Programs3	
DBA 130	Introduction to NoSQL Databases	
EQUIPTU C	MECTED	
FOURTH SE	Introduction to Interpersonal Comm3	
CSC 130	Computing Fundamentals II4	
CTS 115	Info Sys Business Concepts	
	HUM/Fine Arts Elective3	
	Project Elective3	
	I ET . A .	
	and Fine Arts	
(Select 1 Co ART 111	Art Appreciation3	
HUM 115	Critical Thinking	
MUS 110	Music Appreciation3	
PHI 240	Introduction to Ethincs3	
Major Elect		
	rs from the following courses	
CSC 122 CSC 139	Python Applications	
CSC 139	C++ Programming3	
CSC 256	Software Quality Assurance	
DBA 220	Oracle DB Programming II3	
WEB 115	Web Markup and Scripting3	
WEB 151	Mobile Application Dev I	
WEB 187	Programming for Mobile Devices	
CTS 285	Systems Analysis and Design3	
Major Elect	ivas II	
	rs from the following courses	
CSC 116	Introduction to Functional Programming	
CSC 133	C Programming3	
CSC 216	Software Architecture3	
CSC 221	Advanced Python3	
CSC 234	C++ Programming	
CSC 239 DBA 240	Advanced Visual Basic	
WEB 251	Mobile Applications Dev II	
Project Elec	etives	
	rs from the following courses	
CSC 227	Cloud Applications	
CSC 289	Programming Capstone	
*WBL 111 *WBL 112	Work-Based Learning	
*WBL 112	Work-Based Learning	
WDL 110		
*Work-Base	d Learning is an elective. Students must have approval	
	partment head and pre-register with the Computer	
Technologie	s Division office. The Work-Based Learning work period	
	n over two semester as WBL 112 or over two semesters	
as WBL-111	, and WBL-121 or in one semester as WBL-113	

CYBER SECURITY

Cyber Security AAS Degree - A25590CS

-Day and Evening

The Cyber Security 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

FIRST SEN	MESTER	
CTI 110	Web, Pgm, & Db Foundation	
CTI 120	Network and Security Foundations	3
ENG 111	Writing and Inquiry	3
MAT 143	Quantitative Literacy	3
NOS 110	Operating Systems Concepts	3
SECOND S	SEMESTER	
NET 125	Introduction to Networks	3
NET 126	Routing Basics	
NOS 130	Windows Single User	3
NOS 230	Windows Admin I	
SEC 110	Security Concepts	3
SUMMER S	SEMESTER	
NOS 120	Linux/UNIX Single User	3
	HUM/FA Elective	
THIRD SEN		
CCT 121	Computer crime Investigations	4
CCT 250 CTS 115	Network Vulnerabilities I	პ
SEC 150	Secure Communications	
SEC 160	Security Administration I	
020 100	Scounty / turningtration / r	0
FOURTH S		
CCT 240	Data Recovery Techniques	
CCT 251	Network Vulnerabilities II	3
ENG 114	Professional Research and Reporting	
	Major ElectiveSocial and Behavioral Sciences Elec	2
	Social and Benavioral Sciences Elec	S
SUMMER S	SEMESTER	
CTS 288	Professional Practices in IT	
SEC 193	Selected Topic in Cyber Security	3
Humanitie	s and Fine Arts Electives	
	credit hours from the following courses)	
,	• ,	
ART 111	Art Appreciation	
HUM 115	Critical Thinking	
MUS 110	Music Appreciation	
PHI 240	Introduction to Ethics	3
Social and	Behavioral Sciences Electives	
(Choose 3	credit hours from the following courses)	
ECO 151	Survey of Economics	3
ECO 251	Principles of Microeconomics	3
POL 120	American Government	
PSY 118	Interpersonal Psychology	
PSY 150	General Psychology	
SOC 210	Introduction to Sociology	

Major Electives

(Minimum of 2 credit hours)

Gradi	uation I	Requirement72 Credit Hour	's
WBL		Work Based Learning	2
SEC	210	Intrusion Detection	3

Hacking and Forensics Diploma – D25590HF

-Day, Evening, Online

The Information Technologies – Hacking and Forensics Diploma provides students with intermediate level skills and ability to perform digital forensic operations, and network vulnerability testing and prevention.

Course work includes programming, databases, operating systems, forensic data recovery, security concepts, hacking technologies and network firewall configuration. Additional topics may include routing and switching, communications and writing, and web technologies.

Graduates from this diploma should qualify to take industry certifications in ethical hacking, security, networking, and forensic examinations. Graduates may qualify for employment opportunities connected to these skills and certifications.

SUMMER SEMESTER

CTI CTI NOS ENG	120 110	Web, Programming and Database Foundations 3 Network and Security Foundations 3 Operating System concepts 3 Writing and Inquiry 3			
FALL	SEME				
CCT	121	Computer Crime Investigations4			
CCT	250	Network Vulnerabilities I			
SEC	110	Security Concepts3			
NET	125	Networking Basics3			
NET	126	Routing Basics			
SPRING SEMESTER					
CCT	240	Data Recovery Techniques3			
CCT	251	Network Vulnerabilities II3			
CTS	115	Info Systems Business Concept			
NOS	120	Linux/UNIX Single User3			
SEC	150	Secure Communications3			
Grad	Graduation Requirement43 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 will be proficient in Python, SQL, XML, database development, client/server-side JavaScript and Python. Graduates will 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 will 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.

IT Foundations Certificate - C25590F

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

Database Programming - General Certificate - C25590GB

-Online

Designed for individuals interested in acquiring programming skills in databases.

Database Programming – Microsoft Certificate - C25590SQ

-Online

Designed for individuals interested in acquiring programming skills in Microsoft SQL databases.

Database Programming – Oracle Certificate - C25590OR

-Online

Designed for individuals interested in acquiring programming skills in Oracle databases.

Database Programming – SAS Certificate - C25590SS

-Online

Designed for individuals interested in acquiring programming skills in SAS databases.

Python Programming Certificate - C25590PY

-Online

Designed for individuals interested in acquiring programming skills in Python.

Programming Fundamentals Certificate - C25590PF

-Day

The Fundamentals of Computer Programming Certificate will give students the opportunity to achieve programming literacy.

Program Sequence

FIRST SEMESTER

FNG 111

CSC	121	Python Programming	. 3			
CTI	110	Web, Pgm, and DB Foundations	. 3			
		Database Concepts				
		Statistical Methods				
SECOND SEMESTER						
CSC	122	Python Applications	. 3			
DBA	120	Database Programming I	. 3			

Writing and Inquiry3

CSC 120 Computing Fundamentals I......4

CSC	124	Intro to Programming for Data Science	.3
CTI	120	Network & Sec Foundations	.3
FIRS	TSUMN	MER SEMESTER	
CSC	174	Server-Side JavaScript	.3
WEB	115	Web Markup and Scripting	.3
	D SEME		_
CTS	115	Info Sys Business Concepts	.3
CSC	204	DBA Elective	
DBA	130	Advanced Python	
CSC	152	SAS	
550	132	SAS	
FOUF	RTH SE	MESTER	
COM		Introduction to Interpersonal Comm	.3
	227	Cloud Applications	.3
ECO	151	Survey of Economics	.3
		HUM/Fine Arts Elective	
		Major Elective	.3
		and Elma Auta	
	anities a ct 1 Cou	and Fine Arts	
ART		Art Appreciation	3
HUM		Critical Thinking	
MUS	110	Music Appreciation	
PHI	240	Introduction to Ethics	
	-		
	r Electi		
		s from the following courses	
CSC	116	Introduction to Functional Programming	.3
CSC	153	C# Programming	
CSC	154 225	Software Development	
DBA	225 115	Spreadsheet Data Analysis	
DBA	285	Data Warehousing and Mining	
DBA	240	Database Analysis/Design	
J D, (10	Databass / Marysis/Dosign	
DBA	Elective	e	
Selec	t 3 hour	s from the following courses	
DBA	221	SQL Server DB Programming II	.3
	220	Oracle DB Programming II	.3
	224	SAS DB Programming II	
DBA.		MySQL DB Programming II	.3
-rodi	IIOtion	Joannicomoneo 60 Crodit Hone	•

Healthcare Business Informatics

Healthcare Business Informatics Degree - A25590HB

-Day and Evening

The HBI degree program is intended for computer system professionals who expect to work for a healthcare provider of any size; from large scale hospital systems to small practice offices.

A concentration in healthcare terminology and medico-legal issues is combined with specific courses in healthcare networking and database design. Any healthcare provider that uses computers to store and manage their patient information needs an IT professional that understands the confidentiality and business process concerns of the industry – this degree program is intended to produce those IT professionals.

Potential employers for graduates of this program would include the IT departments at Rex, Wake Med and Duke Hospitals, and any healthcare related industry partner, such as Blue Cross Blue Shield and other health insurance providers.

Program Sequence

FIRST SEM	ESTER	of medical	office positions in medical offices, hospitals, insurance
CTI 110	Web, Pgm, & Db Foundation3	companies	s, laboratories, medical supply companies, research
CTI 120	Network & Sec Foundation3		nd other healthcare organizations. Students may be
MAT 143	Quantitative Literacy3		sit for industry-recognized certification exams.
NOS 110	Operating System Concepts3	Ü	, ,
OST 141	Med Terms I	Medica	l Office Professional Certificate –
SECOND SE	EMESTER	C25310	P
HBI 110	Issues and Trends in HBI3	-Online	
OST 142	Med Terms II		
ENG 111	Writing and Inquiry3	This certific	cate provides the medical and computer skills necessary
NET 110	Networking Concepts	for entry-le	vel employment in medical settings. The certificate is
DBA 110	Database Concepts	available o	nline.
<i>DD</i> /1 110	2442240 CO1100pto		
SUMMER SI	EMESTER	Progran	n Sequence
HBI 210	Intro to Health Info Net	•	•
		FIRST SEI	MESTER
THIRD SEM	ESTER	ENG 111	Writing and Inquiry3
HBI 113	Survey of Medical Insurance3	OST 122	Office Computations3
HBI 250	Data Management and Utilization3	OST 137	Office Software Applications3
CTS 135	Integrated Software Intro4	OST 141	Med Office Terms I
ENG 114	Professional Research & Reporting3	OST 148	Medical Coding, Billing, and Insurance3
LING TIT	HUM / FA Elective		oaioai goaii.ig, ziiii.ig, aila ilioaiai.oo iliiiiiiiiiiiii
	TIOWIT I A LICCUIVO	SECOND	SEMESTER
FOURTH SE	MESTER	0_00	ENG Elective3
CTS 118	IS Professional Comm2	CTS 130	Spreadsheet3
CTS 116	Info Sys Business Concept	OST 134	Text Entry and Formatting3
CTS 113	Hardware / Software Support3	OST 142	Med Office Terms II
OST 149		OST 243	Med Office Simulation
051 149	Medical Legal Issues	031 243	Wed Office Simulation
CTC 200	Professional Practices in IT	Eligible fo	r Medical Office Professional Certificate (C25310P)
CTS 288	FIDIESSIONAL FIACTICES III II		OST-148, OST-134, OST-142, CTS-130, OST-243
GENERAL E	EDUCATION ELECTIVES	001-141,	001-140, 001-134, 001-142, 010-130, 001-243
02.12.17.12.2	.500/111011 222011120	SUMMER	SEMESTER
Humanities/	Fine Arts Elective		Social Science Elective3
	ours from the following courses)		Humanities / FA Elective3
ART 111	Art Appreciation3		
HUM 115	Critical Thinking	THIRD SE	MESTER
MUS 110	Music Appreciation	OST 136	Word Processing3
PHI 240	Introduction to Ethics	OST 164	Office Editing3
FII 240	Introduction to Ethics	OST 184	Records Management3
Casial/Daha	vioral Science Elective	OST 286	Professional Development
		031 200	OA Elective
	nours from the following courses)		OA LIEGUVE
ECO 151	Survey of Economics	Eligible fo	r Office Professional Certificate (C25370P): OST-122,
ECO 251	Principles of Microeconomics		OST-164, OST-184, OST-134, OST-136
POL 120	American Government3	031-137,	031-104, 031-104, 031-134, 031-130
PSY 118	Interpersonal Psychology3	EOLIDTH 9	SEMESTER
PSY 150	General Psychology	OST 149	Medical Legal Issues3
SOC 210	Introduction to Sociology3	OST 149	Adv Office Editing3
	D 1 4 4 10 10 10 10 10 10 10 10 10 10 10 10 10	OST 288	Medical Office Admin Capstone
Graduation	Requirements 66 Credit Hours	US1 200	MAT/Science Elective
			OA Elective
MEDIO	AL OFFICE		OA LIEUTIVE
MEDIC	AL OFFICE	Fligible fo	r Medical Office Professional Diploma (D25310P)
VDMIN	ISTRATION		OST-137, OST_141, OST_148, OST-164, OST-134,
			OST-137, OST_141, OST_140, OST-104, OST-134, OST-149, OST-243, OST-288, CTS-130, ENG Elective
		001-1 4 2,	33. 1.10, 33.1 2.10, 33.1 2.00, 0.10 1.00, ENO Elective
Medical (Office Professional Degree - A25310P	Humanitie	s and Fine Arts Elective
-Online	•		credit hours from the following courses)
		ART 111	Art Appreciation3
	Office Professional curriculum prepares individuals	HUM 110	Technology and Society3
for employm	ent as medical administrative office personnel (AAS	HUM 115	Critical Thinking3

The Medical Office Professional curriculum prepares individuals for employment as medical administrative office personnel (AAS degree). Students 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 is available online.

Graduates should qualify for employment opportunities in a variety

(Choose 3 credit hours from the following courses)

(Choose 3 credit hours from the following courses)

Mathematical Measurement3

Principles of Biology4

Mathematics Electives

MAT 110 BIO 110

ENG Electives

ENG 114	Professional Research and Reporting		
ENG 112	Writing/Research in the Disc	SUMMER S	
COM 120	Intro Interpersonal Comm3	CTC 420	ENG Elective
Social and E	Behavioral Sciences Electives	CTS 130	Spreadsheet
	redit hours from the following courses)		ST-148, OST-134, OST-142, CTS-130, OST-243
PSY 150	General Psychology3	001-141, 0	01-140, 001-104, 001-142, 010-100, 001-240
SOC 210	Introduction to Sociology3	ENG Electiv	ves .
HIS 111	World Civilizations I		redit hours from the following courses)
		ÈNG 114	Professional Research and Reporting
OA Electives	S	ENG 112	Writing/Research in the Disc
(Choose 6 cr	edit hours from the following courses)	COM 120	Intro Interpersonal Comm
ACC 120	Prin of Financial Accounting4	Graduation	Requirements36 Credit Hours
BUS 153 CTS 230	Human Resource Management		
HMT 110	Intro to Healthcare Mgt3		Billing and Coding Degree - A25310B
HMT 211	Long-Term Care Admin	-Online	
HMT 212	Mgt of Healthcare Org	Medical Off	ce Administration has a new concentration in Medical
OST 132	Keyboard Skill Building2		Coding (AAS degree). Students develop skills in
OST 135	Adv Text Entry and Formatting3		ling and auditing, along with medical terminology,
OST 138	Office Applications II		g, editing and formatting, office software applications,
OST 153	Office Finance Solutions		utations, medical office procedures, medical insurance
OST 233	Desktop Publishing3		medical legal and ethical issues, electronic health
OST 236	Adv Word Processing		Il and written communication, critical thinking, team
OST 241 OST 247	Office Transcription I	building; an	d problem solving. The degree is available online.
OST 247	Procedure Coding	0	
OST 260	Adv Coding Methodologies		should qualify for employment opportunities in medical
OST 264	Medical Auditing		Ithcare facilities including hospitals, nursing homes, tation centers; insurance billing offices; and
OST 284	Emerging Technologies2		. Students are eligible to take industry-recognized
WBL 111	Work-Based Learning I1	certification	
WBL 121	Work-Based Learning II1		
WBL 112	Work-Based Learning I	Program	Sequence
0	Danwinson and	3	1
Graduation	Requirements 66 Credit Hours	FIRST SEM	
		ENG 111	Writing and Inquiry
Medical	Office Professional Diploma -	ENG 111 OST 122	Writing and Inquiry
Medical D25310P	Office Professional Diploma -	ENG 111 OST 122 OST 137	Writing and Inquiry
Medical	Office Professional Diploma -	ENG 111 OST 122 OST 137 OST 141	Writing and Inquiry
Medical D25310P	Office Professional Diploma -	ENG 111 OST 122 OST 137	Writing and Inquiry
Medical D25310P -Online The Medical	Office Professional Diploma - Office Professional Diploma is designed for the	ENG 111 OST 122 OST 137 OST 141 OST 148	Writing and Inquiry
Medical D25310P -Online The Medical individual en	Office Professional Diploma - Office Professional Diploma is designed for the tering, upgrading, or retraining in the medical office	ENG 111 OST 122 OST 137 OST 141	Writing and Inquiry
Medical D25310P -Online The Medical individual en field. Studen	Office Professional Diploma - Office Professional Diploma is designed for the tering, upgrading, or retraining in the medical office ts develop skills in medical terminology, keyboarding	ENG 111 OST 122 OST 137 OST 141 OST 148	Writing and Inquiry
Medical D25310P -Online The Medical individual en field. Studen and formattir procedures,	Office Professional Diploma - Office Professional Diploma is designed for the tering, upgrading, or retraining in the medical office ts develop skills in medical terminology, keyboarding ag, office software applications, medical office medical insurance and billing, medical legal and	ENG 111 OST 122 OST 137 OST 141 OST 148 SECOND S	Writing and Inquiry
Medical D25310P -Online The Medical individual en field. Studen and formattir procedures, ethical issue	Office Professional Diploma - Office Professional Diploma is designed for the tering, upgrading, or retraining in the medical office ts develop skills in medical terminology, keyboarding ng, office software applications, medical office medical insurance and billing, medical legal and s, electronic health records, oral and written	ENG 111 OST 122 OST 137 OST 141 OST 148 SECOND S CTS 130 OST 134 OST 142	Writing and Inquiry
Medical D25310P -Online The Medical individual en field. Studen and formattir procedures, ethical issue communicati	Office Professional Diploma - Office Professional Diploma is designed for the tering, upgrading, or retraining in the medical office ts develop skills in medical terminology, keyboarding ng, office software applications, medical office medical insurance and billing, medical legal and s, electronic health records, oral and written ion, editing, critical thinking, team building, and	ENG 111 OST 122 OST 137 OST 141 OST 148 SECOND S CTS 130 OST 134	Writing and Inquiry
Medical D25310P -Online The Medical individual en field. Studen and formattir procedures, ethical issue communicati	Office Professional Diploma - Office Professional Diploma is designed for the tering, upgrading, or retraining in the medical office ts develop skills in medical terminology, keyboarding ng, office software applications, medical office medical insurance and billing, medical legal and s, electronic health records, oral and written	ENG 111 OST 122 OST 137 OST 141 OST 148 SECOND S CTS 130 OST 134 OST 142 OST 243	Writing and Inquiry
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Medical D25310P -Online The Medical individual enfield. Studen and formattir procedures, ethical issue communicati problem solv Graduates s offices, healt medical equi industry-reco	Office Professional Diploma - Office Professional Diploma is designed for the tering, upgrading, or retraining in the medical office ts develop skills in medical terminology, keyboarding ng, office software applications, medical office medical insurance and billing, medical legal and s, electronic health records, oral and written on, editing, critical thinking, team building, and ring. The diploma is available online. Thould qualify for employment opportunities in medical thcare facilities, insurance billing offices, labs, and impent manufacturers. Students are eligible to take ognized certification exams. Sequence ESTER Writing and Inquiry	ENG 111 OST 122 OST 137 OST 141 OST 148 SECOND S CTS 130 OST 134 OST 142 OST 243 Eligible for OST-141, OST 247 OST 248 THIRD SEN OST 164 OST 286	Writing and Inquiry
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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

		and Fine Arts Elective	
(Choo	se 3 cr	edit hours from the following courses)	
ART	111	Art Appreciation	3
HUM	110	Technology and Society	3
HUM	115	Critical Thinking	3
Math	and Sc	ience Electives	
		edit hours from the following courses)	
MAT	110	Mathematical Measurement	3
BIO		Principles of Biology	
		,	
	Elective		
		edit hours from the following courses)	
ENG	114	Professional Research and Reporting	3
ENG	112 120	Writing/Research in the Disc	
COM	120	Intro Interpersonal Comm	3
Socia	l and F	Behavioral Sciences Electives	
		edit hours from the following courses)	
PSY		General Psychology	3
	210	Introduction to Sociology	3
HIS	_	World Civilizations I	3
-	lectives		
(Choo	se 3 cr	edit hours from the following courses)	
ACC	120	Prin of Financial Accounting	Δ
BUS	153	Human Resource Management	3
CTS	230	Advanced Spreadsheet	
HMT		Intro to Healthcare Mgt	
HMT	-	Long-Term Care Admin	3
HMT		Mgt of Healthcare Org	
OST		Keyboard Skill Building	
OST	135	Adv Text Entry and Formatting	3
OST	136	Word Processing	3
OST	138	Office Applications II	3
OST		Office Finance October	
007	153	Office Finance Solutions	3
OST	153 233	Office Finance Solutions	
OST	233	Desktop Publishing	3
	233 236	Desktop Publishing	3
OST	233 236 241	Desktop Publishing	3
OST OST	233 236 241 247	Desktop Publishing	3 3 3
OST OST OST	233 236 241 247 284	Desktop Publishing	333333
OST OST OST OST	233 236 241 247 284 111	Desktop Publishing	3 3 3 3 1 1
OST OST OST OST WBL	233 236 241 247 284 111 121	Desktop Publishing	3 3 3 3 1 1

Healthcare Administration Degree - A25310H

Medical Office Administration has a new concentration in Healthcare Administration (AAS degree). Students 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

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 is available online.

Graduates should 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 are eligible to take industry-recognized certification exams.

Program Sequence

FIRST SEMESTER			
FNG	111	Writing and Inquiry	•

OST 122	Office Computations	OST
OST 137	Office Applications I	OST
OST 141	Med Office Terms I	OST
OST 148	Medical Ins & Billing3	OST
	-	OST
SECOND SE		OST
	ENG Elective	OST
CTS 130	Spreadsheet	OST
OST 134	Text Entry and Formatting	WBL
OST 142 OST 243	Med Office Terms II	WBL WBL
031 243	Wed Office Simulation	WDL
	Medical Office Professional Certificate (C25310P) ST-148, OST-134, OST-142, CTS-130, OST-243	Grad
SUMMER SI	EMESTER	Mc
	Social Science Elective3	
	HUM/FA Elective3	Mok
THIRD SEM		A25
BUS 153	Human Resource Mgmt	-Day a
HMT 110	Intro to Healthcare Mgmt	The
OST 164 OST 286	Office Editing	The V the in
031 200	OA Elective	and c
	OA LICCUIVO	and c
FOURTH SE	MESTER	Cours
HMT 211	Long Term Care Admin3	markı
HMT 212	Mgmt of Healthcare Org3	mana
OST 149	Medical Legal Issues	and L
OST 288	Medical Office Admin Capstone	using
	MAT/Science Elective	Gradu
Eligible for	Medical Office Professional Diploma (D25310P)	progra
	ST-137, OST-141, OST-148, OST-164, OST-134, OST-	desig
	19, OST-243, OST-288, CTS-130, ENG Elective	relate
		The N
	and Fine Arts Elective	mobil
	redit hours from the following courses)	iOS a
ART 111	Art Appreciation	.00 a
HUM 110 HUM 115	Technology and Society	And
TIOWI TTS	Childai Thirking	C25
Math and So	cience Electives	– Onlir
(Choose 3 cr	redit hours from the following courses)	This (
MAT 110	Mathematical Measurement3	11110
BIO 110	Principles of Biology4	iOS
ENG Electiv		
	redit hours from the following courses)	C25
ENG 114	Professional Research and Reporting	-Day a This (
ENG 112 COM 120	Writing/Research in the Disc	ms
COM 120	Intro Interpersonal Comm3	Fro
Social Scien	nces Electives	–Onlin
	redit hours from the following courses)	This
PSY 150	General Psychology3	11110
SOC 210	Introduction to Sociology3	Wel
HIS 111	World Civilizations I	
		C25
OA Elective		–Onlin This o
(Choose 3 cr	redit hours from the following courses)	begin
ACC 120	Prin of Financial Accounting	begin
ACC 120 CTS 230	Prin of Financial Accounting	
OST 132	Keyboard Skill Building	Web
OST 132	Adv. Text Entry and Formatting4	- Onlin
OST 136	Word Processing	Using
OST 138	Office Applications II	full ar
OST 153	Office Finance Solutions2	Pro
OST 165	Adv Office Editing	FIO
OCT 101	Pagarda Managament	

OST 233	Desktop Publishing	3
OST 236		
OST 241	Medical Office Transcription I	
OST 247	•	
OST 248		
OST 260	Adv Coding Methodologies	3
OST 264	Medical Auditing	3
OST 284	Emerging Technologies	2
WBL 111	Work-Based Learning I	1
WBL 121	Work-Based Learning II	1
WBL 112	Work-Based Learning I	2
	<u> </u>	

uation Requirements 66 Credit Hours

obile Applications Developer

bile Applications Developer Degree – 590MA

ind Online

Web Technologies curriculum prepares graduates for careers in formation technology arena using computers to disseminate ollect information via the web.

se work in this program covers web design, web scripting and up, databases, web programming, e-commerce, web content gement systems as well as mobile applications development JI/UX. Studies will provide opportunity for students to learn industry standard software and technologies.

uates should qualify for career opportunities as designers, ammers, or developers in the areas of web development, web n, web services, mobile application development and other

Mobile Applications Developer Degree covers the developing of le content, both apps (applications) and websites. Focus is on and Android operating systems

droid Application Developer Certificate -590MA

Certificate covers the development of apps for Android devices.

Application Developer Certificate -590MI

and Online

Certificate covers the development of apps for iOS devices.

nt-End Developer Certificate - C25590DV

certificate teaches basic front-end development concepts

Development Basics Certificate -590WB

certificate teaches basic web technology concepts for ning web designers and developers.

b Designer Certificate - C25590DM

g industry standard technologies to design and develop basic nd mobile web sites.

gram Sequence

FIRS	T FALL	SEMESTER	
WEB		Web Development Tools	. 3
CIS	115	Intro to Prog Logic	.3
		HUM 110 or HUM 115 or HUM 230	.3
CTI	110	Web, Pgm and DB Foundation	.3
		WEB 111 or SGD 112	
WEB	110	Internet / Web Fundamentals	.3
FIRS'	T SPRI	NG SEMESTER	
WEB	210	Web Design	.3
WEB	115	Web Markup and Scripting	.3
WEB	141	Mobile Interface Design	.3
CSC	151	Java Programming	.3
EIDO:	T 01 1841	MED OFMEOTED	
		MER SEMESTER	,
	111	Writing and Inquiry	٠.
		SOC 210 or ECO 252 or PSY 150	٠.
		WEB 215 or WBL 112	. 4
SEC	OND FA	ALL SEMESTER	
WEB	125	Mobile Web Design	.3
SGD	168	Mobile SG Programming I	.3
CTI	120	Network & Sec Foundation	.3
WEB	151	Mobile Applications Dev I	. 3
SECO	ND SE	PRING SEMESTER	
0_0). 11 2	COM 110 or COM 120 or COM 231	-
WFB	287	Web e-Portfolio	
	251	Mobile Applications Dev II	
		MAT 121 or MAT 143 or MAT 152 or MAT 110	.3
		IMMED CEMECTED	
		JMMER SEMESTER	_
	115		٠.
SGD	208	Mobile SG Programming 2	٠.
Comp	oletion	Requirements 68 Credit Hour	rs

NETWORK MANAGEMENT

Network Management Degree - A25590NM

- Day and Evening

The Network Management curriculum prepares individuals for employment supporting local- and wide-area networks. Students will 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.

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 will 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.

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.

Microsoft Certified IT Professional Certificate - C25590MS

- Day and Evening

This certificate is intended for students who are interested in testing for the MCITP or MCSA industry certifications. Courses cover the installation, configuration and management of Microsoft operating systems.

Linux Certified IT Professional Certificate – C25590LX

-Day and Evening

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. Completion of NOS-110 or CTI-130 is required to begin this program.

Linux Security Specialist Certificate – C25590LS

-Day and Evening

Graduates from this certificate program will be prepared to demonstrate their knowledge, skills, and abilities in securing and auditing Linux based systems. Students will learn how to install, configure, and monitor Linux systems that include Apache, and Security Enabled Linux servers and workstations. Graduates will be ready to demonstrate proficiency in the management and hardening of LAMP stack systems.

Global Windows Security Administration Certificate – C25590WS

-Day

Graduates from this certificate program will be prepared to demonstrate their knowledge, skills, and abilities in securing Microsoft Windows clients and servers, including technologies such as PKI, IPSec, and Group Policies. Students will earn how to install, configure and secure Windows operating systems. Graduates will be ready to demonstrate proficiency in managing the hardening of Windows systems against malware and persistent adversaries.

Cisco Security Certificate – C25590CX

-Day and Evening

This program is intended for individuals who are interested in getting certified in network security. Courses lead to industry credentials in networking and network security.

Program Sequence

FIRST SEMESTER

LIVOI OFINI	ESTER	
CTI 110	Web, Programming and Database Foundations3	3
CTI 120	Network and Security Foundations	3
NOS 110	Operating System Concepts 3	3

ENG 111	Writing and Inquiry3	CTS 135
MAT 143	Quantitative Literacy3	CTS 155
SECOND S		CTS 220
NET 125	Introduction to Networks	CTS 255
NET 126 CTS 120	Routing Basics	CTS 272 NET 115
NOS 130	Hardware/Software Support	NET 115 NET 135
NOS 230	Windows Admin I	NET 175
1100 200	7711007077011117	NET 240
SUMMER S	EMESTER	NOS 125
NET 225	Routing and Switching I3	OMT 154
NET 226	Routing and Switching II3	PMT 110
THIRD SEM	ESTED	SEC 110
CTS 115	Info Sys Business Concepts	SEC 150 SEC 160
ENG 114	Professional Research and Reporting3	WBL
NOS 120	Linux / UNIX Single User3	WDL
	Major Elective I3	Graduation
FOURTH SI		Data Sto
CTS 288	Professional Practices in IT	- D2559
	HUM / FA Elect (Min 3 cr hrs)	- Evening
— —	Major Elective II	This diplom
	Wajor Licotive II	many cours
SUMMER S	EMESTER	path followi
	Major Elective III2	student cou
NET 289	Networking Project	operating s
		cloud comp
	/Fine Arts Elective	The diplom Microsoft de
(Select 3.0 r ART 111	nours from the following courses) Art Appreciation	training with
HUM 115	Critical Thinking3	qualify stud
MUS 110	Music Appreciation	Cisco, Micr
PHI 240	Introduction to Ethics	
		This diplom
	avioral Science Elective	putting stud
,	nours from the following courses)	CTI 110
ECO 251	Prin. Of Microeconomics	CTI 110
ECO 151 POL 120	Survey of Economics	CTI 240
PSY 118	Interpersonal Psychology3	CTI 241
PSY 150	General Psychology3	CTS 115
SOC 210	Introduction to Sociology3	CTS 120
		ENG 114
Concentrat	ion Electives List	NET 125
Select one of	option from grouping below:	NET 126
	W. 60.00 UTD 6 : 1T 1	NOS 130
	Microsoft Certified IT Professional Track Windows Administration II	NOS 230
NOS 231 NOS 232	Windows Administration II	WBL 113
1103 232		
		Graduation
Option 2: C		Graduation
Option 2: C NET 270	isco Certified Network Professional Track Building Scalable Networks	
	isco Certified Network Professional Track Building Scalable Networks	OFFIC
NET 270	isco Certified Network Professional Track Building Scalable Networks	OFFIC
NET 270 NET 272 NET 273	isco Certified Network Professional Track Building Scalable Networks	
NET 270 NET 272 NET 273 Option 3: R	isco Certified Network Professional Track Building Scalable Networks	OFFIC Office P
NET 270 NET 272 NET 273 Option 3: R NOS 220	isco Certified Network Professional Track Building Scalable Networks 3 Multi-Layer Networks 3 Internetworking Support 3 ed Hat Certified Engineer Track Linux/UNIX Administration I 3	OFFIC Office P -Online The Office
NET 270 NET 272 NET 273 Option 3: R NOS 220 NOS 221	isco Certified Network Professional Track Building Scalable Networks 3 Multi-Layer Networks 3 Internetworking Support 3 ed Hat Certified Engineer Track Linux/UNIX Administration I 3 Linux/UNIX Administration II 3	OFFIC Office P -Online The Office individuals
NET 270 NET 272 NET 273 Option 3: R NOS 220	isco Certified Network Professional Track Building Scalable Networks 3 Multi-Layer Networks 3 Internetworking Support 3 ed Hat Certified Engineer Track Linux/UNIX Administration I 3	OFFIC Office P -Online The Office individuals Students de
NET 270 NET 272 NET 273 Option 3: R NOS 220 NOS 221 NOS 222	isco Certified Network Professional Track Building Scalable Networks 3 Multi-Layer Networks 3 Internetworking Support 3 ed Hat Certified Engineer Track Linux/UNIX Administration I 3 Linux/UNIX Administration II 3 Linux/UNIX Administration III 3	OFFIC Office P -Online The Office individuals Students de tasks, along
NET 270 NET 272 NET 273 Option 3: R NOS 220 NOS 221 NOS 222	isco Certified Network Professional Track Building Scalable Networks 3 Multi-Layer Networks 3 Internetworking Support 3 ed Hat Certified Engineer Track Linux/UNIX Administration I 3 Linux/UNIX Administration III 3 Linux/UNIX Administration III 3 Data Storage & Virtualization Track Virtualization Concepts 3	OFFIC Office P -Online The Office individuals Students de tasks, along manageme
NET 270 NET 272 NET 273 Option 3: R NOS 220 NOS 221 NOS 222 Option 4: E CTI 140 CTI 240	Seco	OFFIC Office P -Online The Office individuals Students de tasks, along manageme office comp
NET 270 NET 272 NET 273 Option 3: R NOS 220 NOS 221 NOS 222 Option 4: E CTI 140	isco Certified Network Professional Track Building Scalable Networks 3 Multi-Layer Networks 3 Internetworking Support 3 ed Hat Certified Engineer Track Linux/UNIX Administration I 3 Linux/UNIX Administration III 3 Linux/UNIX Administration III 3 Data Storage & Virtualization Track Virtualization Concepts 3	OFFIC Office P -Online The Office individuals Students de tasks, along manageme
NET 270 NET 272 NET 273 Option 3: R NOS 220 NOS 221 NOS 222 Option 4: E CTI 140 CTI 240 CTI 241	Second S	OFFIC Office P -Online The Office individuals Students detasks, along manageme office compthinking, tea
NET 270 NET 272 NET 273 Option 3: R NOS 220 NOS 221 NOS 222 Option 4: E CTI 140 CTI 240 CTI 241 Option 5: M	Second S	OFFIC Office P -Online The Office individuals Students de tasks, along manageme office comp thinking, tea available or
NET 270 NET 272 NET 273 Option 3: R NOS 220 NOS 221 NOS 222 Option 4: C CTI 140 CTI 240 CTI 241 Option 5: M CCT 121	Sco Certified Network Professional Track	OFFIC Office P -Online The Office Individuals Students de tasks, along manageme office comp thinking, tea available or Graduates of office positions of the composition of the compositi
NET 270 NET 272 NET 273 Option 3: R NOS 220 NOS 221 NOS 222 Option 4: E CTI 140 CTI 240 CTI 241 Option 5: M	Second S	OFFIC Office P -Online The Office individuals Students de tasks, along manageme office comp thinking, tea available or

CTS	135	Integrated Software Intro	4
CTS	155	Technical Support Functions	
CTS	220	Advanced Hardware/Software Support	3
CTS	255	Advanced Technical Support Functions	
CTS	272	Desktop Support: Apps	3
NET	115	Telecom for IT Professionals	3
NET	135	Data Center Networking	
NET	175	Wireless Technology	3
NET	240	Network Design	
NOS	125	Linux/UNIX Scripting	3
OMT	154	Customer Satisfaction	
PMT	110	Intro to Project Management	3
SEC	110	Security Concepts	
SEC	150	Secure Communications	3
SEC	160	Security Administration I	
WBL		Work Based Learning (All numbers acceptable)	

Graduation Requirements65 Credit Hours

Data Storage and Virtualization Diploma - D25590DV

This diploma under the Network Management degree includes many courses from that degree, but requires a specific elective path following Virtualization. The skills and credentials that the student could earn with this diploma include those in that area of operating system virtualization, which is a prominent technology in cloud computing and datacenter operations.

The diploma includes courses in Cisco routing and switching, Microsoft desktop and server operating systems, and in-depth raining with O/S virtualization. Instruction in these areas can qualify students to take industry certification exams in VMWare, Cisco, Microsoft, CompTIA, and NetApp.

This diploma also includes a work-based learning component, putting students to work in live datacenters.

CTI	110	Web, Pgm & DB Foundation	3
CTI	140	Virtualization Concepts	
CTI	240	Virtualization Admin I	3
CTI	241	Virtualization Admin II	3
CTS	115	Info Sys Business Concept	3
CTS	120	Hardware/Software Support	3
ENG	114	Professional Research & Reporting	3
NET	125	Networking Basics	
NET	126	Routing Basics	3
		NOS-110 or CTI-130	3
NOS	130	Windows Single User	
NOS	230	Windows Admin I	3
WBL	113	Work Based Learning I	3
Grad	uation	Requirements	42 Credit Hours

OFFICE ADMINISTRATION

Office Professional Degree - A25370P

The Office Professional curriculum (AAS degree) prepares individuals for employment as administrative office personnel. Students 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 is available online.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Students are eligible to take industry-recognized certification exams.

skills necessary for entry-level employment in a variety of offices. The certificate is available online. **Program Sequence FIRST SEMESTER** ENG 111 Writing and Inquiry3 OST 122 Office Computations......3 OST 137 Records Management......3 OST 184 OST 164 **SECOND SEMESTER** English Elective......3 CTS 130 Spreadsheet......3 OST 136 Word Processing......3 OST 134 Text Entry & Formatting3 Math Elective......3 **SUMMER SEMESTER** Social Science Elective HUM / FA Elective Eligible for Office Professional Certificate (C25370P): OST-122, OST-137, OST-164, OST-184, OST-134, OST-136 THIRD SEMESTER OST 138 Advanced Software Applications......3 Introduction to Office Systems3 OST 181 Adv. Word / Information Processing......3 OST 236 Adv. Text Entry and Formatting3 OST 135 OST 286 Eligible for Office Professional Diploma (D25370P): OST-122, OST-134, OST-181, OST-184, OST-135, OST-136, OST-137, OST-164, OST-286, CTS-130, ENG-111, ENG Elective **FOURTH SEMESTER** Advanced Spreadsheet......3 CTS 230 Adv Office Editing......3 OST 165 Office Publications Design3 OST 233 OST 289 Eligible for Office Software Certificate (C25370S): CTS-130, OST-136, OST-137, OST-236, CTS-230 **Humanities and Fine Arts Electives** (Choose 3 credit hours from the following courses) Art Appreciation......3 **HUM 110** Technology and Society......3 HUM 115 Critical Thinking......3 **Mathematics Electives** (Choose 3 credit hours from the following courses) Mathematical Measurement......3 BIO 110 Principles of Biology......4 **English Electives** (Choose 3 credit hours from the following courses) **ENG** 114 Professional Research and Reporting3 Writing/Research in the Disc......3 ENG 112 COM 120 Intro Interpersonal Comm3

Office Professional Certificate - C25370P

This certificate provides the technical and administrative support

PSY	150	General Psychology	3
		Introduction to Sociology	
HIS	111	World Civilizations I	3

Social Sciences Electives

(Choose 3 credit hours from the following courses)

OA Elective	ac.			OA Floativo	_
Choose 3 cr	edit hours from the following courses:		_	OA Elective	2
ACC 120	Prin of Financial Accounting4	Eligible	for	Office Software Certificate (C25370S): C7	TS-130
BUS 115	Business Law I			OST-137, OST-236, CTS-230	G-130,
BUS 153	Human Resource Management3	007 70	0, 0	701 101, 001 200, 010 200	
OST 153	Office Finance Solutions	Humani	ties	s and Fine Arts Electives	
OST 155	Legal Terminology3	(Choose	3 c	credit hours from the following courses)	
OST 156	Legal Office Procedures3	ÀRT 11	11	Art Appreciation	3
OST 132	Keyboard Speed Building2	HUM 11	10	Technology and Society	
OST 284	Emerging Technologies2	HUM 11	15	Critical Thinking	3
WBL 111	Work –Based Learning I1				
WBL 121	Work-Based Learning II1			cs Electives	
WBL 112	Work-Based Learning I2	,		credit hours from the following courses)	_
Graduation	Requirements 66 Credit Hours	MAT 11 BIO 11	-	Mathematical Measurement Principles of Biology	
Graduation	requirements	ыо п	10	Filliciples of Biology	4
Office Fi	nance Degree - A25370F	English	Ele	ectives	
-Online				credit hours from the following courses)	
	nistration has a new concentration in Office Finance	ÈNG 11		Professional Research and Reporting	3
	e). Students develop skills in accounting and office	ENG 11	12	Writing/Research in the Disc	3
finance, alor	ng with office procedures, office software applications,	COM 12	20	Intro Interpersonal Comm	3
	nagement, office computations, keyboarding, editing				
	ng, oral and written communication, critical thinking,			ences Electives	
team buildin	g and problem solving. The degree is available online.	,		credit hours from the following courses)	
		PSY 15		General Psychology	3
	should qualify for employment opportunities in	SOC 21		Introduction to Sociology	
	agencies, real estate offices, financial institutions, and	HIS 11	11	World Civilizations I	3
	all offices and businesses. Students are eligible to take	04 Flag	4:		
industry-rec	ognized certification exams.	OA Electives Choose 2 credit hours from the following courses:			
_		CHOOSE	2 (1	redit flours from the following courses.	
Program	Sequence	BUS 11	15	Business Law I	3
		BUS 15		Human Resource Management	
FIRST SEM		OST 13		Keyboard Skill Building	
ENG 111	Writing and Inquiry	OST 13	35	Adv Text Entry & Format	
OST 122	Office Computations	OST 15	55	Legal Terminology	
OST 137	Office Applications I	OST 15	56	Legal Office Procedures	3
OST 164	Office Editing	OST 23		Office Publications Design	3
OST 184	Records Management3	OST 28	34	Emerging Technologies	
SECOND SI	EMECTED	WBL 11		Work –Based Learning I	
CTS 130	Spreadsheet3	WBL 12		Work-Based Learning II	
OST 134	Text Entry & Formatting	WBL 11	12	Work-Based Learning I	2
OST 136	Word Processing			D 1	
001 100	English Elective3	Graduat	tion	Requirements66 C	redit Hours
	Math/Science Elective		_	(C. D. A050701	
			Ot	ffice Degree - A25370L	
Eligible for	Office Professional Certificate (C25370P): OST-122,	-Online		Calabartan kan an ann an an antartan ta Land	000
OST-137, O	ST-164, OST-184, OST-134, OST-136			inistration has a new concentration in Legal	
				ee). Students develop skills in legal office pr	
SUMMER S				along with legal terminology, business law, oplications, records management, office con	
	Social Science Elective3			g, editing and advanced formatting, oral and	
	Humanities/FA Elective3			g, editing and advanced formatting, oral and tition, critical thinking, team building, and pro	
TUIDO OCTO	ESTED			e degree is available online.	~10111
THIRD SEM		55g.		o dog. oo io avanazio eiiniioi	
ACC 120 OST 138	encorenancial Accounting A			should qualify for employment opportunities	in
	Prin of Financial Accounting	Graduat	es s		
OCT 191	Office Applications II			t agencies, the court system, law offices, re	al estate
OST 181	Office Applications II	governm	nent	t agencies, the court system, law offices, re ncial institutions, and large to small offices :	
OST 236	Office Applications II	governm offices, f	nent finai		and
	Office Applications II	governm offices, f	nent finai ses.	ncial institutions, and large to small offices a . Students are eligible to take industry-reco	and
OST 236 OST 286	Office Applications II	governm offices, f business certificat	nent finai ses. tion	ncial institutions, and large to small offices. Students are eligible to take industry-reco	and
OST 236 OST 286	Office Applications II 3 Office Procedures 3 Adv Word Processing 3 Professional Development 3 Office Professional Diploma (D25370P): OST-122,	governm offices, f business certificat	nent finai ses. tion	ncial institutions, and large to small offices a . Students are eligible to take industry-reco	and
OST 236 OST 286 <i>Eligible for</i> OST-134, O	Office Applications II 3 Office Procedures 3 Adv Word Processing 3 Professional Development 3 Office Professional Diploma (D25370P): OST-122, IST-181, OST-184, OST-135, OST-136, OST-137, OST-136, OST-136, OST-137, OST-136, OST-137, OST-136, OST-137, OST-136, OST	governm offices, f business certificat Legal -Online	nent finar ses. tion	ncial institutions, and large to small offices. Students are eligible to take industry-reconstants. Strice Certificate – C25370L	and gnized
OST 236 OST 286 <i>Eligible for</i> OST-134, O	Office Applications II 3 Office Procedures 3 Adv Word Processing 3 Professional Development 3 Office Professional Diploma (D25370P): OST-122,	governm offices, f business certificat Legal -Online This cer	nent final ses. tion Of	ncial institutions, and large to small offices. Students are eligible to take industry-recognisms. ffice Certificate – C25370L ate provides a study of the office skills neces	and gnized essary for
OST 236 OST 286 Eligible for OST-134, O 164, OST-28	Office Applications II	governm offices, f business certificat Legal -Online This cer	nent final ses. tion Of	ncial institutions, and large to small offices. Students are eligible to take industry-reconstants. Strice Certificate – C25370L	and gnized essary for
OST 236 OST 286 Eligible for OST-134, O 164, OST-28	Office Applications II	governm offices, f business certificat Legal -Online This cer employn	nent finar ses. tion Of tifica	ncial institutions, and large to small offices. Students are eligible to take industry-recognisms. Frice Certificate – C25370L ate provides a study of the office skills necest in a legal setting. The certificate is available.	and gnized essary for
OST 236 OST 286 Eligible for OST-134, O 164, OST-28 FOURTH SE OST 153	Office Applications II	governm offices, f business certificat Legal -Online This cer employn	nent finar ses. tion Of tifica	ncial institutions, and large to small offices. Students are eligible to take industry-recognisms. ffice Certificate – C25370L ate provides a study of the office skills neces	and gnized essary for
OST 236 OST 286 Eligible for OST-134, O 164, OST-28 FOURTH SE OST 153 CTS 230	Office Applications II 3 Office Procedures 3 Adv Word Processing 3 Professional Development 3 Office Professional Diploma (D25370P): OST-122, IST-181, OST-184, OST-135, OST-136, OST-137, OST-186, CTS-130, ENG-111, ENG Elective EMESTER Office Finance Solutions 3 Advanced Spreadsheet 3	governmoffices, for business certificate Legal -Online This ceremployne	nent final ses. tion Of tifica nen	ncial institutions, and large to small offices a. Students are eligible to take industry-recognisms. ffice Certificate – C25370L ate provides a study of the office skills necest in a legal setting. The certificate is available. Sequence	and gnized essary for
OST 236 OST 286 Eligible for OST-134, O 164, OST-28 FOURTH SE OST 153	Office Applications II	governm offices, f business certificat Legal -Online This cere employm Prograf	nent final ses. tion Of Of tification	ncial institutions, and large to small offices a. Students are eligible to take industry-recognisms. ffice Certificate – C25370L ate provides a study of the office skills necest in a legal setting. The certificate is available. Sequence	and gnized essary for

OST 134 OST 136 OST 137 OST 155	Text Entry & Formatting 3 Word Processing 3 Office Applications I 3 Legal Terminology 3	WBL 111 WBL 121 WBL 112	1 Wo 2 Wo	ork –Based Learning Iork-Based Learning IIork-Based Learning Iork-Based Learning I	1
SECOND SI	MESTER	Graduation Requirements66 Credit Hours			
CTS 130	Spreadsheet3	Office	Softv	vare Degree - A2537	709
OST 135	Adv Text Entry & Formatting3	-Online	JUILV	vale Deglee - A233	103
OST 156	Legal Office Procedures3		lminietra	ation has a new concentration	on in Office Software
	English Elective3			tudents develop skills in ad	
	Math/Science Elective3			ng with office procedures, re	
	Legal Office Certificate (C25370L): OST-134, OST- 55, OST-135, OST-156	office com written co	mputatio ommuni	ons, keyboarding, editing ar cation, critical thinking, tear The degree is available on	nd formatting, oral and no building, and
SUMMER S	EMESTER	0			
	Social Science Elective3			ld qualify for employment or	
	Humanities/FA Elective3			ncies, financial institutions,	
		rocognizo	nd busii	nesses. Students are eligible fication exams.	e to take industry-
THIRD SEM		recognize	eu certii	ication exams.	
OST 122	Office Computations	Office	Softu	vare Certificate – C	252708
OST 138	Office Applications II		SUILV	vare Certificate – C	233703
OST 164	Office Editing3	-Online	ificata n	rovides an in-depth study o	f commonly used office
OST 184	Records Management3			tions to prepare students fo	
OST 236	Adv Word Processing3			n exams in word processing	
				tware. The certificate is ava	
	Office Professional Certificate (C25370P): OST-122,	presentati	11011 3011	iware. The certificate is ava	liable offilitie.
OST-137, O	ST-164, OST-184, OST-134, OST-136	Progran	m Sac	NUANCA	
		i iogiai	111 560	querice	
FOURTH SE		FIRST SE	FMFSTI	FR	
BUS 115	Business Law I	ENG 111	_	iting and Inquiry	3
OST 165	Adv Office Editing	OST 122		ice Computations	
OST 286	Professional Development	OST 137		ice Applications I	
OST 289	Office Admin Capstone	OST 164		ice Editing	
	OA Elective3	OST 184		cords Management	
Humanities	and Fine Arts Electives			G	
	redit hours from the following courses)	SECOND	SEME	STER	
ART 111	Art Appreciation	CTS 130		readsheet	
HUM 110	Technology and Society3	OST 134	4 Tex	xt Entry & Formatting	3
HUM 115	Critical Thinking3	OST 136		ord Processing	
	Č			glish Elective	
Mathematic	s Electives		_ Ma	th/Science Elective	3
(Choose 3 c	redit hours from the following courses)	Eliaible fa	for Offic	na Professional Cartificate	(C25270D), OCT 422
MAT 110	Mathematical Measurement3			ce Professional Certificate 164, OST-184, OST-134, OS	
BIO 110	Principles of Biology4	031-137,	, 031-1	104, 031-184, 031-134, 03	11-130
		SUMMER	R SEME	STER	
English Ele			_ So	cial Science Elective	3
ENG 114	redit hours from the following courses) Professional Research and Reporting		_ Hu	manities/FA Elective	3
ENG 112	Writing/Research in the Disc				
COM 120	Intro Interpersonal Comm	THIRD SE			
		CTS 230		vanced Spreadsheet	
Social Scien	nces Electives	OST 138		ice Applications II	
(Choose 3 ca	redit hours from the following courses)	OST 181		ice Procedures	
PSY 150	General Psychology3	OST 236		v Word Processing	
SOC 210	Introduction to Sociology3	OST 286	o Pic	ofessional Development	
HIS 111	World Civilizations I3	Eliaible fa	for Offic	ce Professional Diploma (L	025370P): OST-122.
				181, OST-184, OST-135, OS	
OA Elective				TS-130, ENG 111, ENG EL	
(Cnoose 3 c	redit hours from the following courses)	•	•		
ACC 120	Drip of Financial Accounting			ce Software Certificate (C2	5370S): CTS-130,
BUS 153	Prin of Financial Accounting	OST-136,	6, OST-1	137, OST-236, CTS-230	
CTS 230	Advanced Spreadsheet 3				
OST 153	Office Finance Solutions	FOURTH			
OST 133	Keyboard Skill Building2	OST 153		ice Finance Solutions	3
OST 132	Office Procedures	OST 165		v Office Editing	
OST 233	Office Publications Design	OST 289	9 Off	ice Admin Capstone	3
OST 284	Emerging Technologies	OST 233	3 Off	ice Publications Design	3
-	5 5 ······- <u>-</u>		OA	Elective	3

	and Fine Arts Electives redit hours from the following courses)	
ART 111		2
HUM 110	Technology and Society	2
HUM 115	Critical Thinking	
HUIVI 115	Chucai Triinking	J
Mathematic		
	redit hours from the following courses)	
MAT 110		
BIO 110	Principles of Biology	4
English Ele	ectives	
	redit hours from the following courses)	
ENG 114	Professional Research and Reporting	3
ENG 112	Writing/Research in the Disc	
COM 120	Intro Interpersonal Comm	3
Social Scie	nces Electives	
(Choose 3 c	redit hours from the following courses)	
PSY 150	General Psychology	3
SOC 210	Introduction to Sociology	3
HIS 111	World Civilizations I	3
OA Elective	es	
Choose 3 cr	edit hours from the following courses:	
ACC 120	Prin of Financial Accounting	4
BUS 115	Business Law I	3
BUS 153	Human Resource Management	
OST 135	Adv Text Editing and Formatting	3
OST 155	Legal Terminology	3
OST 156	Legal Office Procedures	
OST 132	Keyboard Speed Building	2
OST 284	Emerging Technologies	
WBL 111	Work –Based Learning I	
WBL 121	Work-Based Learning II	
WBL 112	Work-Based Learning I	2
Graduation	Requirements 66 Credit H	lours

Office Professional Diploma - D25370P

The Office Administration Diploma is designed for the individual entering, upgrading, or retraining in the office field. Students develop skills in records management, office computations, software applications, office procedures, keyboarding, editing and advanced formatting, critical thinking, and problem solving. The diploma is available online.

Graduates should qualify for entry-level employment opportunities in a variety of office positions in business, government, and industry. Students are eligible to take industry-recognized certification exams.

Program Sequence

FIRST SEM	ESTER	
ENG 111	Writing and Inquiry	3
OST 122	Office Computations	
OST 134	Text Entry and Formatting	
OST 181	Office Procedures	
OST 184	Records Management	3
	•	
SECOND S	EMESTER	
SECOND S OST 135	EMESTER Adv Text Entry & Formatting	3
	Adv Text Entry & Formatting	
OST 135	Adv Text Entry & Formatting	3
OST 135 OST 136	Adv Text Entry & Formatting	3
OST 135 OST 136 OST 137	Adv Text Entry & Formatting	3 3

SUMMER S	_	2
— —	Spreadsheet	
	rectives redit hours from the following courses; Writing/Research in the Disc	
	Professional Research and Reporting	
COM 120	Intro Interpersonal Com	
Graduation	Requirements	36 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 will receive hands-on training in design, 3D modeling, software engineering, database administration and programming for the purpose of creating simulations and games.

Graduates should qualify for employment as designers, artists, animators, programmers, database administrators, testers, quality assurance analysts, engineers and administrators in the entertainment industry, the health care industry, engineering, forensics, education, NASA and government agencies.

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.

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.

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.

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.

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.

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.

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.

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.

Level Design - C25450I

This certificate prepares students for an entry-level positions as a level designer within the simulation or video game industry.

Simulation and Game Development- Art & Modeling Degree - A25450A

-Day and Evening

Program Sequence FIRST FALL SEMESTER

ACA	111	College Student Success
ENG	111	Writing and Inquiry
SGD	111	Introduction to SGD
SGD	112	SGD Design
SGD	116	Graphic Design Tools
SGD	117	Art for Games
360	117	Alt for Games
FIRST	SPRIN	G SEMESTER
		Math Elective
SGD	113	SGD Programming
SGD	114	3D Modeling
SGD	163	SG Documentation
SGD	212	SGD Design II
CCD	212	OOD Doolgi II
FIRST	SUMM	ER SEMESTER
		English Elective
		HUM / FA Elective
SECO	ND FAL	L SEMESTER
SGD	166	SG Physiology / Kinesis
SGD	134	SG Quality Assurance
SGD	174	SG Level Design
SGD	214	3D Modeling II
SGD	162	SG 3 D Animation
OOD	.02	
SECO	ND SPR	RING SEMESTER
		Social Science Elective
		Major Elective
SGD	165	SG Character Development
SGD	158	SGD Business Management
SGD	164	SG Audio / Video
300	104	OO / (daio / Video

Math Elective	Math	ı Ele	ctive
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(Select 3 credit hours from the following courses)

(Select 3 cr	ealt nours from the following courses)
MAT 121	Algebra/Trigonometry I3
MAT 143	
MAT 152	
MAT 171	Precalculus Algebra4
Humanities	s/Fine Arts Elective
	redit hours from the following courses)
ART 111	Art Appreciation3
DRA 126	
ENG 125	
HUM 110	3, 4 4 4 4 4
HUM 130	
HUM 160	
REL 110	World Religions3
Communic	eations Electives
(Select 3 cr	redit hours from the following courses)
ÈNG 112	Argument-Based Research3
ENG 120	Intro Interpersonal Communication3
COM 231	
Social/Beh	avioral Science Elective
(Select 3 cr	edit hours from the following courses)
ECO 151	Survey of Economics3
HIS 111	
PSY 150	General Psychology3
SOC 210	Introduction to Sociology
	. ,
	uired Electives
(inimum of 4 credit hours)
SGD 135	Serous Games3
SGD 159	SGD Production Management3
SGD 161	SG Animation3
SGD 167	SG Ethics3
SGD 168	Mobile SG Programming I3
SGD 172	Virtual SG Environments3
SGD 237	Rigging 3D Models3
SGD 244	3D Modeling III3
SGD 268	Mobile SG Programming II3
SGD 274	SG Level Design II3
CCD 200	SCD HTML Programming I

Simulation and Game Development-Programming Degree - A25450P

Graduation Requirements...... 71 Credit Hours

SGD Portfolio Design.....2

Work-Based Learning I2

-Day and Evening

SGD 280

SGD 288 WBL 112

Program Sequence

FIRST FALL	SEMESTER	
ACA 111	College Student Success	1
ENG 111	Writing and Inquiry	3
SGD 111	Introduction to SGD	
SGD 112	SGD Design	3
SGD 116	Graphic Design Tools	
SGD 113	SGD Programming	
FIRST SPRII	NG SEMESTER	
SGD 213	SGD Programming II	3
MAT 171	Precalculus Algebra	4
SGD 114	3D Modeling	3
SGD 163	SG Documentation	
SGD 212	SGD Design II	3

3 3 3

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	ER SEMESTER English Elective
SGD 134 SGD 174 SGD 180	L SEMESTER 4 College Physics I
SGD 158 SGD 164	ING SEMESTER Social Science Elective 3 Major Elective I 2 SGD Business Management 3 SG Audio / Video 3 Mobile SG Programming I 3
	MER TERM 2 Major Elective I 2 SGD Project 3
(Select 3 credit ART 111 DRA 126 ENG 125 HUM 130 HUM 160	ne Arts Elective hours from the following courses) Art Appreciation 3 Storytelling 3 Creative Writing I 3 Myth in Human Culture 3 Introduction to Film 3 World Religions 3
ENG 112 A COM 120 In	hours from the following courses) rgument-Based Research
(Select 3 credit ECO 151 S HIS 111 W PSY 150 G	hours from the following courses) urvey of Economics
following) SGD 135 Sc SGD 159 Sc SGD 161 Sc SGD 167 Sc SGD 237 Ri SGD 244 3L SGD 268 M SGD 274 Sc SGD 280 Sc SGD 288 Sc WBL 112 W	## (Choose a minimum of 4 credit hours from the serious Games

Modeling and Animation Diploma - D25450B

The modeling and animation diploma prepares students for entrylevel positions as an artist in the simulation or video game industry. The program provides training in design, traditional art, texturing, 3D modeling, rigging, and animation as well as creating audio and video content for simulations or game development.

General Education Courses Required Courses

ENG	111	Expository Writing	3
SGD	111	Introduction to SGD	3
SGD	112	SGD Design I	
SGD	114	3D Modeling	
SGD	116	Graphic Design Tools	3
SGD	117	Art for Games	
SGD	162	SG 3D Animation	3
SGD	164	SG Audio/Video	3
SGD	165	SG Character Development	3
SGD	166	SG Physiology/Kinesis	3
SGD	212	SGD Design II	3
SGD	214	3D Modeling II	3
		SGD 237 or SGD 244	3
		Math Elective	3
Math	Electiv	ve .	
(Selec	t 3.0 h	ours from the following courses)	
MAT	121	Algebra/Trigonometry I	
MAT	143	Quantitative Literacy	3
MAT	152	Statistical Methods I	4
MAT	171	Precalculus Algebra	3
Gradu	ation	Requirements45	Credit Hours

SOFTWARE AND WEB DEVELOPMENT

Software and Web Development Degree - A25590SW

-Day and Evening

This curriculum prepares learners to design and develop desktop and web applications. Graduates will be proficient in C#, .NET, MVC, HTML, client/server-side JavaScript, and SQL. Graduates will 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 will 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.

IT Foundations Certificate - C25590F

-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

C# Programming Certificate - C25590CZ

-Online

Designed for individuals interested in acquiring programming skills necessary to design and implement C# programs. The student will learn how to design C# programs using event-driven programming techniques, implement current interface design standards, and create reusable code. Manipulate records in both a file-based system and a database system, and program customization using API calls. Emphasis is placed on proper program design techniques.

JavaScript Certificate - C25590JS

-Day

The certificate offers courses for students interested in programming JavaScript with Full Stack implementation

.NET Programming Certificate - C25590NE

-Day

The .NET Programming Certificate offers courses for students to become proficient in .NET technologies. **Prerequisites required:** C25590CZ

Programming Fundamentals Certificate - C25590PF

-Day

The Fundamentals of Computer Programming Certificate will give students the opportunity to achieve programming literacy.

PROGRAM SEQUENCE

CSC CSC CTI CTI	120 121 110 120	ESTER 4 Computing Fundamentals I 4 Python Programming 3 Web, Pgm, and DB Foundations 3 Network & Sec Foundations 3 MAT 121 or Higher 3 Student Success 1
CSC DBA WEB NOS ENG	153 120 115 115 110 111	C # Programming 3 Database Programming I 3 Web Markup and Scripting 3 Operating System Concepts 3 Writing and Inquiry 3
FIRST	ГЅШМ	MER SEMESTER
CSC		Major Elective
THIRI	D SEMI	ESTER
COM CSC WEB CSC CSC	120 174 180 163 154	Introduction to Interpersonal Comm. 3 Server-Side JavaScript. 3 Active Server Pages. 3 C# Applications Development. 3 Software Development. 3
FOUF	RTH SE	MESTER
CSC ECO CTS	226 251 115 ——	.NET Programming 3 Prin of Microeconomics 3 Info Sys Business Concepts 3 HUM/Fine Arts Elective 3 Project Elective 3
Huma	anities	and Fine Arts
(Select ART HUM MUS PHI	ot 1 Cou 111 115 110 240	urses) 3 Art Appreciation
•	116 122 256 130 221	res from the following courses Introduction to Functional Programming

Project Electives

Select 3 hour	rs from the following courses	
CSC 227	Cloud Applications	.3
CSC 289	Programming Capstone	.3
*WBL 111	Work-Based Learning	
*WBL 112	Work-Based Learning	
*WBL 113	Work-Based Learning	.3

*Work-Based Learning is an elective. 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 over two semester as WBL 112 or over two semesters as WBL-111, and WBL-121 or in one semester as WBL-113

Graduation Requirements 68 Credit Hours

Storage & Virtualization Degree

Storage and Virtualization Degree (A25590SV)

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 will 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

FIRST SEMESTER

CTI	110	Web, Pgm & DB Foundation	.3
CTI	120	Network & Sec Foundation	
CTI	130	OS and Device Foundation	6
ENG	111	Writing and Inquiry	.3
MAT	143	Quantitative Literacy	
SEC	OND SE	MESTER	
NOS	130	Windows Single User	.3
NOS	230	Windows Admin I	
CTI	140	Virtualization Concepts	.3
NET	125	Networking Basics	.3
NET	126	Routing Basics	.3
CTI	141	Cloud & Storage Concepts	.3
SUMI	MER SE	EMESTER	
WBL	112	Work-Based Learning I	.2
CTI	240	Virtualization Admin I	.3
	D SEMI		
ENG		Professional Research & Reporting	
CTS		IS Professional Comm	
OMT	154	Customer Satisfaction	
		Major Electives	
		Humanities and Fine Arts Elec (3 hrs)	.3
		Social & Behavioral Sciences Elec (3 hrs)	.3

	_	MESIER	
CTS	288	Professional Practices in IT	3
CTI	241	Virtualization Admin II	3
CTI	260	Data Center Troubleshooting	3
CTS	115	Info Sys Business Concept	3
NET	135	Data Čenter Networking	3
		Major Elective II	
		,	
Maior	Electiv	ves	
CCT	121	Computer Crime Investigations	4
CCT	240	Data Recovery Techniques	
CTS	120	Hardware/Software Support	
CTS	155	Technical Support Functions	
CTS	220	Advanced Hardware/Software Suppo	
CTS	255	Advanced Transware/Software Support Advanced Technical Support Function	
NET	115	Telecom for IT Professionals	
NET	175	Wireless Technology	
	225	Routing and Switching I	
NET		Routing and Switching I	ა
NET	226	Routing and Switching II	3
NET	240	Network Design	
NOS	120	Linux/UNIX Single User	
NOS	125	Linux/UNIX Scripting	
NOS	220	Linux/UNIX Admin I	
NOS	231	Windows Admin I	
NOS	232	Windows Admin III	3
PMT	110	Intro to Project Management	
SEC	110	Security Concepts	3
SEC	150	Secure Communications	
WBL	122	Work Based Learning II	
WBL	132	Work Based Learning III	2
		Fine Arts Elective	
(Selec	ct 3.0 ho	ours from the following courses)	
ART	111	Art Appreciation	3
HUM	115	Critical Thinking	3
MUS	110	Music Appreciation	3
PHI	240	Introduction to Ethics	
Socia	ıl/Beha	vioral Science Elective	
(Sele	ct 3.0 h	ours from the following courses)	
ÈCO		Survey of Economics	3
ECO	251	Principles Of Microeconomics	3
POL	120	American Government	
PSY	118	Interpersonal Psychology	
PSY	150	General Psychology	
_	210	Introduction to Sociology	
500	210	introduction to doctology	
Gradi	uation I	Requirements	73 Credit Hours

Technical Support

Technical Support Degree – A25590TS

-Day and Evening

FOURTH OFMEOTER

The Information Technology Technical 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 will provide experience for students to implement, support, and customize industry-standard information systems.

Graduates should 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.

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.

IT Help Desk Technician Certificate - C25590HD

-Day and Evening

This certificate provides students with the knowledge and practical skills necessary to support users of computing technologies. The course work will help students develop the ability to work in helpdesk and technical support positions.

Cybersecurity Support Certificate – C25590CS

-Day and Evening

This certificate provides students with the knowledge and practical skills necessary to support cyber security technologies. The course work will help students develop the ability to work in a security operations center support position.

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 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.

Networking Support Certificate - C25590NS

- Day and Evening

This certificate provides students with the knowledge and practical skills necessary to support users of networking technologies. The course work will help students develop the ability to work in a networking support position.

PROGRAM SEQUENCE

FIRST SEMESTER ENG 111 Writing and Inquiry......3 CTI 110 Web, Programming and Database Foundations3 CTI 120 Network and Security Foundations......3 NOS 110 Operating Systems Concepts......3 **SECOND SEMESTER** Information Systems Business Concept......3 CTS 115 CTS 155 Windows Single User3 NOS 130 NOS 230 Windows Admin I......3 MAT 143 Quantitative Literacy......3

Completes IT Foundations Certificate (C25590F)		
SUMMER SEMESTER Major Elective I		
THIRD SEMESTER CTS 135 Integrated Software Intro		
FOURTH SEMESTER CTS 288 Professional Practices in IT		
GENERAL EDUCATION ELECTIVES		
Humanities and Fine Arts Electives (Choose 3 credit hours from the following courses) ART 111 Art Appreciation		
Social and Behavioral Sciences Electives (Choose 3 credit hours from the following courses) ECO 151 Survey of Economics		
Major Electives (Select 1 option grouping below)		
Option 1 – Hardware Support and Repair CTS 120 Hardware / Software Support		
Option 2 – Networking Support NET 125 Introduction to Networks 3 NET 126 Routing Basics 3 And one of the following Cisco certificate courses NET 135 Data Center Networking 3 NET 175 Wireless Technology 3 NET 240 Network Design 3 SEC 150 Secure Communications 3		
Option 3 – Cyber Security Support SEC 110 Security Concepts		
Mixed Elective Options (Choose a minimum of 7 credit hours from any of the courses listed above or below)		
CCT 121 Computer crime Investigations		

CTS	210	Computer Ethics	3
DBA	110	Database Concepts	
DBA	115	Database Applications	3
DBA	120	Database Programming I	
DBA	130	Intro to noSQL Databases	3
HBI	110	Issues and Trends in HBI	3
HBI	113	Survey of Medical Insurance	3
HBI	210	Data Management and Utilization	
NOS	125	Linux/UNIX Scripting	3
NOS	220	Linux.UNIX Admin I	3
OST	137	Office Software Applications	3
OST	141	Med Terms I – Med Office	
OST	142	Med Terms II – Med Office	3
OST	149	Medical Legal Issues	3
PMT	110	Intro to Project Management	3
WBL		Work Based Learning* (all numbers accepted)	2
		= - /	

Graduation Requirements 66 Credit Hours

*Work based education is an elective. Students must have approval from the Program Director and pre-register with the Work-based Learning Office. The work may be done over one semester s WBL 113, two semesters as WBL 112 and WBL 121, or three semesters as WBL 111, WBL 121 and WBL 131.

WEB DESIGNER

Web Designer Degree - A25590DM

Online

The Web Technologies curriculum prepares graduates for careers in the information technology arena 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 will provide opportunity for students to learn using industry standard software and technologies.

Graduates should 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.

Web Designer Certificate - C25590DM

- Online

Using industry standard technologies to design and develop basic full and mobile web sites.

Advanced Web Designer Certificate – C25590AW

Online

This program builds upon the Web Developer certificate with more advanced web programming and eCommerce development skills.

Front-End Developer Certificate - C25590DV

-Online

This certificate teaches basic front-end development concepts.

Web Development Basics Certificate - C25590WB

-Online

This certificate teaches basic web technology concepts for beginning web designers and developers.

Program Sequence

FIRST SEM		
CTI 110	Web, Pgm, and DB Foundation	3
GRD 141	Graphic Design I	
WEB 111	Introduction to Web Graphics	3
WEB 110	Internet / Web Fundamentals	3
DME 110	Intro to Digital Media	
SECOND S	EMESTER	
WEB 210	Web Design	3
WEB 115	Web Markup and Scripting	3
DME 210	User Interface Design	3
WEB 140	Web Development Tools	3
CIS 115	Intro to Prog & Logic	3
FIRST SUM	IMER SEMESTER	
ENG 111	Writing and Inquiry	3
	SOC 210 or ECO 251 or PSY 150	3
WEB 214	Social Media	3
THIRD SEM		
WEB 125	Mobile Web Design	3
CTS 115	Information Sys Business Concepts	3
DME 140	Intro to Audio / Video Media	3
	MAT 121 or MAT 143 or MAT 152 or MAT 110.	3
	ART 111 or HUM 115 or HUM 230	3
FOURTH SI		
	COM 110 or COM 120 or COM 231	3
WEB 287	Web E-Portfolio	2
CTI 120	Network & Sec Foundation	3
WEB 213	Internet Mkt & Analysis	3
	WEB 211 or WBL 112	3
Graduation	Paguiraments 60 Cradit	Hours

WEB DEVELOPER

Web Developer Degree - A25590WD

-Online

The Web Technologies curriculum prepares graduates for careers in the information technology arena 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 will provide opportunity for students to learn using industry standard software and technologies.

Graduates should 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.

Web Developer Certificate - C25590WD

Online

This certificate will prepare students to develop web sites using industry standard scripting and programming. Students will learn HTML, CSS, PHP, JavaScript, ASP.Net and CMS skills.

Advanced Web Developer Certificate - C25590AD

_Online

This certificate teaches advanced Web Developer concepts.

Front-End Developer Certificate - C25590DV

-Online

This certificate teaches basic front-end development concepts.

Web Development Basics Certificate - C25590WB

-Online

This certificate teaches basic web technology concepts for beginning web designers and developers.

Program Sequence

FIRST SEMESTER WEB 110 Internet/Web Fundamentals	.3
SECOND SEMESTER	
WEB 210 Web Design	.3 .3 .3
FIRST SUMMER SEMESTER	
ENG 111 Writing and Inquiry	.3
THIRD SEMESTER	
WEB 182 PHP Programming	
COM 110 or COM 120 or COM 231	
WEB 250 Database Driven Websites	.3
SOC 210 or ECO 251 or PSY 150	
FOURTH SEMESTER	
WEB 225 Content Management Systems	.3
WEB 287 Web E-Portfolio	
WEB 213 Internet Mkt & Analytics	
WEB 260 or WBL 112	_
SECOND SUMMER SEMESTER	_
MAT 121 or MAT 143 or MAT 152 or MAT 110 HUM 110 or HUM 115 or HUM 230	-
Graduation Requirements70 Credit Hour	re

Health Sciences Division

Health Sciences Information: 919-747-0400

Dean Dr. Molly Curry
Phone: 919-747-0007
Email: mpcurry@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 <u>WebAdvisor</u> for the availability of classes. Click to see a list of Wake Tech's programs that can be completed fully <u>online</u>.

Program Name	Program Code
Associate Degree Nursing – AAS Degree	A45110
Associate Degree Nursing (LPN to RN Advanced Placement Option) – AAS Degree	A45110
Computed Tomography Technology - Certificate	C45200
Dental Assisting - Diploma	D45240
Dental Hygiene – AAS Degree	A45260
Emergency Medical Science – AAS Degree	A45340
Health and Fitness Science – AAS Degree	A45630
Health and Fitness Science - Certificate	C45630
Human Services Technology	
Human Services Technology – <i>AAS Degree</i>	A45380
Human Services Technology/Mental Health – AAS Degree	A4538C
Human Services Technology/Substance Abuse – AAS Degree	A4538E
Human Services Technology/Mental Health - Certificate	C4538C
Substance Abuse Counseling - Certificate	C4538ECO
Substance Abuse Intervention - Certificate	C4538EI
Magnetic Resonance Imaging - Diploma	D45800
Medical Assisting – AAS Degree	A45400
Medical Assisting - Diploma	D45400
Medical Laboratory Technology – AAS Degree	A45420
Pharmacy Technology – AAS Degree	A45580
Pharmacy Technology – <i>Diploma</i>	D45580
Phlebotomy - Certificate	C45600
Radiography – AAS Degree	A45700
Therapeutic Massage - Diploma	D45750

*Collaborative Agreements

None at this time

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 - A45110

-Dav

First Term

NUR 111	Introduction to Health Concepts8	
BIO 168	Anatomy and Physiology I4	
PSY 150	General Psychology3	
ENG 111	Writing and Inquiry3	
Second Terr	m	
NUR 112	Health-Illness Concepts5	
NUR 114	Holistic Health Concepts5	
BIO 169	Anatomy and Physiology II4	
PSY 241	Developmental Psychology3	
Third Term		
NUR 211	Health Care Concepts5	
BIO 175	General Microbiology3	
Carrette Tarre	_	
Fourth Term NUR 113		
NUR 212	Family Health Concepts 5	
SOC 210	Health System Concepts	
ENG 112	Introduction to Sociology	
ENG 112	Wilding/Research in the Disc	
Fifth Term		
NUR 213	Complex Health Concepts	
-	Fine Arts Elective	
Trainantico, Tino 7 tto Elocato		
Graduation Requirements72 Credit Hours		

*HUMANITIES/FINE ARTS ELECTIVE:

Choose one from: ART 111,114,115 HUM 115 MUS 110, 112 PHI 215, 240

Associate Degree Nursing - A45110 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
BIO	155	Nutrition	3
BIO		n Anatomy and Physiology II Developmental Psychology	

BIO 175	General Microbiology	3
Third Term NUR 214	Nursing Transition Concepts Humanities/Fine Arts Elective	
Fourth Tern	n	
NUR 114	Holistic Health Concepts	
NUR 212		
ENG 112	Writing/Research in the Disc	3
Fifth Term		
NUR 213	Complex Health Concepts	10
**Licensed F	Practical Nurses	
Advanced P	lacement Option Credits	19
Graduation	Requirements	72 Credit Hours

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 Semes	ter	
CAT 211	CT Procedures	4
CAT 224	CT Clinical Practicum	4
Spring Sem	nester	
CAT 210	CT Physics and Equipment	3
CAT 226	CT Clinical Practicum	6
CAT 261	CT Exam Prep	1
Graduation	Requirements 18 Credi	t Hours

*CAT 210, 211 and 261 taught totally online

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

^{*}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 Ms. Washington prior to school start date.

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 classified 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 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 S	Semeste	er	
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
Secon	d Seme	ester	
DEN	103	Dental Sciences	2
DEN	104	Dental Health Education	3
DEN	105	Practice Management	2
DEN	106	Clinical Practice I	
DEN	112*	Dental Radiography	
COM	120	Intro Interpersonal Communications	3
Summ	ner Tern	n	
DEN	107	Clinical Practice II	5
PSY	118	Interpersonal Psychology	

^{*}Core course with Dental Hygiene.

Graduation Requirements......48 Credit Hours

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
		Infection/Hazard Control	
DEN	112	Dental Radiography	. 3

DEN	120	Dental Hygiene Preclinic Lecture	
DEN	121	Dental Hygiene Preclinic Lab	.2
	d Sem		
BIO	175	General Microbiology	
ENG	111	Writing and Inquiry	.3
DEN	124	Periodontology	.2
DEN	130	Dental Hygiene Theory I	
DEN	131	Dental Hygiene Clinic I	
DEN	223	Dental Pharmacology	
DEN	224	Materials and Procedures	.2
0	-		
	er Ter	···	_
CHM	130	General, Organic and Biochemistry	
COM	120	Interpersonal Communication	.პ
DEN	140	Dental Hygiene Theory II	
DEN	141	Dental Hygiene Clinic II	.2
Third	Semes	ter	
PSY	150	General Psychology	.3
DEN	123	Nutrition and Dental Health	.2
DEN	125	Dental Office Emergencies	
DEN	220		
DEN DEN	220 221	Dental Hygiene Theory III	.2
			.2 .4
DEN	221	Dental Hygiene Theory III Dental Hygiene Clinic III	.2 .4
DEN DEN	221 222 Seme	Dental Hygiene Theory III Dental Hygiene Clinic III General and Oral Pathology	.2 .4 .2
DEN DEN Fourth DEN	221 222 Seme 230	Dental Hygiene Theory III	.2 .4 .2
DEN DEN Fourth DEN DEN	221 222 Seme 230 231	Dental Hygiene Theory III	.2 .4 .2 .1
DEN DEN Fourth DEN DEN DEN	221 222 Seme 230 231 232	Dental Hygiene Theory III	.2 .4 .2 .1 .4
DEN DEN Fourth DEN DEN DEN DEN	221 222 Seme 230 231 232 233	Dental Hygiene Theory III	.2 .4 .2 .1 .4 .3 .2
DEN DEN Fourth DEN DEN DEN	221 222 Seme 230 231 232	Dental Hygiene Theory III	.2 .4 .2 .1 .4 .3 .2 .3
DEN DEN Fourth DEN DEN DEN DEN	221 222 Seme 230 231 232 233	Dental Hygiene Theory III	.2 .4 .2 .1 .4 .3 .2 .3
DEN DEN Fourth DEN DEN DEN DEN SOC	221 222 Seme 230 231 232 233 210	Dental Hygiene Theory III	.2 .4 .2 .1 .4 .3 .2 .3 .3

EMERGENCY MEDICAL SCIENCE

The Emergency Medical Science curriculum provides individuals with the knowledge, skills and attributes to provide advanced emergency medical care as a paramedic for critical and emergent patients who access the emergency medical system and prepares graduates to enter the workforce.

Students will gain complex knowledge, competency, and experience while employing evidence-based practice under medical oversight, and serve as a link from the scene into the healthcare system.

Graduates of this program may be eligible to take state and/or national certification examinations. Employment opportunities include providers of emergency medical services, fire departments, rescue agencies, hospital specialty areas, industry, educational and government agencies.

Emergency Medical Science Degree - A45340-Day

First Semester (First Fall)

EMS 110 EMT.....8 BIO 163 Basic Anat & Physiology5 MED 120 Survey of Med Terminology2 Second Semster EMS 122 EMS Clinical Practicum I1 EMS 130 Pharmacology.....4 EMS 131 Advanced Airway Management......2 EMS 160 Cardiology I2 ENG 111* Writing and Inquiry......3 MAT 110+ Math Measurement & Literacy3

Summer Term (First Summer)	OR
EMS 150 Emergency Vehicles & EMS Comm2	COM 231 Public Speaking3
EMS 220 Cardiology II	* Other Major Hours (Choose from Pick List As Needed)
EMS 221 EMS Clinical Practicum II2	
EMS 250 Medical Emergencies4	Second Fall Semester
· ·	PED 118 Weight Training II1
Third Semester (Second Fall)	PSF 210 Personal Training3
EMS 125 EMS Instructor Methodology2	PSF 118 Fitness Facility Management4
EMS 231 EMS Clinical Pract III	HEA 112 First Aid & CPR2
EMS 260 Trauma Emergencies2	HUM 115 Critical Thinking3
EMS 270 Life Span Emergencies	MAT 143 Quantitative Literacy3
ENG 112 [§] Writing/Research in the Disc	OR
ŭ	MAT 171 Precalculus Algebra4
Fourth Semester (Second Spring)	* Other Major Hours (Choose from Pick List As Needed)
EMS 140 Rescue Scene Management2	**Eligible to sit for ACSM Personal Trainer Certification Exam
EMS 240 Patients W/ Special Challenges2	-
EMS 241 EMS Clinical Practicum IV	Second Spring Semester
EMS 285 EMS Capstone	PSF 212 Exercise Programming3
PHI 240 Introduction to Ethics	PSF 218 Lifestyle Chang & Wellness4
PSY 150* General Psychology3	WBL 111 Work Based Learning1
To the second of	BIO 155 Nutrition3
Graduation Requirements70 Credit Hours	PED 111 Physical Fitness I1
	* Other Major Hours (Choose from Pick List As Needed)
* College transfer courses	,
College trailerer codition	*Other Major Hours
§ Other 3-credit-hour English courses such as ENG-114 may be	BIO 110 Principles of Biology4
accepted with EMS Department Head approval.	PED 110 Fit and Well for Life2
accepted mail Eme Department road approvail.	PED 119 Circuit Training1
College Transfer Human Anatomy and Physiology Option:	PED 121 Walk, Jog, Run1
BIO-168* with BIO-169* may be substituted for BIO-163.	PED 122 Yoga I1
nay be educated for <u>bre-ree.</u>	PED 130 Tennis-Beginning1
	PED 217 Pilates I
HEALTH AND FITNESS SCIENCE	HEA 110 Personal Health/Wellness3
	BUS 139 Entrepreneurship I
The Health and Fitness Science program is designed to provide	
students with the knowledge and skills necessary for employment	Graduation Requirements68-70 Credit Hours
in the fitness and exercise industry.	•
Students will be trained in exercise science and be able to	Health and Fitness Science Certificate
Students will be trained in exercise science and be able to administer basic fitness tests and health risk appraisals, teach	
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	Health and Fitness Science Certificate
Students will be trained in exercise science and be able to administer basic fitness tests and health risk appraisals, teach	Health and Fitness Science Certificate -C45630
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 and facilities.	Health and Fitness Science Certificate
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 and facilities. Graduates should qualify for employment opportunities in	Health and Fitness Science Certificate -C45630 Major Courses PSF 110 Exercise Science
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 and facilities. Graduates should qualify for employment opportunities in commercial fitness clubs, YMCA's/YWCA's, wellness programs in	Health and Fitness Science Certificate -C45630 Major Courses PSF 110 Exercise Science 4 PSF 111 Fitness & Exercise Testing 4
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 and facilities. Graduates should qualify for employment opportunities in commercial fitness clubs, YMCA's/YWCA's, wellness programs in business and industry, Parks & Recreation Departments and other	Health and Fitness Science Certificate -C45630 Major Courses PSF 110 Exercise Science
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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 and facilities. Graduates should qualify for employment opportunities in commercial fitness clubs, YMCA's/YWCA's, wellness programs in business and industry, Parks & Recreation Departments and other organizations implementing exercise & fitness programs. HEALTH AND FITNESS SCIENCE - A45630 First Fall Semester ACA 111 College Student Success	Health and Fitness Science Certificate -C45630 Major Courses PSF 110 Exercise Science
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transferred into select 4-year colleges and universities.

Summer Session

PSY 150 COM 120

First	Fall Se			HSE	112	Group Process I	2
ENG	111	Writing and Inquiry	3	HSE	110	Intro to Human Services	
HSE	110	Introduction to Human Services	3	HSE	135	Orientation Lab I	1
HSE	135	Orientation Lab I	1	PSY	150	General Psychology	3
HSE	112	Group Process I	2	SAB	110	Substance Abuse Overview	
PSY	150	General Psychology					
SAB	110	Substance Abuse Overview		First S	Sprina	Semester	
	-			ENG		Prof Research & Reporting	3
First	Spring	Semester		HSE	123	Interviewing Techniques	
PSY		Developmental Psychology	3	HSE	-	Counseling	
ENG		Prof Research and Reporting	3	PSY		Abnormal Psychology	
HSE		Counseling		MHA	-	Mental Health Systems	
HSE	-	Human Services Issues				er Term	
HSE	-	Interviewing Techniques			240	Introduction to Ethics	3
	0	g realquee			111	Basic PC Literacy	
First	Summe	er Term		SOC		Sociology of the Family	
PHI		Introduction to Ethics	3	000		Coolology of the Farmy	
CIS		Basic PC Literacy		Secor	nd Fall	l Semester	
SOC		Sociology of the Family		MAT		Math Measurement & Literacy	3
000		Coolology of the Farmy		MHA	-	Psychological Assessment	
Seco	nd Fall	Semester		HSE		Crisis Intervention	
MAT		Math Measurement & Literacy	3	HSE	-	Mental Retardation	
GRO	-	Gerontology		PSY	-	Behavioral Modification	
Oito	120	❖Major Elective		101	200	Deriavioral Modification	
HSE	225	Crisis Intervention		Secor	nd Snr	ring Semester	
HSE	-	Stress Management		WBL	•	Work-Based Learning	1
	2-10	Otrood Mariagement		WBL		Work-Based Learning Seminar I	
Seco	nd Snri	ng Semester		SWK	-	Working with Diversity	
WBL		Work-Based Learning I	1	PSY	_	Developmental Psych	
WBL		Work-Based Learning Seminar I		HSE		Human Services Issues	
HSE		Conflict Resolution		HSE		Case Management	
SWK		Working with Diversity		MHA	-	Advocacy	
HSE	-	Case Management		IVII IA	240	Advocacy	
PSY	-	Abnormal Psychology		Gradi	ıation	Requirements68 Cr	odit Hours
F31	201	Abriorniai Esychology		Graut	auon	Requirements00 Ci	edit nours
.∻Ma	jor Elec	tives		Hara		Convince Technology/Montal He	ماداه
		rs from the following courses				Services Technology/Mental He	aitn
HSE		Child Abuse and Neglect	3	Cert	ifica	te - C4538C	
HSE	-	Child & Adolescence in Crisis					
HSE		Activities Planning		N 4 = : = =	Classic.		
SWK	-	Introduction to Social Work	ວ ວ	•	Electiv		•
SVVK	110	ITHIOGUCHOTT TO SOCIAL WORK		HSE	-	Intro to Human Services	
Grad	uation !	Paguiramente 6	7 Crodit Hours	HSE		Intellectual Disabilities	
Grad	uation l	Requirements6	7 Credit Hours	MHA	155	Psychological Assessment	3
		·		MHA PSY	155 150	Psychological Assessment	3 3
		Requirements6		MHA PSY PSY	155 150 265	Psychological Assessment	3 3

MENIAL HEALIH

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 Se	mester	
ENG	111	Writing and Inquiry	3

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 PSY ENG HSE SAB HSE	135 150 111 110 110 112	Orientation Lab I	3 3 3
First	Spring	Semester	
ENG		Prof Research and Reporting	3
HSE	125	Counseling	
HSE	123	Interviewing Techniques	3
PSY	241	Developmental Psychology	
SAB	210	Substance Abuse Counseling	
First :	Summe	er Term	
PHI	240	Introduction to Ethics	3
CIS	-	Basic PC Literacy	
SOC		Sociology of the Family	
Seco	nd Fall	Semester	
MAT		Math Measurement & literacy	3
SAB	135	Addictive Process	3
SAB	120	Intake and Assessment	
HSE	225	Crisis Intervention	
SAB	-	SAB Issues in Client Services	
Seco	nd Spri	ng Semester	
SWK		Working with Diversity	3
WBL		Work-Based Learning I*	
WBL		Work-Based Learning Seminar I*	1
SAB		SA Case Management	
HSE		Human Services Issues	
SAB	220	Group Techniques/Therapy	
PSY	281	Abnormal Psychology	
Gradi	uation I	Requirements69 Credit Hou	rs

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.

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
Com	pletion	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.

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 by the American Registry of Radiologic Technologists.

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.

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 Instrumentation	
		MRI Clinical Ed I.	
		Writing and Inquiry	
		Fine Arts Elective	

Fall	Semes	ster	
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
Sprir	ng Sen	nester	
MRI	215	MRI Procedures II	2
MRI	218	MRI Physics II	
MRI	242	MRI Anatomy and Path II	2
MRI	270	MRI Clinical Ed III	8
MRI	271	MRI Capstone	1
Grad	uation	n Requirements45 Credit H	lours

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.

The Medical Assisting Education Review Board (MAERB), an autonomous unit within the Endowment, evaluates medical assisting programs according to Standards adopted by the American Association of Medical Assistants (AAMA), the American Medical Association (AMA), and the Commission on Accreditation of Allied Health Education Programs (CAAHEP). The MAERB then recommends programs to CAAHEP for accreditation.

Graduates of CAAHEP accredited medical assisting diploma program may be eligible to sit for the American Association of Medical Assistants' Certification Examination, the CMA (AAMA) exam, to become Certified Medical Assistants. Employment opportunities include physicians' offices, health maintenance organizations, health departments, and outpatient clinics.

Medical Assisting Diploma - D45400

-Hvbrid

-пурпи			
First S	Semest	er	
BIO	161	Intro to Human Biology	3
ENG	111	Writing and Inquiry	3
MAT	110	Math Measurement & Literacy	3
CIS	111	Basic PC Literacy	2
MED	110	Orientation to Medical Assisting	1
MED	118	Medical Law and Ethics	2
MED	121	Medical Terminology I	3
MED	130	Administrative Office Procedures I	
MED	138	Infection/Hazard Control	2
First S	Semest	~ -	
MED	122	Medical Terminology II	3
MED	131	Administrative Office Procedures II	
MED	140	Examining Room Procedures I	5
MED	150	Laboratory Procedures I	5
Sumn	ner Teri		
MED	260	Medical Clinical Practicum	_
MED	262	Clinical Perspectives	
MED	264	Medical Assisting Overview	2
MED	274	Diet Therapy/Nutrition	3
Gradu	ıation F	Requirements47 Credit H	Hours

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 completion program is designed for Medical Assistants who desire an associate degree for career advancement or transfer purposes.

Additional Courses Required for the Medical Assisting Degree – A45400

First Spring Sc BIO 161 ENG 111 MAT 110 CIS 111 MED 110 MED 118 MED 121 MED 130	Intro to Human Biology	3212
MED 138 First Spring S MED 122 MED 131 MED 140 MED 150	Infection/Hazard Control	
Summer Term MED 260 MED 262 MED 264 MED 274 Total Diploma	Medical Clinical Practicum	1 2 3
Third Semester MED 232 MED 270 MED 272 ENG/COM	Medical Insurance Coding	
PSY/SOC SPA 120 HUM/Fine Arts	PSY 150 or SOC 210Spanish for the Workplace	3
Graduation Re	equirements 67 Cred	dit Hours

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

First Semester

rirst	Semes	
MLT	110	Introduction to MLT3
MLT	118	Medical Lab Chemistry3
MLT	140	Introduction to Microbiology3
BIO	163	Basic Anatomy and Physiology5
MLT	111	Urinalysis and Body Fluids2
MLT	115	Laboratory Calculations2
Seco	nd Sen	nester
MLT	120	Hematology/Hemostasis I4
MLT	130	Clinical Chemistry I4
MLT	240	Special Clinical Microbiology3
MLT	125	Immunohematology I5
First	Summe	er Semester
MAT	143	Quantitative Literacy3
MLT	220	Hematology/Hemostasis II3
MLT	254	MLT Practicum I4
Third	Semes	
MLT	230	Clinical Chemistry II3
MLT	280	Special Practice Lab1
ENG	111	Writing and Inquiry3
CIS	111	Basic PC Literacy2
MLT	266	MLT Practicum II6
	h Sem	
*Hum	anities/	Fine Arts Elective
MLT	217	Professional Issues1
MLT	276	MLT Practicum III6
ENG	112	Writing/Research in the Disc3
PSY	150	General Psychology3

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.

Graduation Requirements......75 Credit Hours

Students will 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 will 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 will 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 will be prepared to take the national Certification Examination administered by the Pharmacy Technician Certification Board.

Phai	Pharmacy Technology Diploma - D45580				
	emeste	r			
*ENG	111	Writing & Inquiring3			
*MAT	110	Mathematical Measurement & Literacy3			
PHM	110	Introduction to Pharmacy3			
PHM	111	Pharmacy Practice I4			
PHM	115	Pharmacy Calculations			
PHM	115A	Pharmacy Calculations Lab 1			
Spring	g Seme	ster			
PHM	118	Sterile Products4			
PHM	120	Pharmacology I3			
PHM	134	Pharmacy Clinical4			
PHM	140	Trends in Pharmacy2			
PHM	155	Community Pharmacy3			
Summ	ner Terr	n			
PHM	125	Pharmacology II3			
PHM	132	Pharmacy Clinical2			
PHM	165	Pharmacy Prof Practice2			
Gradu	ation R	equirements 40 Credit Hours			
*Cours	ses may	be taken before entering the program			
Pha	Pharmacy Technology Degree - A45580				
First F	all Sen				
ENG	111	Writing & Inquiry3			
MAT	110	Mathematical Measurement & Literacy3			
PHM	110	Introduction to Pharmacy3			
PHM	111	Pharmacy Practice I4			
PHM	115	Pharmacy Calculations3			

ENG MAT PHM PHM PHM PHM	fall Sem 111 110 110 111 115 115A	Writing & Inquiry	3 4 3
PHM	pring a	Semester Sterile Products	4
РНМ	120	Pharmacology I	
PHM	134	Pharmacy Clinical	
PHM	140	Trends in Pharmacy	
PHM	155	Community Pharmacy	3
Summ	er Tern	n	
PHM	125	Pharmacology II	3
PHM	132	Pharmacy Clinical	
PHM	165	Pharmacy Prof Practice	2
Total [Diploma	a Requirements47 Semester Credit Hour	s
Secon	d Fall S	Semester	
*CIS	111	Basic PC Literacy	2
*ENG	112	Writing/Research in the Disciplines	3
PHM	133	Pharmacy Clinical	
PHM	150	Hospital Pharmacy	4
Secon	d Sprin	g Semester	
PHM	135	Pharmacy Clinical	5
PHM	160	Pharm Dosage Forms	
PSY	150	General Psychology	3
OR		latera are and Developer	_
PSY	118	Interpersonal Psychology	ა ა
		Turnarines Liebuve	J
Gradu	ation R	equirements 66 Credit Hour	S

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 Sem	ester	
PBT 100	Phlebotomy Technology	6
PBT 101	Phlebotomy Practicum	3
Choose o	ne of the following:	
PSY 118	Interpersonal Psychology	3
PSY 150	General Psychology	3

Completion Requirements12 Credit Hours

RADIOGRAPHY

The Radiography curriculum prepares the graduate to be 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

RAD	110	RAD Intro & Patient Care	. 3
BIO	163	Basic Anatomy and Physiology	. 5
ENG	111	Writing and Inquiry	. 3
RAD	151	RAD Clinical Ed I	. 2
Seco	nd Sen	nester	
RAD	112	RAD Procedures II	. 4
RAD	121	Radiographic Imaging I	. 3
MAT	143	Quantitative Literacy	. 3
ENG	112	Writing/Research in the Disc	. 3
RAD	161	RAD Člinical Ed II	. 5

RAD Procedures I4

ner Ter	m	
122	Radiographic Imaging II	2
131	Radiographic Physics I	2
171	RAD Člinical Ed ÍII	4
Semes	ter	
211	RAD Procedures III	3
231	Radiographic Physics II	2
241	Radiobiology/Protection	2
150	General Psychology	3
251		
h Seme		
245	Image Analysis	2
261	RAD Clinical Ed V	7
271	Radiography Capstone	1
115	Critical Thinking	3
uation F	Requirements:73 Credit Hour	S
	122 131 171 Semes 211 231 241 150 251 h Seme 245 261 271 115	131 Radiographic Physics I. 171 RAD Clinical Ed III

THERAPEUTIC MASSAGE

The Therapeutic Massage curriculum prepares graduates to work in direct client care settings to provide manipulation, methodical pressure, friction and kneading of the body for maintaining wellness or treating alterations in wellness throughout the lifespan.

Courses will include content in normal human anatomy and physiology, therapeutic massage, ethical/legal issues, business practices, nutrition and psychology.

Employment opportunities in North Carolina may be found in hospitals, rehabilitation centers, health departments, home health, medical offices, nursing homes, spas, health and sports clubs, and private practice. Graduates may be eligible to take the Massage and Bodywork Licensing Exam, and apply for Licensure in North Carolina.

Fundamentals of Massage......10

Therapeutic Massage Diploma - D45750

First Semester MTH 110 F

ACA	111	College Student Success1	
*BIO	163	Basic Anatomy and Physiology5	
_			
Secor	nd Sem		
*BIO	155	Nutrition3	
MTH	120	Therapeutic Massage Applications10	
MTH	121	Clinical Supplement I1	
MTH	130	Therapeutic Massage Management2	
Sumn	ner Teri	n	
MTH	125	Ethics of Massage2	
_			
		cation Required	
(Trans	sfer Cre	edit May Apply)	
*ENG	111	Writing and Inquiry3	
*PSY	118	Interpersonal Psychology3	
0	r		
*PSY	150	General Psychology3	
Graduation Requirements 40 Credit Hours			
		•	
• .• Δ	CΔ 111	is a co-requisite to MTH 110; students must register	

- ACA 111 is a co-requisite to MTH 110; students must register for ACA 111 section restricted to MTH [D45750]
- BIO 163 must be completed either before or concurrently with MTH 110. Students may not progress to MTH 120 without successful completion of BIO 163.
- Transfer credit may be awarded by review of transcripts.
- Transfer credit for BIO 271 Pathophysiology may be substituted for BIO 155.

^{*} Coursework other than MTH may be completed prior to entry into the program.

COURSE PREFIX IDENTIFICATION

	Academic Related		Electronic Commerce	MRI	0 0
	Accounting	ECO		MSI	Military Science
AHR	Air Conditioning, Heating,	EDU	Education	MNT	
	& Refrigeration	EFL	English as a Foreign Language	MTH	Therapeutic Massage
ANT	Anthropology	EGR	Engineering	MUS	
	Arabic	ELC	Electricity	NAS	•
_	Architecture	ELN	Electronics	NET	Networking Technology
	Art	EMS	Emergency Medical Care	NOS	3 1 3 7
AST	Astronomy	ENG	English	NUR	0
ATR	Automation and Robotics	ENV	Environmental Science	OMT	Operations Management
	Automotive Body Repair	EPT	Emergency Preparedness	oss	Operating Systems
AUT	Automotive	FIP	Fire Protection	OST	Office Systems Technology
BAS	Business Analytics	FRE	French	PAD	Public Administration
BAT	Building Automation Systems	FST	Food Service Technology	PBT	Phlebotomy
BIO	Biology	GEL	Geology	PCI	Process Control
BPA	,	GEO	Geography	DED	Instrumentation
BPM		GIS	Geographic Information	PED	Physical Education
DDD	Tech	004	Systems	PHI	Philosophy
BPR	1 0		Graphic Arts	PHM	Pharmacy
BUS	Business	GRD	, ,	PHY	Physics
	Computed Tomography	GRO	67	PLU	Plumbing
CCT	,	HBI	Healthcare Business	PME	Power Mechanics
CEG	Civil Engineering and	HEA	Informatic	PMT	Project Management
CET	Geomatic		Health	POL	Technology
CET	Computer Engineering	HEO	Heavy Equipment Operation	PSY	Political Science
СНІ	Technology Chinese	пЕТ	Heavy Equipment Maintenance	PTC	, 0,
	Chemistry	HFS	Health and Fitness Sciences	RAD	Pharmaceutical Technology Radiography
CIS	Information Systems	HIS	History	REA	Real Estate Appraisal
CIV	Civil Engineering Technology	HMT	Healthcare Management	REF	Refrigeration
CJC	Criminal Justice		Horticulture	REL	Religion
CMT		HPC	High Performance Computing	RLS	Real Estate
_	Communication	HRM		SAB	Substance Abuse
	Cosmetology	HSC	Health Sciences	SEC	Information Systems Security
CSC	Computer Science	HSE	Human Services	SGD	Simulation and Game
CST	Construction	_	Humanities	OOD	Development Development
CTI	Computer Tech Integration		Hydraulics and Pneumatics	soc	•
	Computer Information	IMG	Imaging		Spanish
	Technology	INT	International Business	SRV	Surveying
CUL	0.	ISC	Industrial Science	SST	Sustainability Technology
	Database Management	JOU	Journalism	SUR	-
	Technology	LAR	Landscape Architecture		Social Work
DDF	Design Drafting	LOG	Logistics Management	TDP	Three Dimensional Printing
DDT	Developmental Disabilities	MAC	-	TNE	Telecommunications and
DEN	Dental	MAT	_		Network Engineering
DES	Design: Creative	MCO			Technology
DFT	Drafting	MEC		TRN	Transportation Technology
DMA	•	MED			Work-Based Learning
	Digital Medial Technology		Mental Health		Web Technologies
	Developmental Math Shell	MKT			Welding
	Drama/Theatre	MLT	Medical Laboratory		•
DRE			Technology		
	Peading/English				

Reading/English

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

All courses are identified by the following example:

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. null 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-120 Career Assessment 1 0 0 1

Requisites:

This course provides the information and strategies necessary to develop clear personal, academic, and professional goals. Topics include personality styles, goal setting, various college curricula, career choices, and campus leadership development. Upon completion, students should be able to clearly state their personal, academic, and professional goals and have a feasible plan of action to achieve those goals.

ACA-121 Managing a Team 1 0 0 1

Requisites: Take NET-289(S21106); Take concurrently. Required.

This course focuses on the process of the individual with an awareness of the reality in the collective teamwork approach for the workplace emphasizing process-orientation. Topics include how teams work, team effectiveness,

team-building techniques, positive thinking, and leadership principles. Upon completion, students should be able to demonstrate an understanding of how teamwork strengthens ownership, involvement, and responsibility in the workplace.

ACA-122 College Transfer Success

0 2 0 1

Requisites: Take 1 group; Option: Take DRE-096(S23641); Option: Take ENG-070(S16349) RED-

070(S10648); Take previously. Required.

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

0 0 1

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-122 Principles of Financial Accounting II

0 3

Requisites: Take ACC-120(S20278); Take previously. Required.

This course provides additional instruction in the financial accounting concepts and procedures introduced in ACC 120. Emphasis is placed on the analysis of specific balance sheet accounts, with in-depth instruction of the accounting principles applied to these accounts. Upon completion, students should be able to analyze data, prepare journal entries, and prepare reports in compliance with generally accepted accounting principles.

ACC-129 Individual Income Taxes

2 2 0 3

Requisites: Take ACC-120(S20278); Take previously. Required.

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-131 Federal Income Taxes

2 2 0 3

Requisites:

This course provides an overview of federal income taxes for individuals, partnerships, and corporations. Topics include tax law, electronic research and methodologies and the use technology for the preparation of individual and

business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax laws, and complete federal tax returns for individuals, partnerships, and corporations.

ACC-132 NC Business Taxes 2 0 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 2 0 2

Requisites: Take ACC-115(S12924) or ACC-120(S10290); Take previously. Required.Take 1 group; Option: Take ACC-115(S12924) CIS-110(S21058); Option: Take ACC-115(S12924) CIS-111(S21059); Option: Take ACC-120(S10290) CIS-110(S21058); Option:

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 Intro to Acc Spreadsheets 1 2 0 2

Requisites: Take ACC-115(S12924) or ACC-120(S10290); Take previously. Required.Take 1 group; Option: Take ACC-115(S12924) CIS-110(S21058); Option: Take ACC-115(S12924) CIS-111(S21059); Option: Take ACC-120(S10290) CIS-110(S21058);

This course provides a working knowledge of computer spreadsheets and their use in accounting. Topics include preprogrammed 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 Applications 1 2 0 2

Requisites: Take ACC-115(S12924) or ACC-120(S10290); Take previously. Required.Take 1 group; Option: Take ACC-115(S12924) CIS-110(S21058); Option: Take ACC-115(S12924) CIS-111(S21059); Option: Take ACC-120(S10290) CIS-110(S21058);

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 solve accounting problems.

ACC-152 Advanced Software Applications 1 2 0 2

Requisites: Take ACC-150(S20275); Take previously. Required.

This course provides continued exposure to commercial accounting software and the opportunity to refine skills developed in ACC 150. 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-170 Technical Accounting 2 2 0 3

Requisites:

This course introduces the use of accounting for decision making and covers integration of financial accounting with managerial concepts. Topics include essentials of financial accounting and analysis, product costing, activity-based costing systems, budgeting, and financial planning. Upon completion, students should be able to understand and develop financial statements and demonstrate an understanding of accounting transactions and product costing systems.

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

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Take ACC-120(S20278); Take previously. Required. Requisites:

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-215 **Ethics in Accounting**

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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

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

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Requisites:

Take ACC-220(S10646); 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

3

3

4

Take ACC-121(S10328); Take previously. Required. Requisites:

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-240 **Gov & Not-For-Profit Acct** 3

0

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Take ACC-121(S10328); 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-250 **Advanced Accounting** 3

0

3

Requisites:

Requisites:

Take ACC-220(S10646); Take previously. Required.

This course is designed to analyze the special accounting issues, which may include business combinations, partnerships, international accounting, estates, and trusts. Emphasis is placed on analyzing transactions and preparing working papers and financial statements. Upon completion, students should be able to solve a wide variety of problems by advanced application of accounting principles and procedures.

ACC-268 **Information Systems & Internal Controls**

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 Auditing & Assurance Services 3 0 0 3

Requisites: Take ACC-220(S10646); 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.

AIR CONDITIONING, HEATING, & 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-112BB Heating Technology 0 4 0 2

Requisites: Take AHR-112AB; Take either previously or concurrently. Required.

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-112C Heating Technology 2 0 0 2

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-112C Heating Technology

0 0 2

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-112L Heating Technology

) 4 0 2

Requisites: Take AHR-112C(L52370); Take either previously or concurrently. Required.

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: Take AHR-113C; Take either previously or concurrently. Required.

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-125 HVACR Electronics

2 2 0

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-130 HVAC Controls

2 2 0 3

Requisites: Take AHR-111(S14148) ELC-111 or ELC-112(S21587); Take previously. Required. This course covers the types of controls found in residential and commercial comfort systems. Topics include

electrical and electronic controls, control schematics and diagrams, test instruments, and analyis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls.

AHR-133 HVAC Servicing 2 6

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-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-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.

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** 2 2 0 3 **Refrigeration Design** 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. 2 **AHR-240 Hydronic Heating** 3 Take AHR-112(S14102); Take previously. Required. Requisites: 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** 0 2 Take AHR-110(S14098); Take previously. Required. Requisites: 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. 2 **AHR-250 HVAC System Diagnostics** Requisites: Take AHR-212(S10365); Take either previously or concurrently. 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** 2 **Energy Management** 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. ANTHROPOLOGY (ANT Prefix) 0 0 **ANT-210 General Anthropology** 3 3 Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(\$23643); 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** 0 3 Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); 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-221 Requisites:	Comparative Cultures Take 1 group; Option: Take ENG-090 RED-090;	3 Option: T	0 ake ENG-	0 111(S13	3 673): Take			
previously. Requ This course provious characteristics an social institutions		e world co s placed o d religion.	vering the	ir distinct larities ar	ive cultural nd differences			
ANT-230 Requisites:	Physical Anthropology Take 1 group; Option: Take ENG-090 RED-090;	3 Option: T	0 ake ENG-	0 111(S13	3 673); 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-230A	Physical Anthropology Lab	0	2	0	1			
Requisites: Take ANT-230; Take either previously or concurrently. Required. Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Take previously. Required. This course provides laboratory work that reinforces the material presented in ANT 230. Emphasis is placed on laboratory exercises which may include fossil identification, genetic analysis, skeletal comparisons, forensics, computer simulations, and field observations. Upon completion, students should be able to demonstrate an understanding of the analytical skills employed by anthropologists in the study of primate evolution and variation.								
ANT-240 Requisites:	Archaeology Take 1 group; Option: Take ENG-090 RED-090;	3	0	0	3			
This course introc process of human Upon completion,	 t); Take previously. Required. duces the scientific study of the unwritten record of a cultural evolution as revealed through archaeolog students should be able to demonstrate an under the variety of past human cultures. 	gical meth	ods of exc	avation a	and interpretation	on.		
ANT-245	World Prehistory	3	0	0	3			
This course provious archaeological ev	Take 1 group; Option: Take ENG-090 RED-090; 5); Take previously. Required. des an introduction to the prehistory of the Old and idence from origins of human culture to the beginner able to demonstrate knowledge of the variability urbanism.	d New wor	ld. Empha	asis is pla ory. Upo	aced on on completion,			
	ARABIC (ARA	Prefix)						
of Arabic-speakin skills. Upon comp	Elementary Arabic I Take ENG-090; Take previously. Required.Take commended. duces the fundamental elements of the modern stage people. Emphasis is placed on the development eletion, students should be able to comprehend and control and demonstrate cultural awareness.	ndard Ara of basic li	bic langua	ige withir beaking,	n the cultural co	vriting		
ARA-181 Requisites:	Arabic Lab I Take ENG-090; Take previously. Required.Take	0 ARA-111	2 ; Take eit	0 her previ	1 ously or			
•	commended. des an opportunity to enhance acquisition of the fu Emphasis is placed on the development of basic li							

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 Arabic and to demonstrate cultural awareness.

ARA-182 Arabic Lab II 0 2 0

Requisites: Take ARA-181; Take previously. Required.Take ARA-112; Take either previously or concurrently. Recommended.

This course provides an opportunity to enhance acquisition of the fundamental elements of the modern standard Arabic 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 Arabic and demonstrate cultural awareness.

ARA-211 Intermediate Arabic I 3 0 0 3

Requisites: Take ARA-112; Take previously. Required.

This course includes communicative competencies in speaking, listening comprehension, reading and writing at an intermediate level with attention to cultural awareness. Emphasis is placed on intermediate skills in speaking, reading, writing, and comprehension of spoken language. Upon completion, students should be able to demonstrate simple conversations and read works written in modern standard Arabic.

ARA-212 Intermediate Arabic II 3 0 0 3

Requisites: Take ARA-211; Take previously. Required.

This course provides continuation of communicative competence in speaking, listening comprehension, reading and writing at an intermediate level with attention to cultural awareness. Emphasis is placed on intermediate skills in speaking, reading, writing, and comprehension of spoken language. Upon completion, students should be able to demonstrate an ability to conduct conversations and to read literary and non-fiction texts in modern standard Arabic.

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-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(S23927); Option: Take ARC-111 MAT-

171(S23934); 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-193 Selected Topics in Architecture Tech 1 4 0 3

Requisites: Take ARC-221; Take previously. Required.

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.

ARC-193A Selected Topics in Advanced Revit 1 4 0 3

Requisites: Take ARC-221; Take previously. Required.

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. 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.

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

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.

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ARC-221 Architectural 3-D CAD 1 4 0 3

Requisites: Take ARC-114(S10248); Take previously. Required.

This course introduces architectural three-dimensional CAD applications. Topics include three-dimensional drawing, coordinate systems, viewing, rendering, modeling, and output options. Upon completion, students should be able to prepare architectural three-dimensional drawings and renderings.

ARC-225 Architectural Building Information Modeling I 1 3 0 2

Requisites:

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.

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(S10754) 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; Option: Take ARC-111 MAT-121(S23927); Option: 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** 4 Take ARC-111; Take previously. Required. Take 1 group; Option: Take ARC-111 ARC-Requisites: 264(S22026); Option: Take ARC-111 ARC-225; Take previously. 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-240** Site Planning 2 2 0 3 Take ARC-111 or LAR-111(S10088); Take previously. Required. Take ARC-111 or LAR-Requisites: 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-241 **Contract Administration** 2 2 Take ARC-111 ARC-112(S11752) LAR-111(S10088) or LAR-112(S10042); Take previously. Requisites: Required. This course covers the techniques for reviewing the progress of construction projects. Topics include site observations, field reports, applications for payment, change orders, and other related topics. Upon completion, students should be able to review construction progress and produce appropriate documentation. 3 3 ARC-250 Survey of Architecture 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 2 0 2 1 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. 2 ARC-264 **Digital Architecture** 1 0 Requisites: Take ARC-112(S23271) or LAR-112(S23292); 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. ARC-293A **Selected Topics in Architecture** 2 2 0 3 Requisites: Take ARC-261 LAR-120 or DES-235(S10605); Take previously. Required. This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on the subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study. (ART Prefix) ART **ART-111 Art Appreciation** Take 1 group; Option: Take ENG-090 RED-090; Option: Take DRE-098(S23643); Take Requisites:

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This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design

previously. Required.

principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. **ART-114 Art History Survey I** 3 Take 1 group; Option: Take ENG-090 RED-090; Option: Take DRE-098(S23643); Take Requisites: 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-116** Survey of American Art 0 0 3 Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); 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 Take 1 group; Option: Take ENG-090 RED-090; Option: Take DRE-098(S23643); Take Requisites: 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** Requisites: Take 1 group; Option: Take ENG-070(S16349) RED-070(S10648); Option: Take DRE-096(S23641); Take previously. Required. 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** 6 3 Take 1 group; Option: Take ENG-070(S16349) RED-070(S10648); Option: Take DRE-Requisites: 096(S23641); Take previously. Required. 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 6 3 Take 1 group; Option: Take ENG-070(S16349) RED-070(S10648); Option: Take DRE-Requisites: 096(S23641); Take previously. Required. 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-132** Drawing II 0 0 3 Take ART-131; Take previously. Required. Requisites: This course continues instruction in the language of drawing and the use of various materials. Emphasis is placed on experimentation in the use of drawing techniques, media, and graphic materials. Upon completion, students should be able to demonstrate increased competence in the expressive use of graphic form and techniques.

This course introduces rendering the human figure with various drawing materials. Emphasis is placed on the use of

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Figure Drawing I

Take ART-131; Take previously. Required.

ART-135

Requisites:

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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 6 0 3 Computer Art I Take 1 group; Option: Take ENG-080 RED-080; Option: Take DRE-097(S23642); Take Requisites: previously. Required. This course introduces the use of the computer as a tool for solving visual problems. Emphasis is placed on fundamentals of computer literacy and design through bit-mapped image manipulation. Upon completion, students should be able to demonstrate an understanding of paint programs, printers, and scanners to capture, manipulate, and output images. **ART-232** Printmaking II 0 3 Take ART-231; Take previously. Required. Requisites: 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 3 Take 1 group; Option: Take ENG-070(S16349) RED-070(S10648); Option: Take DRE-Requisites: 096(S23641); Take previously. Required. 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 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-244** Watercolor 3 Take 1 group; Option: Take ENG-080 RED-080; Option: Take DRE-096(S23641); Take Requisites: previously. Required. This course introduces basic methods and techniques used in watercolor. Emphasis is placed on application, materials, content, and individual expression. Upon completion, students should be able to demonstrate a variety of traditional and nontraditional concepts used in watercolor media. **ART-281** Sculpture I Take 1 group; Option: Take ENG-070(S16349) RED-070(S10648); Option: Take DRE-Requisites: 096(S23641); Take previously. Required. 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. ART-282 Sculpture II Requisites: Take ART-281(S16229); Take previously. Required. This course builds on the visual and technical skills learned in ART 281. Emphasis is placed on developing original solutions to sculptural problems in a variety of media. Upon completion, students should be able to express individual ideas using the techniques and materials of sculpture. ASTRONOMY (AST Prefix)

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Take 1 group; Option: Take MAT-161(S20916) DMA-010 DMA-020 DMA-030 DMA-040 DMA-050;

Descriptive Astronomy

AST-111

Requisites:

Option: Take MAT-171(S23934) DMA-010 DMA-020 DMA-030 DMA-040 DMA-050; Take previously.

Required. Take AST-111A; Take either previously or concurrently. Re This course introduces an overall view of modern astronomy. Topics include an overview of the solar system, the sun, stars, galaxies, and the larger universe. Upon completion, students should be able to demonstrate an understanding of the universe around them. **AST-111A Descriptive Astronomy Lab** 0 Take AST-111; Take either previously or concurrently. Required. Take 1 group; Option: Take Requisites: MAT-161(S20916) DMA-010 DMA-020 DMA-030 DMA-040 DMA-050; Option: Take MAT-171(S23934) DMA-010 DMA-020 DMA-030 DMA-040 DMA-050; Take previously. Req The course is a laboratory to accompany AST 111. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 111 and which provide practical experience. Upon completion, students should be able to demonstrate an understanding of the universe around them. AST-151A **General Astronomy I Lab** 2 0 1 Take AST-151; Take either previously or concurrently. Required.Take DMA-010 DMA-020 DMA-Requisites: 030 DMA-040 DMA-050; Take previously. Required.Take 1 group; Option: Take MAT-143; Minimum grade C; Option: Take MAT-171(S23934); Minimum grade C 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 Take AST-151; Take previously. Required. Take AST-151 AST-151A; Take previously. Requisites: 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** n 2 Requisites: Take AST-151; Take previously. Required.Take AST-151 AST-151A; Take previously. Required.Take AST-152; Take either previously or concurrently. Required.Take AST-152; Take 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-112 **Introduction to Automation** 2 0 3 3 Requisites: This course introduces the basic principles of automated systems and describes the tasks that technicians perform on the job. Topics include the history, development, and current applications of robots and automated systems including their configuration, operation, components, and controls. Upon completion, students should be able to understand the basic concepts of automation and robotic systems. **ATR-193** 2 0 3 **Selected Topic in Automation & Robotics** 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. This course provides an opportunity to explore areas of current interest in Automation Engineering Technology. Emphasis is placed on subject matter appropriate to Automation Engineering. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

ATR-214 **Advanced PLCs** 4 Take ELC-128(S23522) or ELN-260(S21655); Take previously. Required. Requisites: 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 0 3 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. **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-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-121** 3 Non-Structural Damage I 1 0 Requisites: This course introduces safety, tools, and the basic fundamentals of body repair. Topics include shop safety, damage analysis, tools and equipment, repair techniques, materials selection, materials usage, and other related topics. Upon completion, students should be able to identify and repair minor direct and indirect damage including removal/repairing/replacing of body panels to accepted standards. 2 **AUB-122** Non-Structural Damage II 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 0 4 Requisites: This course introduces safety, equipment, structural damage analysis, and damage repairs. Topics include shop

AUB-132 Structural Damage II 2 6 0 4

Requisites: Take AUB-131; Take previously. Required.

has received light/moderate structural damage.

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,

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

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 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. 2 **AUB-150 Automotive Detailing** 1 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-160 Body Shop Operations** Requisites: This course introduces the day-to-day operations of autobody repair facilities. Topics include work habits and ethics, customer relations, equipment types, materials cost and control, policies and procedures, shop safety and liabilities, and other related topics. Upon completion, students should be able to understand the general operating policies and procedures associated with an autobody repair facility. **AUTOMOTIVE (AUT Prefix) AUT-114** 2 2 Safety and Emissions 1 Take AUT-141(S21690) AUT-141A AUT-151(S21692) AUT-151A; Take previously. Required. 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. 3 **AUT-116 Engine Repair** 2 3 0 Take AUT-116A AUT-123; Take either previously or concurrently. Recommended. Requisites: This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and 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-116A** 1 **Engine Repair Lab** 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 NATEF 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 Take AUT-116(S21687) AUT-116A; Take either previously or concurrently. Recommended. 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 Requisites:	Suspension & Steering Systems	2	3	0	3	
steering geome suspension and	vers principles of operation, types, and diag etry. Topics include manual and power stend asteering systems. Upon completion, stud enponents, check and adjust alignment ang	ering systems and sta dents should be able t	andard a o servic	and electrone e and rep	onically cont	trolled
AUT-141A	Suspension & Steering Lab	0	3	0	1	
Requisites:	Take AUT-141(S21690); Take either p	reviously or concurrer	ntly. Re	quired.		
total hours. Top suspension and	an optional lab to be used as an alternative pics include manual and power steering sy disteering systems. Upon completion, studingonents, check and adjust alignment ang	stems and standard a dents should be able t	and elec o servic	ctronically e and rep	controlled	
AUT-151	Brake Systems	2	3	0	3	
Requisites:	Take AUT-161A; Take previously. Recy or concurrently. Recommended.	quired.Take AUT-141	(S21690	0) AUT-14	1A AUT-15	1A; Take
drum and disc b	vers principles of operation and types, diagorakes involving hydraulic, vacuum boost, lystems. Upon completion, students shoulding systems.	hydra-boost, electrica	lly powe	ered boos	t, and anti-lo	
AUT-151A	Brakes Systems Lab	0	3	0	1	
total hours. Top powered boost,	Take AUT-151(S21692); Take either pi an optional lab to be used as an alternative pics include drum and disc brakes involving and anti-lock, parking brake systems and be able to diagnose, service, and repair v	to co-op placement i g hydraulic, vacuum-l emerging brake syste	n meeti ooost, h ems tec	ng the NA ydra-boos hnologies	t, electricall	у
AUT-161B	Basic Auto Electricity Part 2	1	3	0	2	
Requisites: 181(S21701); ¹ This course covbatteries, starte and basic troub	Take AUT-161A; Take previously. Rec Take either previously or concurrently. Revers basic electrical theory, wiring diagramsers, and alternators. Topics include Ohm's eleshooting. Upon completion, students sh basic wiring, battery, starting, charging, ar	quired.Take AUT-163 quired. s, test equipment, and Law, circuit construct ould be able to prope	(S21698 d diagno tion, wir rly use v	B) AUT-16 osis, repai ing diagra wiring diag	3A AUT- r, and replace ms, circuit to grams, diagr	esting, nose,
electronics, ligh communication should be able	Advanced Automotive Electricity Take TRN-120; Take previously. Requivers electronic theory, wiring diagrams, testiting, gauges, horn, wiper, accessories, and, circuit construction, wiring diagrams, circuit properly use wiring diagrams, diagnose, electronic concerns.	t equipment, and diag d body modules. Topi uit testing, and trouble	ics inclu eshootir	de networ g. Upon d	king and mosompletion,	odule students
total hours. Top testing, troubles	Advanced Automotive Electricity Lab Take AUT-163(S21698); Take either part optional lab to be used as an alternative pics include networking and module commishooting and emerging electrical/electronic erly use wiring diagrams, diagnose, test, a concerns.	reviously or concurrer to co-op placement in tunication, circuit cons systems technologie	n meeti structions. Upo	ng the NA n, wiring di n completi	agrams, circ on, students	cuit s should

AUT-181 Engine Performance 1 2 3 0 3 Requisites: Take AUT-161A; Take previously. Required.Take AUT-161B AUT-163(S21698) AUT-163A; Take either previously or concurrently. Recommended. 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. **Engine Performance 1 Lab** AUT-181A 1 Requisites: Take AUT-181(S21701); 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 NATEF standards for total hours. Topics include overviews of engine operation, ignition components and systems, fuel delivery, injection components and systems and emission control devices and emerging engine performance technologies. 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** 4 Take AUT-181(S21701); Take previously. Required.Take AUT-141(S21690) AUT-141A AUT-Requisites: 151(S21692) AUT-151A AUT-281(S21713) AUT-181(S21701); Take previously. Required.Take AUT-221(S21707) AUT-221A; Take either previously or concurrently. 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** Requisites: Take AUT-116(S21687) AUT-116A AUT-123 AUT-161A; Take previously. Required. Take AUT-181(S21701); Take either previously or concurrently. Required. 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** 0 3 **Automatic Transmissions/Transaxles** 2 3 Take AUT-141(S21690) AUT-141A AUT-151(S21692) AUT-151A; Take previously. Required. Take AUT-221A; Take either previously or concurrently. Required. 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-231** Manual Transmissions/Transaxles/Drive Trains 3 Take AUT-231A; Take either previously or concurrently. Recommended. 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. 0 **AUT-231A** Manual Transmissions/Transaxles/Drive Trains Lab 1 Requisites: Take AUT-231(S21711); Take either previously or concurrently. Required.

This course is an optional lab for the program that needs to meet NATEF hour standards but does not have a co-op component in the program. Topics include manual drive train diagnosis, service and repair using appropriate service

information, tools, and equipment. Upon completion, students should be able to diagnose and repair manual drive trains.

AUT-281 Advanced Engine Performance 2 2 0 3

Requisites: Take AUT-161A AUT-161B AUT-163(S21698) AUT-163A AUT-181(S21701) or AUT-161(S21697); Take previously. Required.

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.

BUSINESS ANALYTICS (BAS Prefix)

BAS-120 Introduction to Analytics 2 3 0 3

Requisites: Take DRE-098(S23643) DMA-050; 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 DRE-098(S23643) DMA-050; 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.

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: Take BAS-240; Take previously. Required. Take BAS-221(S24322); 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 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** 0 3 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. BIOLOGY (BIO Prefix) **BIO-106** Intro to Anatomy/Physiology/Microbiology 3 Requisites: This course covers the fundamental and principle concepts of human anatomy and physiology and microbiology. Topics include an introduction to the structure and function of cells, tissues, and human organ systems, and an overview of microbiology, epidemiology, and control of microorganisms. Upon completion, students should be able to identify structures and functions of the human body and describe microorganisms and their significance in health and disease. **BIO-110 Principles of Biology** 3 3 0 4 Take 1 group; Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 ENG-111(S24022); Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 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 Take 1 group; Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 ENG-111(S24022); Requisites: Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 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-120 Introductory Botany 4 Take BIO-110(S13284) or BIO-111(S13307); Take previously. Required. Requisites: This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants. Laboratory exercises are correlated with lecture topics. **BIO-130** 3 3 0 4 Introductory Zoology Requisites: Take BIO-110(S13284) or BIO-111(S13307); Take previously. Required. This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups. The evolutionary relatedness of the organisms studied will be emphasized. **BIO-140** 3 **Environmental Biology** 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** 3 0 1 **Environmental Biology Lab** 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-145** 4 Ecology Take BIO-110(S13284) or BIO-111(S13307); Take previously. Required. Requisites: This course provides an introduction to ecological concepts using an ecosystems approach. Topics include energy flow, nutrient cycling, succession, population dynamics, community structure, and other related topics. Upon completion, students should be able to demonstrate comprehension of basic ecosystem structure and dynamics. The laboratory component of this course provides an introduction to basic field techniques used in modern ecological research. 3 **BIO-150 Genetics in Human Affairs** 3 0 Take BIO-110(S13284) or BIO-111(S13307); Take previously. Required. This course describes the importance of genetics in everyday life. Topics include the role of genetics in human development, birth defects, cancer and chemical exposure, and current issues including genetic engineering and fertilization methods. Upon completion, students should be able to understand the relationship of genetics to society today and its possible influence on our future. Through the analysis of current topics in genetics, students will develop skills in reading scientific articles and in compiling information into written an oral communications. **BIO-155** 3 Requisites: Take CHM-090 or CHM-092; 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 wellas 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 0 0 3 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-165** Anatomy and Physiology I 3 3 0 4 Requisites: Take CHM-090: Take previously. Required. This course is the first of a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. **BIO-166** Anatomy and Physiology II 4 Take BIO-165; Take previously. Required. Requisites: This course is the second in a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and the interrelationships of all body systems. **BIO-168** Anatomy and Physiology I Requisites: Take 1 group; Option: Take DRE-098(S23643) CHM-090; Option: Take DRE-098(S23643) BIO-110(S24019); Option: Take DRE-098(S23643) BIO-111(S24020); 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** 3 0 Anatomy and Physiology II 3 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 0 3 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 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-230** Entomology 3 0 4

This course covers the biology of insects. Topics include harmful and beneficial insects, their identification, classification, life cycles, behavior, distribution, economic importance, and the methods involved in collection and preservation. Upon completion, students should be able to identify common insects and describe their biology and

Take BIO-112(S13261); Take previously. Required.

Requisites:

ecology.

BIO-242 Natural Resource Conservation 3 0 n 3 Take 1 group; Option: Take BIO-112(S13261); Option: Take BIO-140 BIO-140A; Take previously. Requisites: Required. This course covers the importance of natural resources and their role in our environment. Emphasis is placed on the physical, biological, and ecological principles underlying natural resource conservation with attention to the biological consequences of human impacts. Upon completion, students should be able to demonstrate an understanding of natural resource conservation. Local environmental issues dealing with resource conservation are emphasized. **BIO-243** Marine Biology 4 Requisites: Take BIO-110(S13284) or BIO-111(S13307); Take previously. Required. This course covers the physical and biological components of the marine environment. Topics include major habitats, the diversity of organisms, their biology and ecology, marine productivity, and the use of marine resources by humans. Upon completion, students should be able to identify various marine habitats and organisms and to demonstrate a knowledge of their biology and ecology. **BIO-271 Pathophysiology** 0 3 Take BIO-163 BIO-166 or BIO-169(S16244); Take previously. Required. Requisites: This course provides an in-depth study of human pathological processes and their effects on homeostasis. Emphasis is placed on interrelationships among organ systems in deviations from homeostasis. Upon completion, students should be able to demonstrate a detailed knowledge of pathophysiology. **BIO-275** Microbiology 4 Requisites: Take 1 group; Option: Take BIO-110(S13284); Option: Take BIO-111(S13307); Option: Take BIO-163; Option: Take BIO-165; Option: Take BIO-168(S11555); Take previously. Required.Take BIO-110(S13284) BIO-111(S13307) BIO-163 BIO-1 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 ARTS (BPA Prefix) BPA-120 Petit Fours and Pastries** 0 3 Take CUL-110(S11030) CUL-160(S13015); Take previously. Required.Take CUL-110(S22835) Requisites: 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 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-150 Artisan & Specialty Bread** Take CUL-110(S11030) CUL-160(S13015); Take previously. Required.Take CUL-110(S22835) Requisites: CUL-160(S22847); Take previously. Required. This course provides an advanced study in the art and craft of bread making. Topics include pertinent formulas and

techniques associated with naturally leavened loaves, hearth breads, focaccia, flat breads, and other breads utilizing

a variety of grains. Upon completion, students should be able to prepare artisan and specialty breads that meet or exceed the expectations of restaurant and retail publics.

BPA-165 Hot and Cold Desserts 1 4 0

Requisites: Take CUL-110(S11030) CUL-160(S13015); Take previously. Required.

This course covers the principles and techniques of frozen desserts, soufflés, cobblers, crisps, and strudel dough products. Topics include bombes, parfaits, baked Alaska, ice cream, sorbets, sherbets and granites; hand-stretched strudel products, crepes, and hot/cold soufflés. Upon completion, student should be able to prepare and plate hot and cold desserts with suitable sauces and garnishes.

3

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-230A Chocolate Artistry Lab 0 2 0

Requisites: Take CUL-110(S11030) CUL-160(S13015); Take previously. Required.Take BPA-230(S20766); Take either previously or concurrently. Required.Take CUL-110(S22835) CUL-160(S22847); Take previously. 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) BPA-150 BPA-210(S22830); Take previously. 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-150 BPA-210(S22830); Take previously. 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.

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 MFG TEC	(BPM P	refix)						
BPM-110 Requisites:	Bioprocess Practices	3	4	0	5				
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 (B	PR Prefix	<u>x)</u>						
BPR-111 Requisites:	Print Reading	1	2	0	2				
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 Requisites:	Print Reading-Construction	3	0	0	3				
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.									
commercial cons	Commercial Blueprints Take BPR-130(S11505); Take previously. Requiers blueprints specific to commercial structures and struction background. Topics include site, structural, is. Upon completion, students should be able to interest.	requires ba mechanic	al, electri	ical, and p	olumbing blueprints				
	BUSINESS (BUS	Prefix)							
BUS-115 Requisites:	Business Law I	3	0	0	3				
This course intro the law of sales, examined. Upon	duces the student to the legal and ethical framewor torts, crimes, constitutional law, the Uniform Comm completion the student should be able to identify le e laws that apply to them.	ercial Cod	e, and th	e court sy	stems are				
BUS-116 Requisites:	Business Law II Take BUS-115(S24153); Take previously. Requi	3	0	0	3				
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 Requisites:	Business Math	2	2	0	3				
	ers fundamental mathematical operations and their	application	to busin	ess probl	ems. Topics include				

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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-139 Entrepreneurship I 3 0 0 3

Requisites:

This course provides an introduction to the principles of entrepreneurship. Topics include self-analysis of entrepreneurship readiness, the role of entrepreneur in economic development, legal problems, organizational structure, sources of financing, budgeting, and cash flow. Upon completion, students should have an understanding of the entrepreneurial process and issues faced by entrepreneurs.

BUS-148 Survey of Real Estate 3 0 0 3

Requisites:

This course introduces real estate principles and practices. Topics include real estate finance, real estate law, brokerage, land use planning, property management, and valuation. Upon completion, students should be able to explain basic procedures involved in the lease, purchase, and sale of real property.

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-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-228 Requisites:	Business Statistics	2	2	0	3				
This course introduces the use of statistical methods and tools in evaluating research data for business applications. Emphasis is placed on basic probability, measures of spread and dispersion, central tendency, sampling, regression analysis, and inductive inference. Upon completion, students should be able to apply statistical problem solving to business.									
BUS-234 Requisites:	Training and Development	3	0	0	3				
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				
sections of the pla	Take BUS-139(S21145); Take previously. Required signed to allow the student to develop a business plantan, writing the plan, and how to find assistance in predesign and implement a business plan based on sou	n. Topics paring the	plan. Up	on comp	letion, students				
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-259 Requisites: previously. Requ	Human Resource Management Applications Take BUS-217(S24154) BUS-234(S24155) BUS-256	3 6(S24156)	0) BUS-25	0 8(S24157	3 '); Take				
This course provide learning experience by completing in-the appropriate actions.	des students in the Human Resource Management or ces from preceding HRM courses. Emphasis is place basket exercises and through simulations. Upon com- ctions called for by typical events that affect the status uirement of the Human Resources Management cond	ed on appl opletion, so of people	lication of tudents sl e at work.	day-to-d nould be This co	ay HRM functions able to determine urse is a unique				
BUS-260	Business Communication	3	0	0	3				
	Take ENG-110(S22173) or ENG-111(S13673); Takesigned to develop skills in writing business communicandence, and professional presentations. Upon complyork place.	ations. E	mphasis i	s placed					
BUS-280	REAL Small Business	4	0	0	4				

This course introduces hands-on techniques and procedures for planning and opening a small business, including the personal qualities needed for entrepreneurship. Emphasis is placed on market research, finance, time management,

and day-to-day activities of owning/operating a small business. Upon completion, students should be able to write and implement a viable business plan and seek funding.

	COMPUTED TOMOGRAPHY	(CAT P	<u>refix)</u>				
CAT-210 Requisites:	CT Physics & Equipment	3	0	0	3		
This course cover artifacts in compu- conversions, imag	rs the system operations and components, image parted tomography. Emphasis is placed on the data are ge manipulation, and factors controlling image reso a physics and instrumentation used in computed ton	equisition lution. Up	compone on comp	ents, tissu	e attenuation	n	
CAT-210A Requisites:	CT Physics & Equipment Lab	0	2	0	1		
tomography clinic the clinical applica	des the opportunity to apply knowledge gained from cal setting. Emphasis is placed on system componentations of the equipment that comprise CT. Upon countries and responsibilities within the computed tomography	ents and o empletion,	peration, students	and expo	oses the stud		
CAT-211 Requisites:	CT Procedures	4	0	0	4		
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-212 Requisites:	CT Sectional-Anatomy	3	0	0	3		
This course is des Emphasis is place pelvis, and muscu	signed to cover aspects of cross-sectional anatomy ed on the function and identification of anatomical s uloskeletal system visualized on CT images. Upon cross-sectional anatomy into the routine CT imaging	tructures v completio	within the n, studer	e head, ne	eck, chest, al		
CAT-214 Requisites:	CT Pathology	3	0	0	3		
This course is desis placed on the eassociated sympt	signed to provide a thorough understanding of comexamination and demonstration of each disease or toms, and diagnosis with appearance on CT. Upon associated with pathologies on CT.	rauma pro	ocess fro	m its desc	cription, etiol	ogy,	
CAT-224 Requisites:	CT Clinical Practicum	0	0	12	4		
This course provi tomography clinic production in com	des the opportunity to apply knowledge gained fron eal setting. Emphasis is placed on patient care and aputed tomography. Upon completion, students sho of thin the computed tomography clinical environment	positionin ould be ab	g, scann	ing proce	dures, and ir	•	
CAT-226	CT Clinical Practicum	0	0	18	6		
tomography clinic production in com	des the opportunity to apply knowledge gained from cal setting. Emphasis is placed on patient care and aputed tomography. Upon completion, students sho thin the computed tomography clinical environment	positionin ould be ab	g, scann	ing proce	dures, and in	-	

CAT-227 CT Clinical Practicum 0 7 0 21 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-228 CT Clinical Practicum** 0 8 24 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-231 CT Clinical Practicum** 33 11 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 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 3 2 0 **Computer Crime Investigation** Take 1 group; Option: Take CTI-130(S22512) CTI-120(S22511); Option: Take NOS-110(S20980) Requisites: CTI-120(S22511); Option: Take NOS-110(S20980) NET-110(S21056); Option: 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-240** 2 3 0 3 **Data Recovery Techniques** 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-251 **Network Vulnerabilities II** 2 2 0 3 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 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 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** 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. **Construction Materials & Methods** 3 **CEG-210** 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** Take 1 group; Option: Take MAT-121(S23927); Option: Take MAT-171(S23934); Option: Take Requisites: DMA-060(S23172) DMA-070(S23173) DMA-080(S23174); Option: Take MAT-080; Take previously. Required.Take 1 group; Option: Take MAT-121(S2392 This course introduces basic engineering principles and characteristics of hydrology, erosion and sediment control. Topics include stormwater 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 stormwater drainage plan. **CEG-212** Introduction to Environmental Technology Take EGR-250(S23538) EGR-251 or MEC-210(S20669); Take previously. Required. Take 1 Requisites: group; Option: Take EGR-250(S23987) CEG-115 or EGR-115(S20666); Option: Take EGR-251 CEG-115 or EGR-115(S20666); Option: Take MEC-210(S20669) CEG-115 or 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-235 Project Management and Estimating 2 3 n 3 Take CIS-110(S21058) CIS-111(S21059) CEG-115 EGR-115(S20666) or EGR-125; Take Requisites: 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. **COMPUTER ENGINEERING TECHNOLOGY** (CET Prefix) **CET-111** 3 3 Computer Upgrade/Repair I Requisites: This course covers repairing, servicing, and upgrading computers and peripherals in preparation for industry certification. Topics include CPU/memory/bus identification, disk subsystems, hardware/software installation/configuration, common device drivers, data recovery, system maintenance, and other related topics. Upon completion, students should be able to safely repair and/or upgrade computer systems to perform within specifications. 3 **CET-193A** 2 0 Selected Topics in Labview 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. This course provides an opportunity to explore areas of current interest in Computer Engineering Technology. Emphasis is placed on the use of LabVIEW. Upon completion, students should be able to demonstrate an understanding of the use of this simulation software. **CET-222 Computer Architecture** Requisites: This course introduces the organization and design philosophy of computer systems with respect to resource management, throughput, and operating system interaction. Topics include instruction sets, registers, data types, memory management, virtual memory, cache, storage management, multi-processing, and pipelining. Upon completion, students should be able to evaluate system hardware and resources for installation and configuration purposes. (CHI Prefix) CHINESE CHI-111 **Elementary Chinese I** 0 3 Requisites: Take 1 group; Option: Take ENG-090 RED-090; Option: Take DRE-098(S23643); Take previously. Required. Take CHI-181; Take either previously or concurrently. Required. This course introduces the fundamental elements of the Chinese 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 Chinese and demonstrate cultural awareness. CHI-112 **Elementary Chinese II** 3 0 Requisites: Take CHI-111; Take previously. Required. Take CHI-182; Take either previously or concurrently. Required. This course includes the basic fundamentals of the Chinese language within a cultural context of the Chinese people and its history. 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 Chinese and demonstrate further cultural awareness. CHI-181 0 2 Chinese Lab I 0 1 Take 1 group; Option: Take ENG-090 RED-090; Option: Take DRE-098(S23643); Take Requisites:

previously. Required. Take CHI-111; Take either previously or concurrently. Required. This course provides an opportunity to enhance acquisition of the fundamental elements of the Chinese 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 Chinese and demonstrate cultural awareness. CHI-182 0 Chinese Lab II 2 0 1 Requisites: Take CHI-181; Take previously. Required. Take CHI-112; Take either previously or concurrently. Required. This course provides an opportunity to enhance acquisition of the fundamental elements of the Chinese 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 Chinese and demonstrate cultural awareness. CHI-212 Intermediate Chinese II 3 0 3 Requisites: Take CHI-211; Take previously. Required. This course provides continuation of communicative competence in speaking, listening comprehension, reading and writing at an intermediate level with attention to cultural awareness. Emphasis is placed on intermediate skills in speaking, reading, writing, and comprehension of spoken language. Upon completion, students should demonstrate simple conversations and distinguish a broad range of Chinese characters, as well as read expressions in modern standard Chinese. CHEMISTRY (CHM Prefix) CHM-090 **Chemistry Concepts** 0 Take DRE-098(S23643) DMA-010 DMA-020 DMA-030 DMA-040; Take previously. Required. Requisites: 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-092 **Fundamentals of Chemistry** 4 2 Take DRE-098(S23643) DMA-010 DMA-020 DMA-030 DMA-040; Take previously. Required. Requisites: This course covers fundamentals of chemistry with laboratory applications. 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 and demonstrate basic laboratory skills necessary for success in college-level science courses. CHM-115 **Concepts in Chemistry** 3 0 0 3 Requisites: This course introduces basic chemical concepts and their applications to daily life for non-science majors. Topics include air pollution, global warming, energy, world of polymers, water and its importance to a technological society, food, drugs, and nuclear chemistry. Upon completion, students should be able to discuss, apply, and appreciate the impact of chemistry on modern society. CHM-115A 0 1 **Concepts in Chemistry Lab** 0 2 Take CHM-115: Take either previously or concurrently. Required. This course is a laboratory for CHM 115. Emphasis is placed on laboratory experiences that enhance materials

presented in CHM 115. Upon completion, students should be able to utilize basic laboratory procedures and apply

them to chemical concepts presented in CHM 115.

CHM-130 General, Organic, & Biochemistry 0 3 Take DRE-098(S23643) DMA-010 DMA-020 DMA-030 DMA-040; Take previously. Required. Requisites: 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. 0 1 CHM-130A General, Organic, & Biochemistry Lab 0 Requisites: Take CHM-130: Take either previously or concurrently. Required. This course is a laboratory for CHM 130. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 130. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 130. 3 3 CHM-131 **Introduction to Chemistry** 0 0 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-132 **Organic and Biochemistry** 4 3 3 Take 1 group; Option: Take CHM-131 CHM-131A; Option: Take CHM-151; Take previously. Requisites: 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-151 **General Chemistry I** 3 4 Take 1 group; Option: Take CHM-090 ENG-111(S24022) MAT-161(S20916); Minimum grade C; Requisites: Option: Take CHM-092 ENG-111(S24022) MAT-161(S20916); Minimum grade C; Option: Take CHM-090 ENG-111(S24022) MAT-171(S23934); Minimum grade C; Option: This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. Students will develop laboratory technique and learn how to effectively communicate experimental results in written reports. CHM-152 **General Chemistry II** 3 3 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.

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

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Take CHM-152; Take previously. Required.Take CHM-152; Minimum grade C; Take previously.

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CHM-251

Requisites: Required. Organic Chemistry I

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 Intro to Programming & Logic 2 3 0 3

Requisites: Take 1 group; Option: Take DMA-010 DMA-020 DMA-030 DMA-040; Option: Take MAT-121(S23927); Option: Take MAT-171(S23934); Option: Take MAT-060 MAT-070; Option: Take MAT-060 MAT-090; Option: Take MAT-060 MAT

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 manage files with operating system commands, 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(S23538) EGR-251 or MEC-210(S20669); Take previously. Required.Take 1 group; Option: Take EGR-250(S23987) CEG-115; Option: Take EGR-250(S23987) EGR-115(S20666); Option: Take EGR-251 CEG-115; Option: Take EGR-251 EGR-1

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(S10248); 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/surveying topics. Upon completion, students should be able to produce civil/surveying drawings using CAD software. This course utilizes Land Development Desktop Software.

171(S23934); Ta This course introd pavement constru	Highway Technology Take 1 group; Option: Take CEG-115 MAT-121(Stion: Take EGR-115(S20666) MAT-121(S23927); Represential elements of roadway componer action, roadway drawings and details, traffic analysic students should be able to interpret roadway details tion drawings.	Option: 1 onts and descriptions, geome	Take EGR- esign. Topi etric design	115(S206 ics include and othe	e subgrade and related topics.		
applications, the a detailing. Upon co	Steel and Timber Design Take EGR-250(S23538) EGR-251 or MEC-210(S2 duces the basic elements of steel and timber structure analysis and design of steel and timber beams, columpletion, students should be able to analyze, design software (CADD).	ures. Top umns, an	ics include d connection	strength	of materials oncepts of structura		
CIV-230 Requisites:	Construction Estimating Take CIS-111(S12478) EGR-115(S12560) CIS-11	2	3 6) or ABC	0 111: Tak	3		
for a construction and estimates, but	rs quantity take-offs of labor, materials, and equipm project. Topics include the interpretation of working all the codes, bidding techniques and procedures, are able to prepare a detailed cost estimate and bid to prepare.	g drawing and estim	gs and specating softw	cifications /are. Upo	, types of contracts on completion,		
CIV-240	Project Management	2	3	0	3		
include constructi dispute resolution	duces construction planning and scheduling technic on safety, operation analysis, construction schedul is, project records and documentation. Upon compl the roles of construction project participants, maintand dules.	ing, cons etion, stu	truction co idents sho	ntrol syste uld be abl	ems, claims and e to demonstrate ar		
project proposal, estimating, planni	Civil Engineering Technology Project Take CIV-111(S11393) CIV-125(S21521) or CIV-2 des an integrated team approach to civil engineerin site selection, analysis/design of structures, constru- ing, and management of a project. Upon completion e estimates, submit bid proposals, and manage pro-	g techno uction ma n, studen	logy projec iterial selec	ts. Empha	asis is placed on and cost		
	CRIMINAL JUSTICE (C	JC Pref	<u>ix)</u>				
CJC-111	Introduction to Criminal Justice	3	0	0	3		
This course introc structure, function completion, stude	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-113	Juvenile Justice	3	0	0	3		
Requisites: This course cover	rs the juvenile justice system and related juvenile is	sues. To	pics includ	de an ove	rview 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 Requisites:	Crime Scene Photography	2	3	0	3
legal system, and functions required scene photograph should be able to	rs methodologies for photographing crime scenes in the proper use of digital cameras and accessories of the properly photograph physical evidence and crimes, and methods and techniques specific to photogo poperate digital cameras using appropriate settings types of crime scene photographs, and use specials.	. Topics in ne scenes raphing cri to control	clude dig , factors me scen exposure	gital came affecting a es. Upon o e and dept	ras, operational admissibility of crime completion, students th of field, properly
CJC-121	Law Enforcement Operations	3	0	0	3
enforcement oper	duces fundamental law enforcement operations. To rations and related issues. Upon completion, studed to law enforcement operations.	-		-	-
CJC-122 Requisites:	Community Policing	3	0	0	3
This course cover on the empowerm completion, stude	rs the historical, philosophical, and practical dimensions to the police and the community to find solutions to the should be able to define community policing, dimpare community policing to traditional policing.	o problems	by form	ing partne	rships. Upon
CJC-131	Criminal Law	3	0	0	3
sources of substa responsibility, and	rs the history/evolution/principles and contemporary intive law, classification of crimes, parties to crime, dother related topics. Upon completion, students and apply the appropriate statutes/elements.	elements	of crimes	s, matters	of criminal
CJC-132	Court Procedure & Evidence	3	0	0	3
and the rules government, search and completion, stude	rs judicial structure/process/procedure from incider erning admissibility of evidence in court. Topics in discussed seizure laws, exclusionary and statutory rules of ents should be able to identify and discuss procedured procedures, and the admissibility of evidence.	clude cons evidence, a	ideration and other	of state a	nd federal courts, sues. Upon
CJC-141	Corrections	3	0	0	3
corrections. Topic treatment program	rs the history, major philosophies, components, and cs include historical evolution, functions of the varions, inmate control, and other related topics. Upon onents, processes, and functions of the corrections	ous compo completion	nents, al	ternatives	to incarceration,
CJC-144	Crime Scene Processing	2	3	0	3
considerations at preservation of ev	duces the theories and practices of crime scene protection the crime scene, processing indoor and outdoor so vidence and submission to the crime laboratory. Upoch various crime scenes and demonstrate theapparts	cenes, reco	ording, no etion, the	ote taking,	collection and
CJC-151	Introduction to Loss Prevention	3	0	0	3

This course introduces the concepts and methods related to commercial and private security systems. Topics

Requisites:

include the historical, philosophical, and legal basis of security, with emphasis on security surveys, risk analysis, and associated functions. Upon completion, students should be able to demonstrate and understand security systems, risk management, and the laws relative to loss prevention.

CJC-160 3 3 **Terrorism: Underlying Issues** Requisites: This course identifies the fundamental reasons why America is a target for terrorists, covering various domestic/international terrorist groups and ideologies from a historical aspect. Emphasis is placed upon recognition of terrorist crime scene; weapons of mass destruction; chemical, biological, and nuclear terrorism; and planning considerations involving threat assessments. Upon completion, students should be able to identify and discuss the methods used in terrorists' activities and complete a threat assessment for terrorists' incidents. **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-162** Intelligence Analysis and Security Management 3 3 Requisites: This course examines intelligence analysis and its relationship to the security management of terrorist attacks and other threats to national security of the United States. Topics include a historic overview, definitions and concepts, intelligence evolution-politicization-operations-strategies, surveillance, analysis perspectives, covert action, and ethics. Upon completion, students should be able to outline intelligence policies, evaluate source information, implement intelligence techniques and analysis, identify threats, and apply ethical behaviors. **CJC-163** 0 3 **Transportation and Border Security** 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-212 Ethics & Community Relations** 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 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** 3 3 Victimology 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-221 Requisites:	Investigative Principles	3	2	0	4	
This course introd scene/incident pro appropriate repor	duces the theories and fundamentals of the investig ocessing, information gathering techniques, collecti ts, court presentations, and other related topics. Up and demonstrate the techniques of the investigative	on/preser pon comp	vation of letion, stu	evidence ıdents sh	, preparation of ould be able to	
CJC-222 Requisites:	Criminalistics	3	0	0	3	
This course cove and prosecutions technologies, and	rs the functions of the forensic laboratory and its rel . Topics include advanced crime scene processing d other related topics. Upon completion, students sl lated crime scenes and request appropriate laborate	, investiga hould be a	ative tech able to ide	niques, c entify and	urrent forensic collect relevant	
CJC-223 Requisites:	Organized Crime	3	0	0	3	
This course introc the criminal justic criminal activity, le	duces the evolution of traditional and non-traditional are system. Topics include identifying individuals and egal and political responses to organized crime, and identify the groups and activities involved in organi	d groups i d other re	nvolved i lated topi	n organiz cs. Upon	ed crime, areas completion, stu	of dents
CJC-225 Requisites:	Crisis Intervention	3	0	0	3	
justice practitione dangerous, or pro	duces critical incident intervention and managementers. Emphasis is placed on the victim/offender situal oblem-solving citizen contacts. Upon completion, stonal, violent, drug-induced, and other critical and/or	tion as we tudents sh	ell as job- nould be a	related hi able to pro	gh stress, ovide insightful	
CJC-231	Constitutional Law	3	0	0	3	
system. Topics in contemporary crim	rs the impact of the Constitution of the United States include the structure of the Constitution and its ameriminal justice issues, and other related topics. Upon the basic structure of the United States Constitution	ndments, completi	court dec on, stude	isions pe nts shoul	rtinent to d be able to	
CJC-232	Civil Liability	3	0	0	3	
liability, employm	rs liability issues for the criminal justice professiona ent issues, and other related topics. Upon complet liscuss contemporary liability issues.					trial
CJC-233	Correctional Law	3	0	0	3	
include examination restoration of right	duces statutory/case law pertinent to correctional co- tion of major legal issues encompassing incarceration ats, and other related topics. Upon completion, stud- ctly affect correctional systems and personnel.	n, probati	ion, parol	e, restitut	ion, pardon,	
CJC-241 Requisites:	Community-Based Corrections	3	0	0	3	

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This course covers programs for convicted offenders that are used both as alternatives to incarceration and in post-

incarceration situations. Topics include offenders, diversion, house arrest, restitution, community service, probation and parole, including both public and private participation, and other related topics. Upon completion, students should be able to identify/discuss the various programs from the perspective of the criminal justice professional, the offender, and the community.

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-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.

CJC-260 Threat Assessment 1 2 0 2

Requisites:

This course prepares students to perform extensive security audits for private corporations and for local and state government, identifying weaknesses in their overall security programs. Emphasis will be placed on risk analysis studies that examine the methods, procedures, and systems for security gaps and vulnerabilities. Upon completion, students should be able to evaluate all facets of a protective program from corporate disaster response planning to security teams guarding local/state officials.

CJC-262 High-Risk Event Planning 1 2 0 2

Requisites:

This course introduces students to the principles of high-risk executive protection and the planning associated with security during visits from government officials and other dignitaries. Emphasis will be placed on conducting advance surveys, residential security, restaurant and banquet security, surveillance detection, and counter surveillance operations. Upon completion, students should be able to demonstrate the ability to write security plans for high-risk events.

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-112A 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-112B Construction Mgt I 4 4 0 6

Requisites: Take CMT-112A; Take previously. Required.

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.

Requisites:	Codes and inspections	3	0	0	3	
This course cover residential and cocodes. Upon com	rs building codes and the code inspections process immercial buildings. Emphasis is placed on comme pletion, students should understand the building continuity to construction projects.	rcial, resi	dential, a	nd access	sibility (ADA)	_
CMT-210 Requisites:	Construction Management Fundamentals	3	0	0	3	
This course introcknowledge and a communications, discipline, setting	duces the student to the fundamentals of effective soplied skills. Topics include safety, planning and so conflict resolution, recruitment, employment laws a objectives, and training. Upon completion, student successful as a supervisor in the construction indus	heduling, and regula s should b	contracts tions, lea	s, problem dership, n	-solving, notivation, te	eamwork,
CMT-212	Total Safety Performance	3	0	0	3	
individual respons construction haza accountability, sa	Take CMT-210(S13450); Take either previously or the importance of managing safety and productive sibility for safety and health in the workplace. Topicards, communicating and enforcing policies, OSHA fety planning, training, and personal protective equippervise safety at a construction jobsite and qualify	vity equally cs include compliand ipment. U	y by enco safety m ce, person Jpon com	ouraging p anageme nal respor pletion, th	nt, controlling nsibility and ne student sh	g
CMT-214	Planning and Scheduling	3	0	0	3	
vocabulary of pro short interval plan completion, the si	Take CMT-210(S13450) BPR-130(S11505); Take rs the need for and the process of planning construited scheduling. Topics include project preplanning aning, schedule updating and revising, and compute tudent should be able to understand the need for place of planning skills.	ction proj , scheduli er-based p	ects, as wing format	vell as the s, plannin and sched	g for produc Iuling. Upon	tion, 1
CMT-216	Costs and Productivity	3	0	0	3	
Requisites: This course cover hours, and materioverall total proje	Take CMT-210(S13450); Take previously. Requires the relationships between time, work completed, als used. Topics include production rates, production cost control. Upon completion, the student should controlled and productivity improved on a construction.	red. work-hou vity unit ra ld be able	rs spent, ates, work to demo	schedule c method i	mprovemen	ts, and
CMT-218 Requisites:	Human Relations Issues Take CMT-210(S13450); Take previously. Requi	3 red.	0	0	3	
This course provi include relationsh regulations, and i	des instruction on human relations issues as they r ips, human behavior, project staffing issues, teamy dentifying and responding to conflict, crisis, and dis inderstanding of the importance of human relations	elate to co vork, effect cipline. U	ctive com Jpon com	municatio pletion, th	n networks, e student wi	laws and
CMT-226	Applications Project	2	2	0	3	
Requisites: previously. Requ	Take BPR-130(S23275) BPR-230 CMT-210(S232 ired.	70) CMT-	112 CST	-241(S23	984) CMT-21	14; Take

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-110 **Introduction to Communication** 3 3 Requisites: Take 1 group; Option: Take ENG-080 RED-080; Option: Take DRE-097(S23642); Take previously. Required. This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion, students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts. COM-120 **Intro to Interpersonal Communication** 0 0 3 Requisites: Take 1 group; Option: Take ENG-080 RED-080; Option: Take DRE-097(S23642); 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-231 **Public Speaking** 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 wellorganized speeches and participate in group discussion with appropriate audiovisual support. COM-232 **Election Rhetoric** 3 0 n 3 Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Take Requisites: previously. Required. This course provides an overview of communication styles and topics characteristic of election campaigns. Topics include election speeches, techniques used in election campaigns, and election speech topics. Upon completion, students should be able to identify and analyze techniques and styles typically used in election campaigns. COSMETOLOGY (COS Prefix) COS-111 **Cosmetology Concepts I** 4 Take COS-112; Take either previously or concurrently. Required. Requisites: 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-111A** Cosmetology Concepts I Requisites: Take COS-112; Take either previously or concurrently. Required.Take COS-112A(L48049); Take either previously or concurrently. Recommended. 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. This is part one of a two part course. **COS-111B** Cosmetology Concepts I Take COS-112; Take either previously or concurrently. Required.Take COS-112B(L48050); Take Requisites: either previously or concurrently. Recommended. 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. This is part two of a two part course.

COS-112 0 24 0 8 Salon I 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-112A** 0 24 0 8 Requisites: Take COS-111; Take either previously or concurrently. Required.Take COS-111A(L48051); Take either previously or concurrently. Recommended. 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. This is part one of a two part course. COS-112B Salon I 0 24 0 8 Take COS-111; Take either previously or concurrently. Required.Take COS-111B(L48052); Take Requisites: either previously or concurrently. Recommended. 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-113A Cosmetology Concepts II** 4 0 4 Requisites: Take COS-114(S12284); Take either previously or concurrently. Required. Take COS-114A(L48067); Take either previously or concurrently. Recommended. 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. This is part one of a two part course. COS-113B **Cosmetology Concepts II** 4 0 4 Take COS-114(S12284); Take either previously or concurrently. Required. Take COS-Requisites: 114B(L48068); Take either previously or concurrently. Recommended. 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. This is part two of a two part course. COS-114 Salon II 24 0 8 Take COS-113(S12335); Take either previously or concurrently. Required. Requisites: 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-114A** 24 8 Requisites: Take COS-113(S12335); Take either previously or concurrently. Required. Take COS-113A(L48065); 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-114B** Salon II 0 24 8 Requisites: Take COS-113(S12335); Take either previously or concurrently. Required. Take COS-

113B(L48066); Take either previously or concurrently. Recommended.

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-115 Cosmetology Concepts III 4 0 4 Requisites: Take COS-116(S12300); Take either previously or concurrently. 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-115A Cosmetology Concepts III** 4 Requisites: Take COS-116(S12300); Take either previously or concurrently. Required. Take COS-116A; Take either previously or concurrently. Recommended. 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. This is part one of a two part course. **COS-115B Cosmetology Concepts III** Take COS-116(S12300); Take either previously or concurrently. Required. Take COS-116B; Take Requisites: either previously or concurrently. Recommended. 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. This is part two of a two part course. **COS-116A** Salon III 0 12 4 Take COS-115(S12373); Take either previously or concurrently. Required. Take COS-Requisites: 115A(L48069); Take either previously or concurrently. Recommended. This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediatelevel 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. This is part one of a two part course. **COS-116B** 0 12 Take COS-115(S12373); Take either previously or concurrently. Required. Take COS-Requisites: 115B(L48070); Take either previously or concurrently. Recommended. This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediatelevel 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. This is part two of a two part course. **COS-117** 2 **Cosmetology Concepts IV** 0 Take COS-118(S20023); Take either previously or concurrently. Required. Requisites: 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-117A Cosmetology Concepts IV** 0 2 Take COS-118(S20023); Take either previously or concurrently. Required. Take COS-Requisites: 118A(L48077); Take either previously or concurrently. Recommended.

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. This is part one of a two part course.

COS-117B Cosmetology Concepts IV Requisites: Take COS-118(S20023); Take either previously or concurrently. Required. Take COS-118B(L48078); Take either previously or concurrently. Recommended. 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. This is part two of a two part course. **COS-118** 0 7 Salon IV 21 Requisites: Take COS-117(S12343); Take either previously or concurrently. 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-119 Esthetics Concepts I** 2 2 Requisites: This course covers the concepts of esthetics. Topics include orientation, anatomy, physiology, hygiene, sterilization, first aid, chemistry, basic dermatology, and professional ethics. Upon completion, students should be able to demonstrate an understanding of the concepts of esthetics and meet course requirements. **COS-119A Esthetics Concepts I** 2 0 0 2 Requisites: This course covers the concepts of esthetics. Topics include orientation, anatomy, physiology, hygiene, sterilization, first aid, chemistry, basic dermatology, and professional ethics. Upon completion, students should be able to demonstrate an understanding of the concepts of esthetics and meet course requirements. This is part one of two part course. **COS-120 Esthetics Salon I** 6 0 18 0 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-120A Esthetics Salon I** 0 6 18 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-120B Esthetics Salon I

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. This is part two of a two part course.

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COS-125 Esthetics Concepts II 2 0 0 2 Requisites:

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-125A 2 2 **Esthetics Concepts II** 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. This is part one of a two part course. 2 **COS-125B Esthetics Concepts II** 2 0 0 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. This is part two of a two part course. **COS-126** 0 6 **Esthetics Salon II** 18 0 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-193A Selected Topics in Cosmetology** 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. 1 2 **COS-224 Trichology & Chemistry** 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** 0 2 Take COS-223; Take previously. Required. Requisites: This course covers advanced techniques in coloring applications and problem solving situations. Topics include

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.

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

COS-250 Computerized Salon Ops 1 0 0 1

Requisites:

techniques in hair coloring situations.

This course introduces computer and salon software. Emphasis is placed on various computer and salon software applications. Upon completion, students should be able to utilize computer skills and software applications in the salon setting.

COMPUTER SCIENCE (CSC Prefix)

CSC-116 Requisites:	Introduction to Functional Programming	2	2	0	3					
This course introduces the concepts of functional programming. Emphasis is placed on using functions and procedures for the fundamental building blocks of a program. Upon completion, students should be able to program in a style that emphasizes the evaluation of an expression rather than the execution of commands.										
MAT-095; Take p This course provi science, including sorting algorithms	Computing Fundamentals I Take 1 group; Option: Take DMA-010 DMA-020 7); Option: Take MAT-171(S23934); Option: Take previously. Required. des the essential foundation for the discipline of country that the professional of the p	e MAT-080 omputing a rithm desig completior	; Option: and a prog n, data ab n, student	Take MAT gram of stu estraction, s s should be	-090; Option: Take dy in computer searching and e able to solve					
MAT-095; Take p This course provi science, including sorting algorithms	Computing Fundamentals I Take 1 group; Option: Take DMA-010 DMA-020 Y); Option: Take MAT-171(S23934); Option: Take previously. Required. des the essential foundation for the discipline of compute the professional. Topics include algoing, and procedural programming techniques. Upon pralgorithms, specify data types, perform sorts an	e MAT-080 omputing a rithm desig completior	; Option: and a prog n, data ab n, students	Take MAT gram of stu estraction, s s should be	-090; Option: Take dy in computer searching and e able to solve					
common algorithm	Python Programming duces computer programming using the Python pr ms and programming principles utilizing the standa ents should be able to design, code, test, and debe	ard library	distributed	d with Pyth						
languages, noSQ	Introduction to Data Science Programming rs the key technologies used to manipulate, store L databases, database scalability, performance m use programming techniques to investigate data	netrics and	tuning. U	pon comple						
software design norganization meth	Computing Fundamentals II Take CSC-120(S11470); Take previously. Requides in-depth coverage of the discipline of computinethodologies, analysis of algorithm and data strunods. Upon completion, students should be able to and understand social/ethical responsibilities of the computation of the comp	ing and the actures, sea o use softw	role of th arching an are desig	e profession of the profession	onal. Topics include					
principles. Topics	C Programming duces computer programming using the C programs include input/output operations, iteration, arithmeton completion, students should be able to design	etic operati	ons, array	s, pointers	s, filters, and other					
CSC-134 Requisites: previously. Requ This course introd	C++ Programming Take MAT-121(S23927) MAT-143 MAT-152 MA' ired. duces computer programming using the C++ prog		•	•	·					

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-135 COBOL Programming

2 3 0 3

Requisites:

This course introduces computer programming using the COBOL 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.

CSC-136 Fortran Programming

2 3 0 3

Requisites:

This course introduces computer programming using the Fortran 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.

CSC-139 Visual BASIC Programming

2 3 0 3

Requisites:

This course introduces computer programming using the Visual BASIC 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-141 Visual C++ Programming

2 3 0 3

Requisites: Take CSC-134(S21066); Take previously. Required.

This course introduces computer programming using the Visual 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, debug, and implement objects using the appropriate environment at a beginning level.

CSC-151 JAVA Programming

2 3 0 3

Requisites: Take MAT-121(S23927) MAT-143 MAT-152 MAT-171(S23934) or MAT-271(S23939); 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-152 SAS 2 3 0 3

Requisites:

This course introduces the fundamentals of SAS programming. Emphasis is placed on learning basic SAS commands and statements for solving a variety of data processing applications. Upon completion, students should be able to use SAS data and procedure steps to create SAS data sets, do statistical analysis, and general customized reports.

CSC-153 C# Programming

2 3 0 3

Requisites:

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, debug, and implement objects using the appropriate environment at the beginning level.

CSC-154 2 2 0 **Software Development** 3 Requisites: 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-163** 2 **C Sharp Application Development** Requisites: Take CSC-153: Take previously. Required. This course introduces the use of web-enabled applications and web services in the development of C# based applications. Emphasis is placed on creating web-enabled applications using event driven programming, graphical user interface design, database connectivity, and software development principles. Upon completion, students should be able to create web-enabled applications with a graphical user interface using the C# language. CSC-174 Server-Side Javascript 2 Take 1 group; Option: Take CSC-120(S24356) CSC-121; Option: Take WEB-115(S22059); Requisites: Option: Take CSC-151; Option: Take CSC-153; Take previously. Required. This course introduces the use of JavaScript in the server environment to build server-side applications. Topics include asynchronous programming, connecting to other machines, testing, and connecting to different databases. Upon completion, students should be able to create server-side applications using JavaScript applications. **CSC-216 Software Architecture** 2 0 3 Requisites: This course covers the fundamentals of N-tier and Web API software architectures through the exploration of various data access methodologies. Topics include presentation, middle/business and data tiers (N-tier), Web APIs and XML. Upon completion, students should be able to discuss the differences and similarities between N-tier and other software architectures. **CSC-220 Machine Implementation of Algorithms** 3 2 0 4 Take CSC-120(S11470); Take previously. Required.Take MAT-271(S13631); Take either Requisites: previously or concurrently. Required. This course covers the organization and operation of real computer systems at the assembly language level. Topics include mapping of statements and constructs onto machine instruction sequences, internal data types and structures representation, numerical computation, and iterative approximation methods. Upon completion, students should be able to analyze computer system organization, implement procedural language elements, and describe the programming language translation process. **CSC-226** .NET Programming 0 3 Take 1 group; Option: Take CSC-153 DBA-120; Option: Take CSC-139(S21071) DBA-120; Take Requisites: previously. Required. This course introduces the use of C# and XAML to design, develop, test and deploy .NET applications. Topics include building GUIs, data binding, Web API services, automated testing and deployment. Upon completion, students should be able to design, develop, test and deploy .NET applications. **CSC-227** 2 2 0 **Cloud Application Development** 3 Requisites: This course introduces how to build, deploy, host, and manage applications using cloud technologies. Topics include

CSC-229 Mpi Programming 2 3 0 3 Requisites:

This course introduces students to the Message Passing Interface (MPI) library. Topics include writing programs

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.

using the MPI routines, adding parallelism to application code, collective operations, timing, manipulation communicators, PTP operations, and tuning parallel programs. Upon completion, students should be able to design and code a program using the MPI library.

CSC-233 Advanced C Programming

2 3 0 3

Requisites: Take CSC-133(S21065); Take previously. Required.

This course is a continuation of CSC 133 using the C programming language with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, subprograms, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug and document programming solutions.

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-235 Advanced COBOL Programming

2 3 0 3

Requisites: Take CSC-135(S21068); Take previously. Required.

This course is a continuation of CSC 135 using the COBOL programming language with structured 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-239 Advanced Visual BASIC Programming

2 3 0 3

Requisites: Take CSC-139(S21071); Take previously. Required.Take CSC-139(S21071); Take previously.

Required.

This course is a continuation of CSC 139 using the Visual BASIC 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-244 CICS

4 2 0 5

Requisites: Take CSC-235(S13666); Take previously. Required.

This course provides an in-depth study of interactive transaction processing using command level CICS. Topics include pseudoconversational programming, basic mapping support, control tables, storage areas, file maintenance, screen design, and EDF debugging. Upon completion, students should be able to design, code, test, debug, and document command level COBOL programs for menuing, record processing, browsing, and temporary storage.

CSC-249 Data Structure & Algorithms

2 3 0 3

Requisites: Take CSC-133(S21065) CSC-134(S21066) CSC-135(S21068) CSC-136(S21069) CSC-138(S21070) CSC-139(S21071) CSC-140 CSC-141(S21072) or CSC-142(S21073); Take previously. Required.Take CSC-151; Take previously. Required.

This course introduces the data structures and algorithms frequently used in programming applications. Topics include lists, stacks, queues, dequeues, heaps, sorting, searching, mathematical operations, recursion, encryption, random numbers, algorithm testing, and standards. Upon completion, students should be able to design data

structures and implement algorithms to solve various problems.

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-253 **Advanced C# Programming** 2 3 0 3 Take CSC-153; Take previously. Required. Requisites: This course is a continuation of CSC 153 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, debug, and implement objects using the appropriate environment. CSC-256 **Software Quality Assurance** 0 3 Requisites: This course covers the principles, concepts and processes of software testing. Topics include testing technologies, static techniques, test design techniques, and test management. Upon completion, students should be able to design and implement software testing plans and procedures throughout the software life cycle. CSC-258 **JAVA Enterprise Programs** Requisites: Take CSC-151; Take previously. Required.Take DBA-110; Take previously. Required.Take CSC-251; Take concurrently. Required. This course provides a continuation to CSC 151 using the Java Enterprise Edition (JEE) programming architecture. Topics include distributed network applications, database connectivity, Enterprise Java Beans, servlets, collection frameworks, JNDI, RMI, JSP, multithreading XML and multimedia development. Upon completion, students should be able to program a client/server enterprise application using the JEE framework. **CSC-278 JAVA Message Service** 2 3 Requisites: Take CSC-151; Take previously. Required. This course introduces the student to the Java Message Service (JMS), an application program interface that supports messaging between computers in a network. Topics include point-to-point models, transactions, reliability issues, durable subscriptions and introduces messaging within Enterprise JavaBeans technology. Upon completion, students should be able to complete a project using the JMS technology. CSC-289 3 **Programming Capstone Project** 4 0 Take CTS-285(S21012); Take previously. Required. Requisites: 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-289 **Programming Capstone Project** 0 3 Take CTS-115(S20996) CTI-110(S22510) CTI-120(S24360); Take previously. Required.Take Requisites: CSC-239(S21083) CSC-251 CSC-253 or CSC-154; 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-292A Selected Topics in Computer Programming** 2 Take CSC-239(S21083); Take previously. Required. 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. CSC-297 Seminar in Comp Prog Visual C# Project 1 3 2

This course provides an opportunity to explore topics of current interst. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically

Take CSC-253: Take previously. Required.

analyze issues and establish informed opinions.

Requisites:

CONSTRUCTION (CST Prefix) **CST-131** OSHA/Safety/Certification 2 2 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. 2 2 **CST-150 Building Science** 0 3 Take CMT-112; Take previously. Required. 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 0 3 Take BPR-130(S23275) MAT-121(S23927) or MAT-171(S23934); Take previously. Required. Requisites: 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. 2 CST-242 3 0 4 Planning/Estimating II 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. CST-244 Sustainable Building Design 2 3 0 3 Requisites: This course is designed to increase student knowledge about integrating sustainable design principles and green building technologies into mainstream residential construction practices. Emphasis is placed on reducing negative environmental impact and improving building performance, indoor air quality and the comfort of a building's occupants. Upon completion, students should be able to identify principles of green building, environmental efficiency and conservation of natural resources in relation to basic construction practices. **COMPUTER TECH INTEGRATION** (CTI Prefix) CTI-110 3 Web, Programming, and Database Foundation 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** 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, memorysystem, 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 3 Take CTI-130(S22512) or NOS-110(S20980); Take previously. Required. Requisites: 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** 0 3 Requisites: Take CTI-130(S22512); 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-193A **Selected Topics in Troubleshooting Mthd** 0 0 3 3 Requisites: Take CTI-130(S22512); Take previously. Required. 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. 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. CTI-240 Virtualization Administration I 1 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 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 Requisites: Take CTI-141 CTI-240 NET-126(S21096) NOS-230(S24041) WBL-112; 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-060 **Essential Computer Usage** 1 2 0 2 Requisites: This course covers the basic functions and operations of the computer. Topics include identification of components, overview of operating systems, and other basic computer operations. Upon completion, students should be able to

This course includes the fundamentals of the Windows(TM) software. Topics include graphical user interface, icons, directories, file management, accessories, and other applications. Upon completion, students should be able to use Windows(TM) software in an office environment.

perform basic computer commands, access files, print documents and complete fundamental application operations.

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Windows (TM)

CTS-112

Requisites:

CTS-115 Information Systems Business Concepts 3 0 3 Take CIS-110(S21058) CTI-110(S22510) or SGD-111(S21240); Take previously. Required. 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-118 2 **Is Professional Communications** Take 1 group; Option: Take CTI-120(S22511) CTS-135(S24367); Option: Take CTI-120(S22511) Requisites: CTI-130(S22512); Option: Take CIS-110(S21058) CTS-135(S24367); Take previously. Required. This course prepares the information systems professional to communicate with corporate personnel from management to end-users. Topics include information systems cost justification tools, awareness of personal hierarchy of needs, addressing these needs, and discussing technical issues with non-technical personnel. Upon completion, students should be able to communicate information systems issues to technical and non-technical personnel. CTS-120 **Hardware/Software Support** 0 3 Requisites: Take NOS-110(S20980) CTI-130(S22512) or CIS-110(S21058); Take previously. Required. 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 nonfunctioning personal computers. CTS-125 **Presentation Graphics** 0 3 Take CIS-110(S21058) or CIS-111(S21059); Take previously. Required. Requisites: This course provides hands-on experience with a graphics presentation package. Topics include terminology, effective chart usage, design and layout, integrating hardware components, and enhancing presentations with text, graphics, audio and video. Upon completion, students should be able to design and demonstrate an effective presentation. **CTS-130 Spreadsheet** 2 3 Take CIS-110(S21058) CIS-111(S21059) or OST-137(S14241); Take previously. Required. 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. 2 2 3 CTS-130 Spreadsheet 0 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** 4 Take CIS-110(S21058) or CIS-111(S21059); Take previously. Required. Requisites: 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.

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Take CTI-120(S22511) or CIS-110(S21058); Take previously. Required. 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-198 Seminar in Comp Crimes Investigations** 0 3 2 Requisites: This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions. CTS-210 **Computer Ethics** Requisites: Take NET-110(S21056) CIS-110(S21058) CIS-111(S21059) or TNE-111(S10460); Take previously. Required. This course introduces the student to current legal and ethical issues in the computer/engineering field. Topics include moral reasoning, ethical standards, intellectual property, social issues, encryption, software piracy, constitutional issues, and public policy in related matters. Upon completion, students should be able to demonstrate an understanding of the moral and social responsibilities and public policy issues facing an industry. **CTS-210 Computer Ethics** 3 Take CIS-110(S21058) NET-125(S24501) SEC-110(S23204) or CTI-120(S22511); Take Requisites: previously. Required. This course introduces the student to current legal and ethical issues in the computer/engineering field. Topics include moral reasoning, ethical standards, intellectual property, social issues, encryption, software piracy, constitutional issues, and public policy in related matters. Upon completion, students should be able to demonstrate an understanding of the moral and social responsibilities and public policy issues facing an industry. **CTS-220 Advanced Hardware/Software Support** 3 Requisites: Take CTS-120(S20998); 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-225 Spreadsheet Data Analysis 0 3 Requisites: This course presents basic and advanced techniques for data analysis and management using electronic spreadsheets. Topics include an overview of spreadsheet analytics, terminology, model preparation, and analytical techniques. Upon completion, students should be able to develop reliable and effective quantitative data models and reports to support analysis and decision-making for common business systems. CTS-230 2 2 0 3 **Advanced Spreadsheet** Take CTS-130(S21000); Take previously. Required. Requisites: 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. 2 CTS-235 **Integrated Software Advanced** 0 4 Requisites: Take CTS-135(S21001); Take previously. Required. This course provides strategies to perform data transfer among software programs. Emphasis is placed on data interchange among word processors, spreadsheets, presentation graphics, databases and communications products.

Upon completion, students should be able to integrate data to produce documents using multiple technologies.

CTS-155

Tech Support Functions

CTS-240 2 2 0 **Project Management** 3 Requisites: This course introduces computerized project management software. Topics include identifying critical paths, cost management, and problem solving. Upon completion, students should be able to plan a complete project and project time and costs accurately. CTS-245 2 **Integrated Apps Expert** 0 3 Requisites: Take CTS-235; Take previously. Required. This course provides an emphasis on mastery features in each of the application program areas. Emphasis is placed on end-user skills to achieve advanced support level proficiency by utilizing software for cross-platform integration, automation of processing, and application problem solving. Upon completion, students should be able to demonstrate expert level skills in the utilization of advanced features of the software in the workplace. CTS-255 0 3 **Advanced Tech Support Functions** 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-272 **Desktop Support: Applications** 3 Take CIS-110(S21058) or CIS-111(S21059); Take previously. Required. Take 1 group; Option: Requisites: Take CIS-110(S21058) CTS-120(S23679); Option: Take CIS-111(S21059) CTS-120(S23679); Take previously. This course is designed to prepare students for a foundation in Desktop Support certification in office productivity applications. Emphasis is placed on developing proficiency in the end-user support skills, processes, and procedures necessary to correctly support office productivity products. Upon completion, students should be able to prepare for industry-level certification and utilize advanced support tools toward resolving office productivity end-user problems. CTS-272 **Desktop Support: Applications** 3 Requisites: Take CTS-120(S23679) NOS-130(S24397); Take previously. Required. This course is designed to prepare students for a foundation in Desktop Support certification in office productivity applications. Emphasis is placed on developing proficiency in the end-user support skills, processes, and procedures necessary to correctly support office productivity products. Upon completion, students should be able to prepare for industry-level certification and utilize advanced support tools toward resolving office productivity end-user problems. CTS-285 Systems Analysis & Design Take CIS-115(S23954); Take previously. Required. Take CIS-115(S21061) CTS-115(S20996); Requisites: 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-285 Systems Analysis & Design 0 0 3 3 Take 1 group; Option: Take CTI-110(S22510) CTS-115(S20996); Option: Take CIS-115(S24352) Requisites:

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

CTS-115(S20996); Take previously. Required.

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 3 **System Support Project** Take CTI-110(S22510) CTI-120(S22511) CTS-115(S20996); Take previously. Required.Take Requisites: CTI-110(S22510) CTI-120(S22511) CTS-115(S20996) CTS-135(S24367) CTS-220 CTS-285(S24373) NOS-230(S24041); 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. CULINARY (CUL Prefix) **CUL-110** 0 0 2 Sanitation and Safety Requisites: Take DMA-030 DRE-098(S23643); Take previously. Required. 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** 3 **Nutrition for Foodservice** 0 Take CUL-110(S22835) CUL-140(S22844) or CUL-142(S22845); Take previously. Required.Take Requisites: 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-130** 2 Menu Design Requisites: Take DMA-030 DRE-098(S23643); Take previously. Required. 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-135** Food and Beverage Service 0 0 2 Requisites: Take CUL-110(S22835); Take previously. Required. Take CUL-135A(S22843); Take either previously or concurrently. Required. This course is designed to cover the practical skills and knowledge necessary for effective food and beverage service in a variety of settings. Topics include 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 competence in human relations and the skills required in the service of foods and beverages. Concepts and skills studied in this course will be applied in CUL 135A, Food and Beverage Service Lab. **CUL-135A** Food and Beverage Service Lab 2 1 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** 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

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Take CUL-110(S22835); Take either previously or concurrently. Required. Requisites:

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-160 Baking I

Requisites: Take CUL-110(S22835); Take either previously or concurrently. Required. Take DMA-030 DRE-098(S23643); Take previously. Required.Take CUL-110(S22835) 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

Take CUL-110(S22835); Take either previously or concurrently. Required. Take CUL-Requisites: 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 2

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Take DMA-030 DRE-098(S23643); Take previously. Required. 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-230 **Global Cuisines**

Requisites:

5 Take CUL-110(S11030) CUL-140(S12163); Take previously. Required.Take CUL-110(S22835)

WBL-112 CUL-140(S22844) CUL-240(S22853); Take previously. Required.

This course provides practical experience in the planning, preparation, and presentation of representative foods from a variety of world cuisines. Emphasis is placed on indigenous ingredients and customs, nutritional concerns, and cooking techniques. Upon completion, students should be able to research and execute a variety of international and domestic menus.

CUL-240 Culinary Skills II

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Take CUL-110(S22835) CUL-140(S22844); Take previously. Required.Take CUL-110(S22835) Requisites: 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

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Take CUL-110(S22835) CUL-140(S22844) CUL-240(S22853); Take previously. Required.Take Requisites: 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 concurrent 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 0 3 Take CUL-110(S22835) CUL-160(S22847); Take previously. Required.Take CUL-110(S22835) Requisites: 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** 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 pâtés, 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-280 Pastry and Confections** 3 1 Take CUL-110(S22835) CUL-140(S22844) CUL-160(S22847); Take previously. Required.Take Requisites: CUL-110(S22835) CUL-140(S22844) CUL-160(S22847); Take previously. Required. This course includes confections and candy, chocolate techniques, transfer sheets, pulled and blown sugar, pastillage, marzipan and custom silicon molding. Emphasis is placed on showpieces, pre-set molding, stencil cutouts, pattern tracing and/or free-hand shaping. Upon completion, students should be able to design and produce centerpieces and showpieces. **CUL-287 Cultural Experience** 2 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-110 Database Concepts** 2 3 0 3 Requisites: This course introduces database design and creation using a DBMS product. Emphasis is placed on data dictionaries, normalization, data integrity, data modeling, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to design and implement normalized database structures by creating

simple database tables, queries, reports, and forms.

DBA-115 2 2 0 3 **Database Applications**

Requisites: Take DBA-110; Take previously. Required.

This course applies concepts learned in DBA 110 to a specific DBMS. Topics include manipulating multiple tables, advanced queries, screens and reports, linking, and command files. Upon completion, students should be able to create multiple table systems that demonstrate updates, screens, and reports representative of industry requirements.

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:

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-192 Selected Topics in Dba:oracle Internet 0 4 0 2

Requisites: Take DBA-120 DBA-240; Take previously. Required.

This course provides an opportunity to explore areas of current interest in the 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. This course provides an opportunity to explore areas of current interest in the 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.

DBA-192A Selected Topics in Database 1 3 0 2

Requisites:

This course provides an opportunity to explore areas of current interest in the 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.

DBA-193A Selected Topics in Database Management 2 3 0 3

Requisites: Take DBA-260 DBA-230; Take previously. Required.

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. 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. Upon completion, students should be able to complete a Database Administration Project from the definition phase through implementation with minimal instructor support.

DBA-210 Database Administration 2 3 0 3

Requisites: Take DBA-110; Take previously. Required.

This course covers database administration issues and distributed database concepts. Topics include database administrator (DBA) goals and functions, backup and recovery, standards and procedures, training, and database security and performance evaluations. Upon completion, students should be able to produce functional DBA documentation and administer a database.

DBA-220 Oracle Database Programming II 2 2 0 3

Requisites: Take DBA-120; Take previously. Required.

This course is designed to enhance programming skills developed in DBA 120. Topics include application development with GUI front-ends and embedded programming. Upon completion, students should be able to develop an Oracle DBMS application which includes a GUI front-end and report generation.

DBA-223 MySQL Database Programming II 2 2 0 3

Requisites: Take DBA-120; Take previously. Required.

This course is designed to enhance programming skills developed in DBA 120. Topics include application development with GUI front-ends and embedded programming. Upon completion, students should be able to develop a MySQL DBMS application which includes a GUI front-end and report generation.

DBA-224 2 **SAS Database Programming II** 2 0 3 Take DBA-120; Take previously. Required. Requisites: This course is designed to enhance programming skills developed in DBA 120. Topics include application development with GUI front-ends and embedded programming. Upon completion, students should be able to develop a SAS DBMS application which includes a GUI front-end and report generation. 0 **DBA-230 Databases in Corporate Environments** 3 0 3 Requisites: Take DBA-120 DBA-240; Take previously. Required. This course covers database systems as they relate to the corporate environment. Topics include knowledge-based, decision-support, and expert systems; database choices; data warehousing; and corporate structure. Upon completion, students should be able to analyze and recommend database systems needed by a corporation. **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. **DBA-260** Oracle Database Management System Admin 3 Requisites: Take DBA-120 DBA-240; Take previously. Required. This course examines advanced Oracle database administration issues and distributed database concepts. Topics include backup and recovery, transporting of data between databases, database networking concepts, and resolution of database networking issues. Upon completion, students should be able to manage backup recovery and implement networked database solutions. **DBA-261 SQL Server Database Management System Administration** 2 0 3 Take DBA-221; Take concurrently. Required. Requisites: This course examines advanced SQL Server database administration issues and distributed database concepts. Topics include backup and recovery, transporting of data between databases, database networking concepts, and resolution of database networking issues. Upon completion, students should be able to manage backup recovery and implement networked database solutions. **DBA-264 SAS Database Management System Admin** 2 2 0 3 Requisites: This course examines advanced SAS database administration issues and distributed database concepts. Topics include backup and recovery, transporting of data between databases, database networking concepts, and resolution of database networking issues. Upon completion, students should be able to manage backup recovery and implement networked database solutions. **DBA-270** 2 **Oracle Performance Tuning** 0 3 Take NOS-130(S20983); Take previously. Required.Take NOS-130(S23023) DBA-120; Take Requisites: previously. Required. This course covers Oracle performance tuning concepts and techniques. Topics include database tuning and Oracle performance tools. Upon completion, students should be able to configure and diagnose an Oracle database for optimal performance. **DBA-273 MySQL Performance Tuning** 2 2 0 3 Requisites: Take NOS-130(S20983); Take previously. Required. This course covers MySQL performance tuning concepts and techniques. Topics include database tuning and MySQL performance tools. Upon completion, students should be able to configure and diagnose a MySQL database

for optimal performance.

DBA-274 2 **SAS Performance Tuning** 2 0 3 Take NOS-130(S20983); Take previously. Required. Requisites: This course covers SAS performance tuning concepts and techniques. Topics include database tuning and SAS performance tools. Upon completion, students should be able to configure and diagnose a SAS database for optimal performance. **DBA-285 Data Warehousing and Mining** 2 3 0 3 Requisites: Take NOS-130(S20983); Take previously. Required. This course introduces data warehousing and data mining techniques. Emphasis is placed on data warehouse design, data transference, data cleansing, retrieval algorithms, and mining techniques. Upon completion, students should be able to create, populate, and mine a data warehouse. **DBA-285 Data Warehousing and Mining** 2 3 0 3 Requisites: This course introduces data warehousing and data mining techniques. Emphasis is placed on data warehouse design, data transference, data cleansing, retrieval algorithms, and mining techniques. Upon completion, students should be able to create, populate, and mine a data warehouse. **DBA-289 Database Project** 1 Requisites: Take DBA-240 DBA-120; Take previously. Required. Take DBA-220 or DBA-221; Take previously. Required. This course provides an opportunity to complete a significant database systems project with minimal instructor support. Emphasis is placed on written and verbal communication skills, documentation, presentation, and user training. Upon completion, students should be able to present an operational database system which they have created. **DBA-291A** Selected Topics in Database Management 0 1 Take DBA-120 DBA-220; Take previously. Required. 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. 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. Upon completion, students should be well prepared to take the Certification Exam. **DBA-293** Selected Topics in Db Mgmt Mysql Project 2 0 3 Take DBA-223; Take previously. Required. Requisites: This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on the subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study. **DESIGN DRAFTING** (DDF Prefix) **DDF-211** Design Process I 1 6 0 4 Requisites: This course emphasizes design processes for finished products. Topics include data collection from manuals and handbooks, efficient use of materials, design sketching, specifications, and vendor selection. Upon completion, students should be able to research and plan the design process for a finished product. **DEVELOPMENTAL DISABILITIES** (DDT Prefix)

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This course introduces the health and medical aspects of assisting people with developmental disabilities. Topics include universal precautions, medication, wellness, nutrition, human sexuality, and accessing medical services.

DDT Health Issues

Take DDT-110; Take previously. Required.

DDT-210

Requisites:

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Upon completion, students should be able to identify and implement strategies to promote wellness and manage chronic health conditions.

DDT-220 Program Planning Process 3 0 0 3

Requisites:

This course covers the individual program planning process used in services for people with developmental disabilities. Topics include basic components and benefits of the process, the effect of values on outcomes, and group problem-solving methods. Upon completion, students should be able to demonstrate an understanding of effective group process in program planning and the individual roles of team members.

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 3 4 0 5

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-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-106 Clinical Practice I 1 0 12 5 Take DEN-101(S20496); Take previously. Required.Take DEN-101(S20496) DEN-111; Take Requisites: 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-106 Clinical Practice I** Requisites: Take DEN-101(S20496); 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** 12 5 Requisites: Take DEN-106(S14145); 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. 2 **DEN-110** 2 3 **Orofacial Anatomy** 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 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 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** 0 2 **Dental Hygiene Preclinic Lecture** Take DEN-121; Take either previously or concurrently. Required. Requisites: 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. 2 **DEN-121 Dental Hygiene Preclinical Lab** 0 Requisites: Take DEN-120; Take either previously or 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.

DEN-124 Requisites:	Periodontology Take DEN-110; Take previously. Re		2	0	0	2
This course provi- principles of period treatment modalit	des an in-depth study of the periodon dontal therapy. Topics include period ies of periodontal diseases. Upon cor es involved in periodontal/maintenance	itium, periodontal p dontal anatomy and mpletion, students	d a study should b	y of the e be able to	tiology, c describe	lassification, and e, compare, and
DEN-125 Requisites:	Dental Office Emergencies	(0	2	0	1
This course provi- prevention, necess a variety of emerg	des a study of the management of de sary equipment/drugs, medicolegal or gencies. Upon completion, the studer rgencies and activate advanced medi	considerations, reconstructions and considerations.	ognition o recogn	and effectize, asse	ctive initia	I management of
DEN-130	Dental Hygiene Theory I		2	0	0	2
Requisites: concurrently. Re-	Take DEN-120; Take previously. Required.	equired.Take DEN	l-131; Ta	ake eithe	r previou	sly or
This course is a composition of the course include description of the course of the co	continuation of the didactic dental hyginosits/removal, instrument sharpening, and clinical records and procedure at the complete a thorough oral prophy	g, patient educations. Upon completion	n, fluorio	des, plan	ning for d	ental hygiene
DEN-131	Dental Hygiene Clinic I		0	0	9	3
Requisites: concurrently. Re-	Take DEN-121; Take previously. Required.	equired.Take DEN	I-130; Ta	ake eithe	r previou	sly or
This course continue recall patients with	nues skill development in providing ar h gingivitis or light deposits. Upon co ete the necessary dental hygiene trea	mpletion, students				
DEN-140	Dental Hygiene Theory II		1	0	0	1
Requisites: concurrently. Re-	Take DEN-130; Take previously. Required	equired.Take DEN	l-141; Ta	ake eithe	r previou	sly or
This course introd management and	duces principles in treatment modifica advanced radiographic interpretation ent modifications and radiographic ab	n. Upon completion	n, studen			•
DEN-141	Dental Hygiene Clinic II	(0	0	6	2
Requisites: concurrently. Re-	Take DEN-131; Take previously. Required	equired.Take DEN	l-140(S1	4315); T	ake eithe	r previously or
This course continuith early periodo	nues skill development in providing are ental disease and subgingival deposite and complete the necessary dental hygonic material development.	s. Upon completio	•	•		•
DEN-220	Dental Hygiene Theory III		2	0	0	2
Requisites: concurrently. Re-	Take DEN-140(S14315); Take previouired.	iously. Required.T	ake DEI	N-221; T	ake eithe	er previously or
This course introc subgingival irrigat	duces advanced principles of patient of its advanced principles of patient of its advanced principles of patient of its advanced provided and of the atment and its advanced provided and its advanced principles.	case presentations	s. Upon d	completio	n, studer	its should be able
DEN-221	Dental Hygiene Clinic III		0	0	12	4
Requisites: concurrently. Re-	Take DEN-141; Take previously. Required	equired.Take DEN	l-220(S1	1191); T	ake eithe	r previously or
-	quireu. Dues skill development in providing ar	n oral prophylavis	Empha	eie ie nla	an tre	atment of nationts

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-223 Dental Pharmacology 0 2 Requisites: Take BIO-163 BIO-165 or BIO-168(S11555); 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. 2 **DEN-224 Materials and Procedures** 1 3 Requisites: 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** Take DEN-220(S11191); Take previously. Required. Take DEN-231; Take either previously or Requisites: 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 Requisites: Take DEN-221; Take previously. Required. Take DEN-230(S12882); Take either previously or 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** 3 0 3 **Community Dental Health** 2 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 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. **DESIGN: CREATIVE** (DES Prefix) **DES-112** 3 **Building and Construction Systems** Take ARC-111 ARC-114(S10248); Take concurrently. Required. Requisites:

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 0 2 Requisites: Take ARC-111 DES-135(S24225); Take concurrently. Required. 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-193A** 2 0 3 Selected Topics in Interior Design Requisites: Take ARC-111 ARC-114(S10248); Take previously. Required. 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. **DES-210 Professional Practices for Interior Design** Requisites: Take DES-220(S24228); Take previously. Required. Take ENG-114(S13706); Take concurrently. Required. 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** 3 Take 1 group; Option: Take DES-135(S10718) ARC-111; Option: Take DES-110(S10337); Requisites: Option: Take DFT-115; Take previously. Required.Take ARC-114(S10248) DES-125(S24222); 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-235** 3 **Products** Take DES-220(S24228); Take concurrently. Required. Requisites: 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. **DES-240** Commercial and Contract Design I 0 3 Take DES-220(S21676); Take previously. Required.Take DES-193A(L52494); Take previously. Requisites: Required.Take DES-280(S24237) or ARC-131(S23274); Take 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 Requisites: This course introduces architecture, interiors, and furnishings in a variety of historic styles from Prehistroic 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

This course continues the study of architecture, interiors, and furnishings from a variety of historic styles from

Take ENG-111(S24022); Take previously. Required.

Requisites:

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 2

2

0

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

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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-286

Interior Design/Advanced

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3

Requisites:

Take DES-230(S10589); Take previously. Required. Take DES-240(S21677); Take previously.

Required.

This course covers advanced techniques in designing either a residential or non-residential project: a residence, health care facility, retail establishment, or office complex. Emphasis is placed on the development of a total concept based on client profile and specifications and a presentation of appropriate and creative design solutions. Upon completion, students should be able to complete a detailed floorplan, space planning, furniture plan specifications, schedules, and detailed window treatments.

DRAFTING (DFT Prefix)

DFT-111 Technical Drafting I

3

2

Requisites:

This course introduces basic drafting skills, equipment, and applications. Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorials drawings, sections, and auxiliary views. Upon completion, students should be able to understand and apply basic drawing principles and practices.

DFT-112

Technical Drafting II

2

Requisites:

Take DFT-111(S16295); Take previously. Required.

This course provides for advanced drafting practices and procedures. Topics include detailed working drawings, hardware, fits and tolerances, assembly and sub-assembly, geometric dimensioning and tolerancing, intersections, and developments. Upon completion, students should be able to produce detailed working drawings.

DFT-119

Basic CAD

0

2

Requisites:

This course introduces computer-aided drafting software for specific technologies to non-drafting majors. Emphasis is placed on understanding the software command structure and drafting standards for specific technical fields. Upon completion, students should be able to create and plot basic drawings. This course utilizes MicroStation software.

DFT-120

Advanced CAD

1

2

2

Requisites:

Take DFT-119; Take previously. Required.

This course is designed for non-drafting majors to build upon basic computer-aided drafting skills by the use of application-specific assignments. Emphasis is placed on advanced 2D, 3D, isometric, and modeling applications via the CAD system. Upon completion, students should be able to generate, manage, and output engineering drawings via the computer, printer, and plotter. This course utilizes Geopak software.

DFT-121

Introduction to GD&T

0

2

Requisites:

Take 1 group; Option: Take DFT-110; Option: Take DFT-151; Option: Take ARC-114(S10248);

Take previously. Required.

This course introduces basic geometric dimensioning and tolerancing principles. Topics include symbols, annotation, theory, and applications. Upon completion, students should be able to interpret and apply basic geometric dimensioning and tolerancing principles to drawings.

DFT-151 CADI 2 0

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.

DFT-152 CAD II 3 0 3

3

Take 1 group; Option: Take DFT-110; Option: Take DFT-151; Option: Take ARC-114(S10248); Requisites:

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.

DFT-153 CAD III

0 3 3

Take DFT-152(S20642); Take previously. Required. 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.

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-189 Emerging Technologies in CAD

2 0 2

Requisites:

This course provides an opportunity to explore new and emerging technologies related to Computer-Aided Drafting (CAD). Emphasis is placed on introducing a selected CAD technology or topic, identified as being "new" or "emerging," from a variety of drafting discipines. Upon completion, students should be able to demonstrate an understanding of and practical skill in the use of the CAD technology studied.

DFT-251 Customizing CAD Software

2 3

Requisites: Take DFT-151; Take previously. Required.

This course covers customizing CAD software. Topics include the creation of symbol libraries and screen menus, macro writing, and automation of common drafting functions on CAD. Upon completion, students should be able to create a symbol library and screen menu and automate common drawing functions.

DFT-253 CAD Data Management

2 2 3

Take DFT-151; Take previously. Required.

This course covers engineering document management techniques. Topics include efficient control of engineering documents, manipulation of CAD drawing data, generation of bill of materials, and linking to spreadsheets or databases. Upon completion, students should be able to utilize systems for managing CAD drawings, extract data from drawings, and link data to spreadsheets or database applications.

DFT-254 Intermediate Solid Modeling & Rendering

2 3 0 3

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.

DEVELOPMENTAL MATHEAMATICS (DMA Prefix)

DMA-010 Requisites:	Operations With Integers	1	0	0	1	
exponents, squ order of operati	ovides a conceptual study of integers and integer of pare roots, perimeter and area of basic geometric figures. Upon completion, students should be able to principles and apply this knowledge in the evaluation	gures, Pytha demonstrat	gorean tl e an unde	neorem, a	nd use of the c	
DMA-020	Fractions and Decimals	1	0	0	1	
problems. Topi the circumferer	Take DMA-010; Take previously. Required. ovides a conceptual study of the relationship betwe cs include application of operations and solving conce and area of circles with the concept of pi. Upon understanding of the connections between fraction	ntextual app	lication p	roblems, i	ncluding deterr	nining
DMA-030	Proportion/Ratios/Rates/Percents	1	0	0	1	
proportions. To of the geometry	Take DMA-010 DMA-020; Take previously. Repvides a conceptual study of the problems that are opics include rates, ratios, percent, proportion, convy of similar triangles. Upon completion, students shallication problems.	represented version of Er	nglish and	d metric u	nits, and applic	
This course pro include slope, e	Graphs and Equations of Lines Take 1 group; Option: Take DMA-010 DMA-02 te previously. Required. byides a conceptual study of problems involving graphy acquations of lines, interpretation of basic graphs, are to solve contextual application problems and representations.	aphic and alg	gebraic re deling. U	epresentat Ipon comp	ions of lines. T	Topics s
equations. Top radical equation	Algebra for Precalculus Take DMA-010 DMA-020 DMA-030 DMA-040 Education of problems involving algebraic represions include simplifying polynomial, rational, and radius. Upon completion, students should be able to first fational applications.	esentations of lical express	of quadra ions and	tic, rationa solving qu	al, and radical ladratic, rationa	
	DIGITAL MEDIAL TECHNOLOG	Y (DI	ME Prefi	<u>ix)</u>		
emerging stand	Introduction to Digital Media Take DRE-098(S23643); Take previously. Recroduces students to key concepts, technologies, and dards, key technologies and related design issues, Upon completion, students should be able to demonstrated.	nd issues rela terminology,	media fo	rmats, ca	reer paths, and	b
DME-140	Introduction to Audio/Video Media	2	2	0	3	
Requisites: Required.	Take DME-110; Take previously. Required.Tal	ke DRE-098	(S23643)	DMA-030); Take previo	usly.
This course is	designed to teach students how to manipulate digit					ns.
Topics include	format conversion and a review of current technological	gies and dig	ital forma	ats. 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.

DME-210 **User Interface Design** 2 3 Take DME-110; Take previously. Required. Take WEB-140; Take previously. Required. Requisites: This course covers current design approaches and emerging standards related to the design and development of user interfaces. Emphasis is placed on conducting research, and analyzing and reviewing current practices in effective interface design. Upon completion, students should be able to intelligently discuss and evaluate new and existing digital media products in terms of the user interface. **DEVELOPMENTAL MATH SHELL** (DMS Prefix) **DMS-001 Developmental Math Shell 1** Take MAT-050; Take previously. Required. Requisites: This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be one DMA module appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content. DMS-001A 0 0 1 **Developmental Math Shell 1** Take MAT-050; Take previously. Required. Requisites: This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be one DMA module appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content. DMS-001B 0 0 1 **Developmental Math Shell 1** 1 Requisites: Take MAT-050; Take previously. Required. This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be one DMA module appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content. **DMS-001E Developmental Math Shell 1** 1 Take MAT-050; Take previously. Required. Requisites: This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be one DMA module appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content. **DMS-001F** 1 0 0 1 **Developmental Math Shell 1** Requisites: Take MAT-050; Take previously. Required. This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be one DMA module appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content. DMS-001G 1 0 0 1 **Developmental Math Shell 1** Requisites: Take MAT-050; Take previously. Required. This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be one DMA module appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content. DMS-001H 1 **Developmental Math Shell 1** Requisites: Take MAT-050; Take previously. Required. This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be one DMA module appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content. Developmental Math Shell 1 DMS-001I **Developmental Math Shell 1** 1 1

This course provides an opportunity to customize developmental math content in specific developmental math areas.

Take MAT-050; Take previously. Required.

Requisites:

Content will be one DMA module appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-002 **Developmental Math Shell 2** 2

0

1

2

Requisites:

Take MAT-050; Take previously. Required.

This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be two DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-002A Developmental Math Shell 2

2

Requisites:

Take MAT-050; Take previously. Required.

This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be two DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-002B Developmental Math Shell 2

2

Requisites:

Take MAT-050: Take previously. Required.

This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be two DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-002E Developmental Math Shell 2 2

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2

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Requisites: Take MAT-050; Take previously. Required.

This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be two DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-002F Developmental Math Shell 2 2

2

Requisites:

Take MAT-050; Take previously. Required.

This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be two DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-002G Developmental Math Shell 2

2

Requisites:

Take MAT-050; Take previously. Required.

This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be two DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-002H Developmental Math Shell 2 2

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1

2

Requisites: Take MAT-050; Take previously. Required.

This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be two DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-002I **Developmental Math Shell 2** 2

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3

Take MAT-050; Take previously. Required.

This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be two DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-003 Developmental Math Shell 3

Requisites:

Requisites:

Take MAT-050; Take previously. Required.

This course provides an opportunity to customize developmental math content in specific developmental math areas.

Content will be three DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-003B Developmental Math Shell 3 2 2 0 3

Requisites: Take MAT-050; Take previously. Required.

This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be three DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-003D Developmental Math Shell 3 2 2 0 3

Requisites: Take MAT-050; Take previously. Required.

This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be three DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-003F Developmental Math Shell 3 2 2 0 3

Requisites: Take MAT-050; Take previously. Required.

This course provides an opportunity to customize developmental math content in specific developmental math areas. Content will be three DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DMS-004 Developmental Math Shell 4 3 2 0 4

Requisites: Take MAT-050; Take previously. Required.

This course provides an opporturnity to customize developmental math content in specific developmental math areas. Content will be four DMA modules appropriate to the required level of the student. Upon completion, students should be able to demonstrate an understanding of their specific developmental math area of content.

DRAMA/THEATRE (DRA Prefix)

DRA-111 Theatre Appreciation 3 0 0 3

Requisites: Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take DRE-097(S23642); 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-120 Voice for Performance 3 0 0 3

Requisites:

This course provides guided practice in the proper production of speech for the theatre. Emphasis is placed on improving speech, including breathing, articulation, pronunciation, and other vocal variables. Upon completion, students should be able to demonstrate effective theatrical speech.

DRA-122 Oral Interpretation 3 0 0 3

Requisites: Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take DRE-097(S23642); Take previously. Required.

This course introduces the dramatistic study of literature through performance. Emphasis is placed on analysis and performance of poetry, drama, and prose fiction. Upon completion, students should be able to embody and discuss critically the speakers inherent in literature.

DRA-124 Readers Theatre 3 0 0 3

Requisites: Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Take previously. Required.

This course provides a theoretical and applied introduction to the medium of readers theatre. Emphasis is placed on

the group performance considerations posed by various genres of literature. Upon completion, students should be able to adapt and present a literary script following the conventions of readers theatre.

DRA-126 3 0 3 Storytelling Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-097(S23642); 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 3 Requisites: Take 1 group; Option: Take ENG-080 RED-080; Option: Take DRE-097(S23642); 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. **DRA-132** 0 3 **Stage Movement** Requisites: Take DRA-111; Take either previously or concurrently. Required. This course provides an applied study of selected principles of stage movement for actors. Topics include improvisation, mime, stage combat, clowning, choreography, and masks. Upon completion, students should be able to focus properly on stage, to create characters, and to improvise scenes, perform mimes, fight, clown, juggle, and waltz. **DRA-135** Acting for the Camera I 1 4 0 3 Take 1 group; Option: Take ENG-080 RED-080; Option: Take DRE-097(S23642); Take Requisites: previously. Required. This course provides an applied study of the camera actor's craft. Topics include commercial, dramatic, and print performance styles. Upon completion, students should be able to explore their creativity in on-camera performance. **DRA-145** Stage Make-Up Requisites: Take 1 group; Option: Take ENG-070(S16349) RED-070(S10648); Option: Take DRE-096(S23641); Take previously. Required. This course covers the research, design, selection of materials, and application of stage make-up, prosthetics, wigs, and hairpieces. Emphasis is placed on the development of techniques, style, and presentation of the finished makeup. Upon completion, students should be able to create and apply make-up, prosthetics, and hairpieces. **DRA-170** Play Production I Take 1 group; Option: Take ENG-070(S16349) RED-070(S10648); Option: Take DRE-Requisites: 096(S23641); Take previously. Required. This course provides an applied laboratory study of the processes involved in the production of a play. Topics include fundamental practices, principles, and techniques associated with producing plays of various periods and styles. Upon completion, students should be able to participate in an assigned position with a college theatre production. DRA-171 **Play Production II** 0 0 3 Take DRA-170; Take previously. Required. Requisites: This course provides an applied laboratory study of the processes involved in the production of a play. Topics include fundamental practices, principles, and techniques associated with producing plays of various periods and styles. Upon completion, students should be able to participate in an assigned position with a college theatre production.

DRA-230 Acting III 0 6 0 3

Requisites: Take DRA-131; Take previously. Required.

This course is designed to include an exploration of acting styles. Emphasis is placed on putting the actor's skills to work in a major theatrical form-musical, comedy, or drama. Upon completion, students should be able to explore their creativity in an acting ensemble.

DRA-231 Acting IV 0

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Requisites:

Take DRA-230; Take previously. Required.

This course is designed to include further exploration of acting styles. Emphasis is placed on putting the actor's skills to work in a major theatrical form-musical, comedy, or drama. Upon completion, students should be able to explore their creativity in an acting ensemble.

DRA-270 Play Production III 0

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Requisites:

Take DRA-171; Take previously. Required.

This course provides an applied laboratory study of the processes involved in the production of a play. Topics include fundamental practices, principles, and techniques associated with producing plays of various periods and styles. Upon completion, students should be able to participate in an assigned position with a college theatre production.

DEVELOPMENTAL READING/ENGLISH (DRE Prefix)

DRE-096 Integrated Reading and Writing I 2

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Requisites:

This course is designed to develop proficiency in specific integrated and contextualized reading and writing skills and strategies. Topics include reading and writing processes, critical thinking strategies, and recognition and composition of well-developed, coherent, and unified texts: these topics are primarily taught at the introductory level using texts primarily in a Lexile (TM) range of 960 to 1115. Upon completion, students should be able to apply those skills toward understanding a variety of academic and career-related texts and composing effective paragraphs. null Please note: (TM) stands for registered trademark.

DRE-097 Integrated Reading and Writing II

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Requisites:

Take DRE-096(S23641); Take previously. Required.

This course is designed to develop proficiency in integrated and contextualized reading and writing skills and strategies. Topics include reading and writing processes, critical thinking strategies, and recognition and composition of well-developed, coherent, and unified texts; except where noted, these topics are taught at a reinforcement level using texts primarily in a Lexile (TM) range of 1070 to 1220. Upon completion, students should be able to demonstrate and apply those skills toward understanding a variety of complex academic and career texts and composing essays incorporating relevant, valid evidence. null Please note: (TM) represents registered trademark.

DRE-098 Integrated Reading and Writing III

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Requisites:

Take DRE-097(S23586); Take previously. Required.

This course is designed to develop proficiency in integrated and contextualized reading and writing skills and strategies. Topics include reading and writing processes, critical thinking strategies, and recognition and composition of well-developed, coherent, and unified texts; these topics are taught using texts primarily in the Lexile (TM) range of 1185 to 1385. Upon completion, students should be able to apply those skills toward understanding a variety of texts at the career and college ready level and toward composing a documented essay. null Note: (TM) represents registered trademark.

DRE-099 Integrated Reading Writing III Option 2

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Requisites:

Take DRE-097(S23586); Take previously. Required. Take ENG-111(S13673); Take either previously or concurrently. Required.

This course is designed to develop proficiency in integrated and contextualized reading and writing skills and strategies by complementing, supporting and reinforcing material covered in ENG 111. Topics include reading and writing processes, critical thinking strategies, and recognition and composition of well-developed, coherent, and unified texts; except where noted, these topics are taught using texts primarily in the Lexile (TM) range of 1185 to 1385. Upon completion, students should be able to apply those skills toward understanding a variety of texts at the

career and college ready level and toward composing a documented essay. null Note: (TM) represents registered

trademark. **ELECTRONIC COMMERCE** (ECM Prefix) ECM-210 **Introduction to E-Commerce** 2 2 0 3 Requisites: 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, and site administration. Upon completion, students should be able to setup a working e-commerce Internet web site. **ECONOMICS** (ECO Prefix) ECO-151 3 0 0 3 **Survey of Economics** 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 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 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. **EDUCATION** (EDU Prefix) EDU-119 **Introduction to Early Childhood Education** 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 0 3 Take 1 group; Option: Take DRE-097(S23642); Option: Take ENG-080 RED-080; Option: Take Requisites: ENG-085; Take either previously or concurrently. Required.

This course covers the development of partnerships between culturally and linguistically diverse families, children, schools and communities. Emphasis is placed on developing skills and identifying benefits for establishing, supporting, and maintaining respectful, collaborative relationships between diverse families, programs/schools, and community agencies/resources. Upon completion, students should be able to explain appropriate relationships

between families, educators, and professionals that enhance development and educational experiences of all children.

EDU-144 Child Development I 3 0 0 3 Requisites: Take 1 group; Option: Take DRE-097(S23642); Option: Take ENG-080 RED-080; Option: Take ENG-085; Take either previously or concurrently. Required. Take DRE-097(S23642); Take either previously or concurrently. Recommended. This course includes the theories of child development, needs, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on developmental sequences in physical/motor, emotional/social, cognitive, and language domains and the impact of multiple influences on development and learning. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain environmental factors that impact development, and identify strategies for enhancing development.

EDU-145 Child Development II 3 0 0 3

Requisites: Take 1 group; Option: Take DRE-097(S23642); Option: Take ENG-080 RED-080; Option: Take ENG-085; Take either previously or concurrently. Required. Take EDU-119(S22283); Take previously. Required. This course includes the theories of child development, needs, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on developmental sequences in physical/motor, emotional/social, cognitive, and language domains and the impact of multiple influences on development and learning. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain environmental factors that impact development, and identify strategies for enhancing development.

EDU-146 Child Guidance 3 0 0 3

Requisites: Take 1 group; Option: Take DRE-097(S23642); Option: Take ENG-080 RED-080; Option: Take ENG-085; Take either previously or concurrently. Required.Take EDU-119(S22283) EDU-144(S23693) or EDU-145(S23694); Take previously. Required.

This course introduces principles and practical techniques including the design of learning environments for providing developmentally appropriate guidance for all children, including those at risk. Emphasis is placed on observation skills, cultural influences, underlying causes of behavior, appropriate expectations, development of self control and the role of communication and guidance. Upon completion, students should be able to demonstrate direct/indirect strategies for preventing problem behaviors, teaching appropriate/acceptable behaviors, negotiation, setting limits and recognizing at risk behaviors.

EDU-151 Creative Activities 3 0 0 3 Requisites: Take 1 group; Option: Take DRE-097(S23642); Option: Take ENG-080 RED-080; Option: Take ENG-085; Take either previously or concurrently. Required.Take ENG-111(S24022) EDU-119(S22283) EDU-144(S23693) EDU-145(S23694); Take previously.

This course covers planning, creation and adaptation of developmentally supportive learning environments with attention to curriculum, interactions, teaching practices and learning materials. Emphasis is placed on creating and adapting integrated, meaningful, challenging and engaging developmentally supportive learning experiences in art, music, movement and dramatics for all children. Upon completion, students should be able to create, adapt, implement and evaluate developmentally supportive learning materials, experiences and environments.

EDU-153Health, Safety and Nutrition 3 0 0 3 Requisites: Take 1 group; Option: Take DRE-097(S23642); Option: Take ENG-080 RED-080; Option: Take ENG-085; Take either previously or concurrently. Required.

This course covers promoting and maintaining the health and well-being of all children. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, recognition and reporting of abuse and neglect and state regulations. Upon completion, students should be able to demonstrate knowledge of health, safety, and nutritional needs, safe learning environments, and adhere to state regulations.

EDU-157 Active Play 2 2 0 3

Requisites: Take 1 group; Option: Take DRE-097(S23642); Option: Take ENG-080 RED-080; Option: Take

ENG-085; Take either previously or concurrently. Required. Take EDU-119(S22283); Take previously. Required. This course introduces the use of indoor and outdoor physical activities to promote the physical, cognitive, and social/emotional development of children. Topics include the role of active play, development of play skills, playground design, selection of safe equipment, and materials and surfacing for active play. Upon completion, students should be able to discuss the stages of play, the role of teachers in play, and the design of appropriate active play areas and activities.

EDU-163 Classroom Management and Instruction 3 0 0 3
Requisites: Take 1 group; Option: Take DRE-097(S23642); Option: Take ENG-080 RED-080; Option: Take ENG-085; Take either previously or concurrently. Required.
This course covers management and instructional techniques with school-age populations. Topics include classroom management and organization, teaching strategies, individual student differences and learning styles, and developmentally appropriate classroom guidance techniques. Upon completion, students should be able to utilize developmentally appropriate behavior management and 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(S22283); Take previously. Required.Take 1 group; Option: Take DRE-097(S23642); Option: Take ENG-080; EDU-080; Option: Take ENG-080; Take either previously or concurrently. Required.Take EDU-119(S22283) EDU-131(S23692

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-216 Foundations of Education 4 0 0 4

Requisites: Take 1 group; Option: Take DRE-098(S23643); Option: Take ENG-080 RED-080; Option: Take ENG-085; Take either previously or concurrently. Required.

This course introduces the American educational system and the teaching profession. Topics include historical and philosophical foundations of education, contemporary educational, structural, legal, and financial issues, and experiences in public school classrooms. Upon completion, students should be able to relate classroom observations to the roles of teachers and schools and the process of teacher education.

EDU-221 Children With Exceptionalities 3 0 0 3

Requisites: Take 1 group; Option: Take EDU-144(S23693) EDU-145(S23694); Option: Take PSY-244(S12069) PSY-245(S11997); Take previously. Required.Take 1 group; Option: Take DRE-098(S23643); Option:

This course introduces children with exceptionalities, their families, support services, inclusive/diverse settings, and educational/family plans based on the foundations of child development. Emphasis is placed on the characteristics of exceptionalities, observation and assessment of children, strategies for adapting the learning environment, and identification of community resources. Upon completion, students should be able to recognize diverse abilities, describe the referral process, and depict collaboration with families/professionals to plan/implement, and promote best practice.

EDU-234 Infants, Toddlers, & Twos 3 0 0 3

Requisites: Take EDU-119(S22283); Take previously. Required.Take 1 group; Option: Take DRE-098(S23643); Option: Take ENG-090 RED-090; Option: Take ENG-095; Take either previously or concurrently. Required.Take EDU-119(S22283) EDU-144(S23693

This course covers the unique needs and rapid changes that occur in the first three years of life and the inter-related factors that influence development. Emphasis is placed on recognizing and supporting developmental milestones through purposeful strategies, responsive care routines and identifying elements of quality, inclusive early care and education. Upon completion, students should be able to demonstrate respectful relationships that provide a

Take ENG-090 RED-090: Option: Take ENG-0

foundation for healthy infant/toddler/twos development, plan/select activities/materials, and partner with diverse families. EDU-235 **School-Age Development and Programs** 3 Take 1 group; Option: Take DRE-098(S23643); Option: Take ENG-090 RED-090; Option: Take Requisites: ENG-095; Take either previously or concurrently. Required. Take EDU-119(S22283); Take previously. Required. 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. Upon completion, students should be able to discuss developmental principles for all children ages five to twelve and plan and implement developmentally-appropriate activities. **EDU-243 Learning Theory** 3 0 0 3 Requisites: Take 1 group; Option: Take DRE-098(S23643); Option: Take ENG-090 RED-090; Option: Take ENG-095; Take either previously or concurrently. Required. This course provides lateral entry teachers an introduction to learning theory, various styles of learning, and motivational factors involved in the learning process. Emphasis is placed on the development of cognitive skills using the eight types of intelligence and applying these to practical classroom situations. Upon completion, students should be able to describe theories and styles of learning and discuss the relationship between different types of intelligence to learning motivation. **EDU-244 Human Growth and Development** 3 Take 1 group; Option: Take DRE-098(S23643); Option: Take ENG-090 RED-090; Option: Take Requisites: ENG-095: Take either previously or concurrently. Required. This course introduces lateral entry teachers to theories and ages and stages related to human growth and development from birth through adolescence. Emphasis is placed on development through the stages of a child's life in the areas of physical, emotional, social, intellectual, and moral development. Upon completion, students should be able to identify and describe milestones of each stage in all areas of development and discuss factors that influence growth. EDU-251 0 **Exploration Activities** 3 Take 1 group; Option: Take DRE-098(S23643); Option: Take ENG-090 RED-090; Option: Take Requisites: ENG-095; Take either previously or concurrently. Required.Take ENG-111(S24022) EDU-119(S22283) EDU-144(S23693) EDU-145(S23694) EDU-151(S23704) ENG-This course covers discovery experiences in science, math, and social studies. Emphasis is placed on developing concepts for each area and encouraging young children to explore, discover, and construct concepts. Upon completion, students should be able to discuss the discovery approach to teaching, explain major concepts in each area, and plan appropriate experiences for children. EDU-251A **Exploration Activities Lab** 2 1 Requisites: Take 1 group; Option: Take EDU-251(S23723) DRE-098(S23643); Option: Take EDU-251(S23723) ENG-090 RED-090; Option: Take EDU-251(S23723) ENG-095; Take either previously or concurrently. Required.Take ENG-111(S24022) ENG-112(S24024) EDU-This course provides a laboratory component to complement EDU 251. Emphasis is placed on practical experiences that enhance concepts introduced in the classroom. Upon completion, students should be able to demonstrate a practical understanding of the development and implementation of appropriate science, math, and social studies activities for children. **EDU-261** Early Childhood Administration I Requisites: Take 1 group; Option: Take EDU-119(S24238) DRE-098(S23643); Option: Take EDU-119(S24238) ENG-090 RED-090; Option: Take EDU-119(S24238) ENG-095; Take either previously or concurrently.

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This course introduces principles of basic programming and staffing, budgeting/financial management and marketing, and rules and regulations of diverse early childhood programs. Topics include program structure and philosophy, standards of NC child care programs, finance, funding resources, and staff and organizational management. Upon

completion, students should be able to develop components of program/personnel handbooks, a program budget, and demonstrate knowledge of fundamental marketing strategies and NC standards.

119(S24238) ENG This course focus diverse early child professional orga advocacy. Upon	Early Childhood Administration II Take EDU-261(S23733); Take previously. Require E-098(S23643); Option: Take EDU-119(S24238) ENG-095; Take either previously or concurrently. Les on advocacy/leadership, public relations/communithood programs. Topics include program evaluation inizations, leadership/mentoring, family, volunteer and completion, students should be able to define and expressions of participations.	NG-090 R nity outread n/accredita nd communication	ED-090; Cach and pration, involving involving the components.	Option: T rogram q lvement a rement a	Take EDU- uality/evaluation for in early childhood and early childhood
This course introc the public or prop	School-Age Program Administration Take 1 group; Option: Take DRE-098(S23643); Opeither previously or concurrently. Required. Take ED duces the methods and procedures for development rietary setting. Emphasis is placed on the construction completion, students should be able to plan, development	U-119(S2 and adm on and or	22283); Ta inistration ganization	ake previ of schoo of the p	iously. Required. I-age programs in hysical
Take ENG-112(S This course introdinclude technolog exceptionalities, f completion, stude	Educational Technology Take 1 group; Option: Take DRE-098(S23643); Opeither previously or concurrently. Required. Take 1 graduates the use of technology to enhance teaching and y concepts, instructional strategies, materials and acceptation of assessment/evaluation, and ethical issuments should be able to apply technology enhanced in the case and demonstrate appropriate technology skills in the case of technology skills in the case and demonstrate appropriate technology skills in the case of t	roup; Op d learning daptive te les surrou structiona	tion: Take g in all edu chnology t unding the al strategie	cational s for childruse of te s, use a	settings. Topics en with echnology. Upon variety of
119(S22283) EDU This course is des provides strategie selection of divers appropriate observa	Language and Literacy Experiences Take 1 group; Option: Take DRE-098(S23643); Opeither previously or concurrently. Required.Take ENJ-144(S23693) EDU-145(S23694) EDU-signed to expand students' understanding of childrenes for enhancing language/literacy experiences in an see literature and interactive media, the integration of evations/assessments and inclusive practices. Upon and evaluate developmentally appropriate and diversity	G-111(Si n's langua enriched literacy c completi	age and lite environm concepts thon, studen	eracy devent. Top orroughounts should	velopment and bics include at the curriculum, d be able to select,
145(S23694) EDU This course cover Topics include the	Early Childhood Literature Take 1 group; Option: Take DRE-098(S23643); Opeither previously or concurrently. Required. Take EDJ-146(S23695) ENG-111(S24022); Take the history, selection, and integration of literature and history and selection of developmentally appropriate hance language and literacy in the classroom. Upon	U-119(S2 and langu te childre	22283) ED lage in the n's literatu	U-144(S early ch re and th	23693) EDU- illdhood curriculum. ne use of books and

appropriate books for storytelling, reading aloud, puppetry, flannel board use, and other techniques.

EDU-287 Leadership in Early Childhood Education 3 0 0 3 Take 1 group; Option: Take EDU-119(S22283) EDU-131(S23692) EDU-144(S23693) EDU-Requisites: 145(S23694); Option: Take EDU-119(S22283) EDU-131(S23692) PSY-244(S12069) PSY-245(S11997); Take previously. Required. Take 1 group; Option: Take DRE-098(S23 This course is designed to facilitate and guide the development of early childhood professionals preparing for leadership roles in improving community early childhood services. Topics include principles of social change, characteristics of effective leaders, techniques of action research, childcare funding mechanisms, quality initiatives, and key issues in early care. Upon completion, students should be able to identify key issues; develop strategic plans; establish relationships with community leaders; and identify opportunities and barriers for advocacy. **ENGLISH AS A FOREIGN LANGUAGE** (EFL Prefix) EFL-030 **English for Special Purpo** 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. This 3 credit elective is appropriate for students who would like to improve accuracy and fluency in spelling and reading of academic English. This 3 credit elective is appropriate for students who would like to improve accuracy and fluency in spelling and reading of academic English. EFL-055 **English for Special Purpo** 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. 5 5 EFL-061 Listening/Speaking I 0 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 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 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.

EFL-071 Requisites:	Reading I	5	0	0	5	
This course is de Emphasis is place and recognizing of	signed to help those literacy skills achieve reading ed on basic academic and cultural vocabulary and organizational styles and context clues. Upon com I and comprehend basic academic, narrative, and	reading str pletion, stu	ategies v dents sh	vhich incl	ude self-monito	
EFL-073	Reading III Take EFL-072; Take previously. Required.	5	0	0	5	
curriculum progra and developing s	signed to develop fundamental reading and study ims. Emphasis is placed on building vocabulary a tudy strategies on basic-level college materials an read and comprehend narrative and expository te	nd cultural d literary w	knowledç orks. Up	ge, impro on compl	ving compreher letion, students	nsion,
EFL-074	Reading IV	5	0	0	5	
Requisites:	Take EFL-073; Take previously. Required.					
level courses. Er comprehension, a	signed to enhance the academic reading skills for mphasis is placed on strategies for effective readin analytical skills, recall, and overall reading speed. thesize, and critique multi-disciplinary college-leve	g and the ι Upon com	utilization oletion, s	of these tudents s	strategies to im	nprove
EFL-081	Grammar I	5	0	0	5	
enrich language s practice which inc	Take EFL-091; Take either previously or concurred to the speakers of English with a variety skills and comprehension. Emphasis is on key based to the speakers of English with a variety of skills and comprehension. Emphasis is on key based to the speakers of specified at the comprehension and correct usage of specified at the speakers.	of fundame sic gramma s areas. U	ntal gran tical strud pon com	nmatical o ctures an pletion, s	d opportunities	for
EFL-082	Grammar II	5	0	0	5	
language skills ar for practice which	Take EFL-081; Take previously. Required. des non-native speakers of English with a variety and comprehension. Emphasis is on key low-intermatical knowledge into various attempted by written and oral means the comprehension	nediate grai skills areas	mmatical . Upon co	structure mpletion	s and opportun , students shou	
EFL-083	Grammar III	5	0	0	5	
structures that im structures in mea	Take EFL-082; Take previously. Required. signed to provide high-intermediate non-native speproves academic communication. Emphasis is planingful contexts through exercises integrating the s. Upon completion, students should be able to de accuracy.	aced on usi use of new	ng high-i ly acquire	ntermedi ed structu	ate grammatica	al ously
EFL-084	Grammar IV	5	0	0	5	
structures and ted advanced gramm	Take EFL-083; Take previously. Required. signed to give non-native speakers of English a fuchniques. Emphasis is placed on oral and written catical forms. Upon completion, students should b written form, demonstrating improved proficiency,	communica e able to in	tive fluen corporate	cy throug the stru	the study of ctures covered	
EFL-091	Composition I	5	0	0	5	
Requisites: This course introd	Take EFL-081; Take either previously or concurreduces basic sentence structure and writing paragra	-			word order, ve	rb

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-092 **Composition II** 5

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Requisites: Take EFL-091; Take previously. Required.

This course provides preparation in low-intermediate academic and general-purpose writing. Emphasis is placed on writing as a process, paragraph development, and basic essay organization. Upon completion, students should be able to write and independently edit and use the major elements of the writing process, sentence, paragraph, and essay.

EFL-094 **Composition IV** 5

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 thegrammatical 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

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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

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-131 Introduction to Electronics Technology

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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

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Requisites:

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-210

Intro to Electrical/Computer Engineering Lab

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Requisites:

Take MAT-271(S13631) PHY-251; Take previously. Required.

This course provides an overview of electrical and computer engineering, through a lecture and laboratory setting. Topics include fundamental concepts, electronic circuits, digital circuits, communication systems, and signal processing. Upon completion, students should be able to discuss the wide range of fields available to the electrical or computer engineer.

EGR-212 O Logic System Design I 3 Take MAT-271(S13631) PHY-251; Take previously. Required. Requisites: 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 Take PHY-251 MAT-272(S13612); Take previously. Required. Take PHY-252 MAT-273(S13616); Requisites: 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-220 Engineering Statics** Take PHY-251; Take previously. Required.Take MAT-272(S13612); Take either previously or Requisites: concurrently. Required.Option: Take PHY-251; Minimum grade C; Option: Take MAT-272(S23940); Minimum grade C; Take previously. Required. Take 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** 0 **Engineering Dynamics** 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 3 Take EGR-220; Take previously. Required. Requisites: 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 3 **Statics** Requisites: Take MAT-121(S23927) or MAT-171(S23934); 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 2 0 3 Strength of Materials 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 2 Take 1 group; Option: Take EGR-115(S20666) DFT-110 ENG-111(S24022); Option: Take EGR-Requisites: 115(S20666) DFT-151 ENG-111(S24022); Option: Take EGR-115(S20666) ARC-114(S10248) ENG-111(S24022);

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.

ELECTRICITY (ELC Prefix) **ELC-112 DC/AC Electricity** 3 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** 0 4 **Residential Wiring** 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-113BB **Residential Wiring** 2 0 Take ELC-118 ELC-113AB(L52149); Take either previously or concurrently. Required. Requisites: 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** Requisites: Take ELC-113(S23518); Take previously. Required.Take ELC-119; Take 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-114C Commercial Wiring** Take ELC-113(S23518); Take previously. Required. Requisites: 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** 6 Requisites: Take ELC-113(S23518); Take previously. Required. Take ELC-114C; Take either previously or 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.

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-111; Option: Take ELC-112(S23481); Option: 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-117C Motors and Controls 2 0 0 2

Requisites: Take 1 group; Option: Take ELC-111; Option: Take ELC-112(S23481); Option: 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; Option: Take ELC-111; Option: Take ELC-112(S23481); Option: 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-119 NEC Calculations 1 2 0 2

Requisites: Take ELC-118; 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: Take ELC-113(S11805) ELC-114(S21588); Take previously. Required.

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(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-128C Introduction to Programmable Logic Controller 2 Take ELC-117(S23521) or ELC-131(S23482); Take previously. Required. Requisites: 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 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-131A** Circuit Analysis I Lab 3 0 1 Take ELC-131(S13459); Take either previously or concurrently. Required. Requisites: 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** 2 0 2 Take ELC-112(S21587); Take previously. Required.Take ELC-117(S21589); Take either Requisites: previously or concurrently. 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-139** 3 3 0 **AC Circuit Analysis** 4 Requisites: This course introduces AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include AC voltages, circuit analysis laws and theorems, reactive components and circuits, transformers, test equipment operation, circuit simulation, and other related topics. Upon completion, students should be able to interpret AC circuit schematics; analyze and troubleshoot AC circuits; and properly use test equipment. **ELC-220** 2 3 3 **Photovoltaic System Technology** 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** 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.

ELC-228 Programmable Logic Controllers Applications 6 2 0 4 Requisites: This course covers programming and applications of programmable logic controllers. Emphasis is placed on programming techniques, networking, specialty I/O modules, and system troubleshooting. Upon completion, students should be able to specify, implement, and maintain complex PLC controlled systems. **ELC-229 Applications Project** 2 Take ELC-113(S11805) ELC-128(S10676) ELN-229(S21638) ELN-133(S16330); Take previously. Requisites: Required. This course provides an individual and/or integrated team approach to a practical project as approved by the instructor. Topics include project selection and planning, implementation and testing, and a final presentation. Upon completion, students should be able to plan and implement an applications-oriented project. **ELC-231** 3 4 **Electric Power Systems** 0 Requisites: This course covers the basic principles of electric power systems, including transmission lines, generator and transformer characteristics, and fault detection and correction. Emphasis is placed on line diagrams and per unit calculations for circuit performance analysis in regards to voltage regulation, power factor, and protection devices. Upon completion, students should be able to analyze simple distribution subsystems, calculate fault current, and compare different types and sizes of circuit protection devices. **ELC-250 Critical Power Systems** 4 Requisites: This course covers power systems commonly utilized in the operation of data centers and other mission critical facilities. Topics include redundant electrical system components including generators, automatic transfer switches, static transfer switches, power quality, uninterruptible power supply systems, battery back-up systems, and electrical codes and safety standards. Upon completion, students should be able to demonstrate an understanding of the operation, layout, system components, and the maintenance and troubleshooting requirements associated with mission critical power systems. **ELECTRONICS** (ELN Prefix) 2 2 **ELN-110** Survey of Electronics 0 3 Requisites: This course introduces fundamental electrical and electronic concepts for non-electronic majors. Emphasis is placed on terminology and devices used in basic electronic and digital applications. Upon completion, students should be able to demonstrate a grasp of the fundamentals of modern electronic circuits. **ELN-112 Diesel Electronics System** 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** 2 **Electronic Fuel Injection** 1 0 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.

This course introduces the characteristics and applications of semiconductor devices and circuits. Emphasis is placed

Take ELC-131(S23482); Take previously. Required.

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Analog Electronics I

ELN-131

Requisites:

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

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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

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Requisites: Take DRE-098(S23643) DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 DMA-060(S23172);

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

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Requisites: Take CIS-110(S21058) CIS-111(S21059) or ELC-127(S21592); Take previously. Required. 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-193A Selected Topics in Elec. Engineering

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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.

ELN-229 Industrial Electronics

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Requisites: Take ELC-112(S23481

Take ELC-112(S23481); Take previously. Required.

This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices. Upon completion, students should be able to construct and/or troubleshoot these devices for proper operation in an industrial electronic circuit.

ELN-229A Industrial Electronics Part 1

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Requisites: Take ELC-112(S21587); Take

Take ELC-112(S21587); Take previously. Required.

This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices. Upon completion, students should be able to install and/or troubleshoot these devices for proper operation in an industrial electronic circuit. This is part one of a two part course.

ELN-229B Industrial Electronics Part 2

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Requisites:

Take ELN-229A; Take previously. Required.

This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices. Upon completion, students should be able to install and/or troubleshoot these devices for proper operation in an industrial electronic circuit. This is part two of a two part course.

ELN-231 Industrial Controls

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Requisites:

Take ELC-131(S23482); Take previously. Required.

This course introduces the fundamental concepts of control of 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 ELN-133(S23488); 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-236 Fiber Optics and Lasers 3 2 0 4

Requisites: Take ELN-131(S23487); Take previously. Required.

This course introduces the fundamentals of fiber optics and lasers. Topics include the transmission of light; characteristics of fiber optic and lasers and their systems; fiber optic production; types of lasers; and laser safety. Upon completion, students should be able to understand fiber optic communications and basic laser fundamentals.

ELN-249 Digital Communication 2 3 0 3

Requisites: Take ELN-131(S23487); Take previously. Required.

This course covers the core processes and applications associated with digital communication techniques. Topics include the characteristics of RF circuits, modulation, transmitters and receivers, electromagnetic transmission, antennas, and related applications. Upon completion, students should be able to demonstrate knowledge of the concepts associated with digital 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 8 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-110A Emt-Basic Part 1** 3 Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Take Requisites: previously. 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-Basic certification. This course is offered only for eligible high school students. **EMS-110B** 3 **Emt-Basic Part 2** 3 n 4 Take EMS-110A; Take previously. Required. 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-Basic certification. This course is offered only for eligible high school students. **EMS-122 EMS Clinical Practicum I** 0 0 1 3 Requisites: Take EMS-110(S23869); Take previously. Required. Take EMS-130(S16339); Take either previously or concurrently. 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 competence with fundamental paramedic level skills. **EMS-130 Pharmacology** 3 Take EMS-110(S23869); Take previously. Required.Take EMS-122(S23872); Take either Requisites: previously or concurrently. Required. This course introduces the fundamental principles of pharmacology and medication administration and is required for paramedic certification. Topics include medical terminology, pharmacological concepts, weights, measures, drug calculations, vascular access for fluids and medication administration and legislation. Upon completion, students should be able to accurately calculate drug dosages, properly administer medications, and demonstrate general knowledge of pharmacology. **EMS-131 Advanced Airway Management** 2 Requisites: Take EMS-110(S23869); Take previously. Required. This course is designed to provide advanced airway management techniques and is required for paramedic certification. Topics include respiratory anatomy and physiology, airway/ventilation, adjuncts, surgical intervention, and rapid sequence intubation. Upon completion, students should be able to properly utilize all airway adjuncts and pharmacology associated with airway control and maintenance. **EMS-140** 1 2 **Rescue Scene Management**

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.

Requisites:

EMS-150 Requisites:	Emergency Vehicles and EMS Communication		3	0	2	
communication e defensive driving Upon completion	rs the principles governing emergency vehicles, management. Topics include applicable motor vehicle, collision avoidance techniques, communication sy, students should have a basic knowledge of emergency bedical Sciences.	laws affec ystems, an gency vehi	ting emer d informa cles, mai	gency ve ation man ntenance	hicle operation agement system , and commu	on, stems. unication
include anatomy	Cardiology I Take EMS-110(S23869); Take previously. Requires the study of cardiovascular emergencies and physiology, pathophysiology, electrophysiology Upon completion, students should be able to reco	d is require y, and bas	ic rhythm	interpret	ation in the	「opics
Topics include as electrocardiograp	Cardiology II Take EMS-122(S23872) EMS-130(S23874) EMS des an in-depth study of cardiovascular emergences essesment and treatment of cardiac emergencies, aby utilizing the twelve-lead ECG, cardiac pharmacoe able to assess and treat patients utilizing American	ies and is r application ology, and	required f and inte patient o	or param rpretation are. Upor	edic certifica of advanced completion	d
proficiency of stu	EMS Clinical Practicum II Take EMS-122(S23872) EMS-130(S23874); Tak des clinical experiences in the hospital and/or field dents' skills and abilities in patient assessments ar demonstrate continued progress in advanced-leve	. Emphasind the deliv	is is place ery of ca	ed on incr	•	students
skills and abilities	EMS Clinical Practicum III Take EMS-130(S23874) EMS-221(S23879); Tak des clinical experiences in the hospital and/or field in providing advanced-level care. Upon completio ss in advanced-level patient care.	. Emphasi	s is place	d on enh	-	
and is required for abused, terminall assaulted patient	Patients With Special Challenges Take EMS-122(S23872) EMS-130(S23874); Take des concepts of crisis intervention and techniques or paramedic certification. Topics include appropria y ill, chronically ill, technology assisted, bariatric, per as well as behavioral emergencies. Upon complete of patients with special challenges.	of interacti ate interver hysically c	ing with partion and hallenged	atients w interactic d, mentall	on for neglect y challenged	ted, I, or
skills/competenci	EMS Clinical Practicum IV Take EMS-130(S23874) EMS-231(S23880); Tak des clinical experiences in the hospital and/or field es required of the paramedic providing advanced-l dvanced-level patient care as an entry-level param	. Emphasis evel care.	s is place	d on mas		ould be
required for parar disorders/disease	Medical Emergencies Take EMS-122(S23872) EMS-130(S23874); Take an in-depth study of medical conditions frequently certification. Topics include appropriate interestinguises affecting the following systems: respirate autinary, musculoskeletal, and immunological as we	ntly encou ventions/tr ory, neurol	ntered in eatments ogical, ab	the preho for dominal/	gastrointestir	nal,

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 2 3 0 3

Requisites: Take EMS-122(S23872) EMS-130(S23874); 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.

EMS-285 EMS Capstone 1 3 0 2

Requisites: Take EMS-220(S16342) EMS-250(S11267) EMS-260(S10208); Take previously. Required. This course provides an opportunity to demonstrate problem-solving skills as a team leader in simulated patient scenarios and is required for paramedic certification. Emphasis is placed on critical thinking, integration of didactic and psychomotor skills, and effective performance in simulated emergency situations. Upon completion, students should be able to recognize and appropriately respond to a variety of EMS-related events.

ENGLISH (ENG Prefix)

ENG-001 English Skills Support 0 2 0 1

Requisites: Take ENG-111(S24022); Take either previously or concurrently. Required.

This course is designed to supplement the skills introduced in ENG-111 with emphasis placed on the editing and revision components of the writing process. Topics include concepts, skills, writing in a variety of genres and formats using a recursive process, and effective use of rhetorical strategies, with emphasis placed on the editing and revision components of the writing process. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English.

ENG-110 Freshman Composition 3 0 0 3

Requisites: Take DRE-097(S23642); 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-111A Writing and Inquiry Lab 0 2 0 1

Requisites: Take DRE-098(S23643); Take previously. Required.Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-095; Option: Take DRE-098(S23643); Take previously. Required.

This writing laboratory is designed to apply the skills introduced in ENG 111. Emphasis is placed on the editing and revision components of the writing process. Upon completion, students should be able to apply those skills in the production of final drafts in ENG 111.

ENG-112 Writing and Research in the Disciplines 3 0 0 3

Requisites: Take ENG-111(S24022); 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-113 Literature-Based Research 0 0 3 Take ENG-111(S13673); Take previously. Required. Take ENG-111(S13673); Minimum grade C; Requisites: Take previously. Required. This course, the second in a series of two, expands the concepts developed in ENG 111 by focusing on writing that involves literature-based research and documentation. Emphasis is placed on critical reading and thinking and the analysis and interpretation of prose, poetry, and drama: plot, characterization, theme, cultural context, etc. Upon completion, students should be able to construct mechanically-sound, documented essays and research papers that analyze and respond to literary works. This course may include a variety of critical approaches. **ENG-114 Professional Research & Reporting** 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-116 Technical Report Writing** 3 Take ENG-110(S13348) or ENG-111(S13673); Take previously. Required. Requisites: This course, the second in a series of two, introduces layout anddesign of technical reports used in business and industry. Emphasisis placed on audience analysis, data collection and analysis, technical writing style and organization, oral presentation oftechnical data, and the appropriate use of graphics in written andoral presentations. Upon completion, students should be able toproduce written and oral reports using a variety of technicalcommunication models. **ENG-125** 0 0 3 **Creative Writing I** 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-126 Creative Writing II** 3 0 3 Take ENG-125(S16350); Take previously. Required. Requisites: This course is designed as a workshop approach for advancing imaginative and literary skills. Emphasis is placed on the discussion of style, techniques, and challenges for first publications. Upon completion, students should be able to submit a piece of their writing for publication. A portfolio of finished work will be required of all students. Introduction to Literature **ENG-131** Take ENG-111(S24022); Take previously. Required. Take ENG-112(S24024) ENG-113 or ENG-Requisites: 114(S13706); Take either previously or concurrently. Required.Take ENG-112(S13681) ENG-114(S13706) ENG-113; Take either previously or concurrently. Recommend This course introduces the principal genres of literature. Emphasis is placed on literary terminology, devices, structure, and interpretation. Upon completion, students should be able to analyze and respond to literature. **ENG-232 American Literature II** 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.

practice of poetry completion, stude	Modern American Poets Take ENG-112(S13681) ENG-113 or ENG-11 rs the works of selected major modern America and the historical and literary traditions which ents should be able to read poetry with more co	an poets. Topics influenced or we	s include ere influ	e each po enced by	pet's theory are the poets. U	lpon
placed on historic	British Literature I Take ENG-112(S13681) ENG-113 or ENG-11 rs selected works in British literature from its be cal background, cultural context, and literary an ents should be able to interpret, analyze, and re	eginnings to the allysis of selecte	Roman ed prose	tic Period , poetry,	d. Emphasis i and drama. U	Jpon
on historical back	British Literature II Take ENG-112(S13681) ENG-113 or ENG-11 rs selected works in British literature from the Reground, cultural context, and literary analysis cents should be able to interpret, analyze, and re	Romantic Period of selected prose	to the pe, poetry	oresent.	Emphasis is p ama. Upon	
beginnings through	World Literature I Take ENG-112(S13681) ENG-113 or ENG-11 duces selected works from the Pacific, Asia, Af gh the seventeenth century. Emphasis is place of selected prose, poetry, and drama. Upon co- cond to selected works.	rica, Europe, an ed on historical b	d the Ar	mericas f und, cultu	rom their liter Iral context, a	-
century to the pre	World Literature II Take ENG-112(S13681) ENG-113 or ENG-11 duces selected works from the Pacific, Asia, Afesent. Emphasis is placed on historical background drama. Upon completion, students should be	rica, Europe, an ound, cultural co	d the Ar	mericas f nd literary	rom the eight analysis of s	selected
Emphasis is place	African-American Literature Take ENG-112(S13681) ENG-113 or ENG-11 des a survey of the development of African-An ed on historical and cultural context, themes, li , students should be able to interpret, analyze,	nerican literature terary traditions,	from its and ba	s beginni ckground	ngs to the pre	
and cultural conte	Literature by Women Take ENG-112(S13681) ENG-113 or ENG-11 des an analytical study of the works of several exts, themes and aesthetic features of individua empletion, students should be able to interpret,	women authors al works, and bid	. Emph ographic	asis is plackg	aced on the h rounds of the	istorical
	ENVIRONMENTAL SCIEN	CE (ENV Pr	efix)			
ENV-110 Requisites:	Environmental Science	3	0	0	3	

This course covers fundamental scientific principles and problems facing society today. Topics include population, natural resources, air and water pollution, and waste disposal problems. Upon completion, students should be able to demonstrate insight into the role the individual plays in shaping the environment.

ENV-110A Environmental Science Laboratory 1 Take ENV-110(S13454); Take either previously or concurrently. Required. Requisites: This course provides a laboratory component to complement ENV 110. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental relationships and of contemporary environmental issues. **ENV-112** 2 **Environmental Education I** 3 Requisites: This course introduces the student to elements of the NC Environmental Education Plan. Topics will include: Basic NC Wild, Project Learning Tree, environmental education learning experience and aquatics. Upon completion, students should have an understanding of environmental education and complete learning objectives specific to obtaining the NCDENR Environmental Education Certification. **ENV-114** 2 3 **Environmental Education II** 3 0 Requisites: This course introduces the student to elements of the NC Environmental Education Plan. Emphasis is placed on the student participating in a variety of out-of-door experiences that support action to ensure stewardship of the earth's environment. Upon completion, students should have the necessary knowledge of the support resources and skills to lead an environmental education class. **ENV-120 Earth Science** 3 2 Take 1 group; Option: Take ENV-110(S13454); Option: Take BIO-140 BIO-140A; Take Requisites: previously. Required. This course covers the fundamental principles of earth science that provide a foundation for continued study in environmental science. Emphasis is placed on the basic principles of geology, oceanography, meteorology, astronomy, and the development of inquiry about the natural world through observation. Upon completion, students should be able to demonstrate an understanding of the component areas of earth science. **ENV-193** 0 3 **Selected Topics in Environmental Science** 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. ENV-193A Selected Topics in Rural Watershed Pro 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. **ENV-210 Management of Waste** 2 0 Take 1 group; Option: Take CHM-131 ENV-110(S13454); Option: Take CHM-131 BIO-140 BIO-Requisites: 140A; Take previously. Required. This course examines contemporary environmental issues concerning the disposal of wastes. Topics include problems associated with the disposal of municipal solid waste, low-level radioactive waste, high-level radioactive waste, hazardous waste, and toxic materials. Upon completion, students should be able to demonstrate an understanding of the methodologies and technologies involved in the proper handling and disposal of wastes.

Requisites: Take 1 group; Option: Take CHM-131 ENV-110(S13454); Option: Take CHM-131 BIO-140 BIO-140A; Take previously. Required.

This course examines the constituents of natural waters from a biological and geochemical perspective. Topics include common components of water, water sources, water law, health consequences, water treatment procedures,

include common components of water, water sources, water law, health consequences, water treatment procedures, and the design of water treatment plants. Upon completion, students should be able to demonstrate an understanding of the biological, chemical, and geological factors affecting water quality.

ENV-214

Water Quality

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ENV-218	Environmental Health	3	0	0	3	
	Take 1 group; Option: Take ENV-110(S13454); (A; Take previously. Required.	•		•		
contaminants and	rs the influence of environmental conditions on hu I the major exposure routes of the human body. Use ts of the environment, including air, water, and foo health.	Jpon com	pletion, stu	dents sh	ould be able to	0
ENV-220	Applied Ecology	3	2	0	4	
Requisites: 110(S23360) BIO This course cover organisms. Topic of populations, int completion, stude	Take 1 group; Option: Take ENV-110(S23360) En-111(S24020); Option: Take BIO-111(S24020) By the relationships between organisms and their east include environmental factors affecting aquatic attractions among species, and the ecological viewents should be able to demonstrate an understand the ecological impact of human activities.	IO-140 Benvironment and terre	IO-140A; T ent and the strial systen modern land	ake previnteractions, regul	riously. Requions among ation and dynament. Upon	amics
ENV-222	Air Quality	3	2	0	4	
Requisites: 140A; Take previous	•		•			
atmospheric conc pollution. Upon c	duces the study of air quality and air pollution. Em ditions, effects of air pollution, air quality analysis a completion, students should be able to demonstrat ir pollution from a human health and welfare persp	ind meas e an und	urement, ar	nd regula	atory control of	f air
ENV-226	Environmental Law	3	0	0	3	
Requisites: previously. Requ						
procedures for enbasics, water qua completion, stude	rs federal laws and acts concerning environmenta iforcing laws, and problems concerning enforcementality laws, air quality laws, waste disposal laws, and ents should be able to demonstrate an understand protection of environmental quality.	ent. Empl d biologic	nasis is plac al resource	ed on er protection	nvironmental la on laws. Upor	aw ¯ n
ENV-228 Requisites:	Environmental Issues	1	0	0	1	
This course provien environmental ne	des a forum for the discussion of current environments, regulations, accidents, and areas of controver anderstanding of the impact of local, state, national	sy. Upor	n completio	n, studer	nts should be a	
ENV-232 Requisites:	Site Assessment and Remediation Take 1 group; Option: Take ENV-110(S13454);	2 Option: 1	3 Take BIO-14	0 40 BIO-1	3 40A; Take	
previously. Requ						
and groundwater. completion, the st	duces the concepts and techniques utilized in the a Emphasis is placed on hydrogeology, environmentudent should be able to properly sample environmentudent, and discuss various remediation approaches	ental sam nental me	pling, and r	emedica	tion practices.	. Upon
ENV-236	Wetlands Science	2	2	0	3	
Requisites: previously. Requ						
Emphasis is place	duces wetlands delineation procedures used and a ed on hydrology, hydrolytic vegetation, and hydric wetlands delineation procedures, according to loc	soils. Up	oon complet	tion,stud	ents should be	
to pononin quality	monariae deminedation procedures, decorating to lot	Jai, Jiaib	, .Juorui, air	- rogula	.c. y protocoi.	

EPT EMERGENCY PREPAREDNESS (EPT Prefix)

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Requisites:						
	rs the four phases of emergency management: mit	-	-	-		-
•	ganizing for emergency management, coordinating		-	-		-
-	overnment agencies at all levels. Upon completion comprehensive emergency management and the i					
understanding of	comprehensive emergency management and the i	niegraieu	emergen	icy manag	jenieni sysi	em.
	FIRE PROTECTION (F	IP Prefix	<u>()</u>			
FIP-120 Requisites:	Introduction to Fire Protection	3	0	0	3	
protection field.	des an overview of the development, methods, sys Fopics include history, evolution, statistics, suppres Upon completion, students should be able to demo	sion, orga	nizations	, careers,	curriculum,	, and
FIP-124 Requisites:	Fire Prevention & Public Education	3	0	0	3	
This course introd NFPA standard 1 programs, and in	duces fire prevention concepts as they relate to cor 01. Topics include the development and maintena spection programs. Upon completion, students shown to a citizens or industrial group.	nce of fire	preventi	on progra	ms, educati	ional
FIP-128 Requisites:	Detection and Investigation	3	0	0	3	
This course cove NFPA standard 9 accelerants, cour	rs procedures for determining the origin and cause 21. Topics include collection and preservation of etroom procedure and testimony, and documentation conduct a competent fire investigation and present	vidence, on of the fir	detection e scene.	and deter	mination of mpletion, st	udents
FIP-132 Requisites:	Building Construction	3	0	0	3	
This course cove construction,inclu construction and related topics. U	rs the principles and practices reference in NFPA siding residential and commercial, as impacted by firelated elements, fire resistive aspects of construction completion, students should be able to unders or negative aspects as related to fire conditions.	re conditio tion materi	ns. Topi als, build	cs include ling codes	types of , collapse,	and other
FIP-136 Requisites:	Inspections and Codes	3	0	0	3	
This course cove in NFPA standard hazards, plan rev	rs the fundamentals of fire and building codes and d 1730. Topics include review of fire and building criews, site sketches, and other related topics. Upor iance inspection and produce a written report.	odes, writi	ng insped	ction repo	ts, identifyi	ng

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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,

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Fire Protection Law

codes, and ordinances as they relate to fire protection.

FIP-152

Requisites:

EPT-140

Emergency Management

FIP-164	OSHA Standards	3	0	0	3	
Emphasis is place material handling.	rs public and private sector OSHA work site requirenced on accident prevention and reporting, personal say. Upon completion, students should be able to analy olicies designed to achieve compliance.	afety, ma	achine ope	rations, a	nd hazardous	
FIP-220 Requisites:	Fire Fighting Strategies	3	0	0	3	
This course provie public and private fire-ground tactics students should b	des preparation for command of initial incident operations sector referenced in NFPA standards 1561, 1710, as and strategies, incident safety, and command/contine able to describe the initial incident system as it related and non-fire situations.	and 172 rol of em	0. Topics nergency c	include in perations	cident management, . Upon completion,	
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-228	Local Government Finance	3	0	0	3	
Requisites: This course introduces local governmental financial principles and practices. Topics include budget preparation and justification, revenue policies, statutory requirements, audits, and the economic climate. Upon completion, students should be able to comprehend the importance of finance as it applies to the operations of a department.						
FIP-229 Requisites:	Fire Dynamics and Combustion	3	0	0	3	
This course cover controlled referen properties of com students should b	rs the theories and fundamentals of how and why fire ced in NFPA standard 1001. Topics include composition bustible solids, classification of hazards, and the use able to describe the properties of matter and dynal extinguishment techniques.	nents of	fire, fire se extinguish	ources, fir ing agents	re behavior, s. Upon completion,	
FIP-240	Fire Service Supervision	3	0	0	3	
supervision skills, grievances, and s						
FIP-244	Fire Protection Project	3	0	0	3	
the fire protection development of co	des an opportunity to apply knowledge covered in professional will encounter referenced in NFPA star comprehensive and professional practices. Upon corviced the fire protection service through written a	ndard 10 npletion	001. Empl , students	nasis is pl should be	aced on the e able to	
FIP-276 Requisites:	Managing Fire Services	3	0	0	3	
This course provide	des an overview of fire department operative service	s refere	nced in NI	FPA stanc	dard 1021. Topics	

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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)

		<u> </u>			
This course introduplaced on the dev	Elementary French I Take 1 group; Option: Take ENG-090 RED-090; ired.Take FRE-181; Take either previously or conduces the fundamental elements of the French language relopment of basic listening, speaking, reading, and ehend and respond with grammatical accuracy to see.	currently. F guage withir d writing ski	Required. n a cultura ills. Upon	al context.	Emphasis is on, students should
or area. Topics in concerns of the a	Cultural Immersion Take FRE-111; Take previously. Required. Fores Francophone culture through intensive study of clude an overview of linguistic, historical, geographere visited. Upon completion, students should be a cost area and demonstrate an understanding of cult	hical, socio able to exhi	political, e bit first-ha	economic	, and/or artistic
This course provide Emphasis is place the use of supple	French Lab 1 Take 1 group; Option: Take ENG-090 RED-090; ired.Take FRE-111; Take either previously or condes an opportunity to enhance acquisition of the fued on the progressive development of basic listening mentary learning media and materials. Upon comp grammatical accuracy to spoken and written Frence	currently. Fandamentaling, speaking	Required. elements g, reading ents shou	of the Fre , and writ ld be able	ench language. ing skills through e to comprehend
This course provide Emphasis is place the use of supple	French Lab 2 Take FRE-181; Take previously. Required.Take RE-112; Take either previously or concurrently. R des an opportunity to enhance acquisition of the fued on the progressive development of basic listenir mentary learning media and materials. Upon compincreasing proficiency to spoken and written Frence	equired. ndamental ng, speaking letion, stud	elements g, reading ents shou	of the Fre g, and writ ld be able	ench language. ting skills through e to comprehend
This course provio	Intermediate French I Take FRE-112; Take previously. Required.Take RE-281; Take either previously or concurrently. R des a review and expansion of the essential skills of entic and representative literary and cultural texts. ectively, accurately, and creatively about the past, p	equired. of the Frenc Upon comp	ch languaç	ge. Empl	nasis is placed on
literary and cultur	Intermediate French II Take FRE-211; Take previously. Required.Take continuation of FRE 211. Emphasis is placed on the al texts. Upon completion, students should be able emplexity and sophistication.	e continuing	study of	authentic	and representative
This course provi	French Lab 3 Take FRE-182; Take previously. Required.Take RE-211; Take either previously or concurrently. R des an opportunity to enhance the review and expansis is placed on the study of authentic and representations.	equired. ansion of th	e essentia	al skills of	the French

Take FRE-281; Take previously. Required. Take FRE-212; Take either previously or concurrently.

of supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

FRE-282 French Lab 4 0 2 0 1

Requisites: 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 continuing 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 spontaneously and accurately with increasing complexity and sophistication.

FOOD SERVICE TECHNOLOGY (FST Prefix) (only offered to immured populations)

FST-100 Introduction to Foodservice 3 0 0 3

Requisites:

This course is designed to develop an understanding of the foodservice industry, its terminology, mathematics, and measurements. Emphasis is placed on employability skills, vocabulary, and culinary math including fractions, ratio and proportion, and percents. Upon completion, students should be able to identify career paths, convert recipes, and differentiate standard measurements.

FST-102 Foodservice Skills I 4 8 0 8

Requisites: Take FST-103(S22867) or CUL-110(S22835); Take either previously or concurrently. Required. This course introduces the concepts, skills, and techniques for volume food production in an institutional or commercial setting. Emphasis is placed on knife skills, tool and equipment handling, and applying principles of basic hot and cold food preparation. Upon completion, students should be able to demonstrate entry-level skills for foodservice operations.

FST-103 Foodservice Sanitation 2 0 0 2

Requisites:

This course provides practical experience with the basic principles of safety and sanitation in the foodservice industry. Emphasis is placed on personal hygiene habits, safety regulations, and food handling practices (H.A.C.C.P.) that protect the health of the consumer. Upon completion, students should be able to demonstrate appropriate safety and sanitation practices required in the foodservice industry.

FST-103A Foodservice Sanitation Lab 0 2 0 1

Requisites: Take FST-103(S22867) or CUL-110(S22835); Take either previously or concurrently. Required. This course provides a laboratory experience for enhancing student skills in the basic principles of sanitation and safety in the foodservice industry. Emphasis is placed on the practical experiences that enhance personal hygiene habits, safety regulations, and food handling practices that protect the health of the consumer. Upon completion, students should be able to demonstrate the application of sanitation and safety production procedures in foodservice operations.

GEOLOGY (GEL Prefix)

GEL-111 Geology 3 2 0 4

Requisites: Take 1 group; Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 ENG-111(S24022); Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 DRE-098(S23643); 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-113 Historical Geology 3 2 0 4

Requisites: Take GEL-111(S12347) or GEL-120; Take previously. Required. Take GEL-111(S12347) or GEL-120; Minimum grade C; Take previously. Required.

This course covers the geological history of the earth and its life forms. Emphasis is placed on the study of rock strata, fossil groups, and geological time. Upon completion, students should be able to identify major fossil groups and associated rock strata and approximate ages of geological formations.

GEL-120 Physical Geology

3 2 0 4

Requisites: Take 1 group; Option: Take ENG-090 MAT-070 RED-090; Option: Take ENG-111(S13673) MAT-070; Option: Take DMA-040 ENG-090 RED-090; Option: Take DMA-040 ENG-111(S13673); Take previously. Required.

This course provides a study of the structure and composition of the earth's crust. Emphasis is placed on weathering, erosional and depositional processes, mountain building forces, rocks and minerals, and structural changes. Upon completion, students should be able to explain the structure, composition, and formation of the earth's crust.

GEL-230 Environmental Geology

3 2 0

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.

GEOGRAPHY (GEO Prefix)

GEO-111 World Regional Geography

3 0 0 3

Requisites: Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take DRE-098(S23643); Take previously. Required.

This course introduces the regional concept which emphasizes the spatial association of people and their environment. Emphasis is placed on the physical, cultural, and economic systems that interact to produce the distinct regions of the earth. Upon completion, students should be able to describe variations in physical and cultural features of a region and demonstrate an understanding of their functional relationships.

GIS-111 Introduction to GIS

2 2 0

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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-120 Introduction to Geodesy

2 2 0 3

Requisites:

This course introduces the fundamental concepts behind map projections, datums, and coordinate systems. Topics include the theory of how the earth's shape is defined and how geographic features are positioned using spherical coordinate systems. Upon completion, students should be able to demonstrate an understanding of the fundamentals of geodesy as it relates to the measurement and representation of the earth.

GEOGRAPHIC INFORMATION SYSTEMS (GIS Prefix)

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.

3

GIS-125 CAD for **GIS** 2 2 0

Requisites:

This course introduces the concepts of Computer Aided Drafting (CAD) as well as software that is used for building geographic data for a GIS. Emphasis is placed on the learning of basic commands used in building spatial data. Upon completion, the student will be able to operate within a CAD environment.

GIS-161 Introduction to Computers-BASIC and C++ 1 4 0 3

Requisites:

This course introduces the electronic computer and includes a description of computer design and operation, associated vocabulary, and most widely used applications. Emphasis is placed on hands-on experience with software. Upon completion, students shouldbe able to utilize and depict calculations, decision-making branching and looping functions processing, and top-down programming methodology.

GIS-230 GIS Data Creation 2 2 0 3

Requisites:

This course introduces the fundamental concepts of primary GIS data creation. Topics include the collection of field data, digital conversion of existing hardcopy maps, and the construction of spatial data from known geodetic locations. Upon completion, students should be able to demonstrate an ability to collect, create, and process spatial data within a variety of environments.

GIS-241 Cartographic Production 2 2 0 3

Requisites: Take GIS-111; Take previously. Required.

This course covers the application of computerized cartography, to include the science and art of map design. Topics include the use of maps as an effective medium, efficient map layout and large-scale map production. Upon completion, students should be able to create a variety of map products for an audience or client.

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 DRE-097(S23642) DMA-030; 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.

the principles of d	Graphic Design I Take DRE-097(S23642); Take previously. Requir luces the conceptualization process used in visual pesign and on the manipulation and organization of one of principles and visual elements to projects.	oroblen	•		
This course cover include creation of	Graphic Design II Take ART-121(S12130) DES-135(S10718) or GRE ake previously. Required. Is the application of visual elements and design print f various designs, such as logos, advertisements, p impletion, students should be able to effectively apple	nciples osters,	in advertising outdoor adve	and grap	hic design. Topics nd publication
	Design Applications I Take GRD-141; Take either previously or concurred ired. luces visual problem solving. Emphasis is placed or nts should be able to produce projects utilizing basi	n applic	cation of desig		
comprehensive pr	Design Applications II Take GRD-142; Take either previously or concurred. signed to provide additional hands-on training in gramulation of the concepts and technologies covered able to provide solutions to design problems.	aphic de	esign. Empha	sis is pla	ced on producing
include the expres	Computer Design Techniques I Take GRD-151; Take previously. Required.Take of the complex design problems utilizing various design essive use of typography, image, and organization to eable to use appropriate computer software to professional computer software computer software computer software computer software computer software computer softw	and dr	awing softwar unicate a mes	e applica	ations. Topics
GRD-167	Photographic Imaging I	1	4	0	3
depth of field, shu completion, stude					
specialized equip	Photographic Imaging II Take GRD-167; Take previously. Required. luces advanced camera operations and photographment, digital image correction and output, and other able to demonstrate proficiency in producing high	r metho	ods and mater	als. Upo	•
Emphasis is place able to demonstra	Selected Topics in Adv/Graphic Design des an opportunity to explore areas of current interest on subject matter appropriate to the program or atte an understanding of the specific area of study. Interest in specific program or discipline areas.	discipli This co	ne. Upon con ourse provides	npletion, an oppo	students should be ortunity to explore

the program of discipline. Upon completion, students should be able to demonstrate an understanding of the specific

area of study.

GRD-230 **Technical Illustration** 3 0 2 Take ART-131 DES-125(S11944) or GRD-121; Take previously. Required. Take 1 group; Option: Requisites: Take GRD-152 ART-131; Option: Take GRD-152 DES-125(S11944); Option: 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-241 Graphic Design III** 4 Take DES-136(S10746) or GRD-142; Take previously. Required.Take 1 group; Option: Take Requisites: DES-136(S10746) GRD-110 GRD-152; Option: 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-263** Illustrative Imaging 3 Take GRD-151 or GRA-151; Take previously. Required. Requisites: This course covers the creative manipulation of images utilizing digital techniques of masking, layering, airbrushing, and painting. Topics include the aesthetic analysis of visual imagery as well as the legalities of manipulating images. Upon completion, students should be able to utilize software applications to creatively manipulate and illustratively build digital images which accomplish design objectives. **GRD-271** Multimedia Design I 3 2 Requisites: Take GRD-151 or GRA-151; Take previously. Required. Take GRD-151 or GRA-151; Take previously. Required. This course introduces the fundamentals of multimedia design and production for computer-related presentations. Topics include interface design, typography, storyboarding, scripting, simple animation, graphics, digital audiovideo, and copyright issues. Upon completion, students should be able to design and produce multimedia presentations. **GRD-280 Portfolio Design** Take 1 group; Option: Take GRD-142 GRD-152; Option: Take GRD-142 GRA-152; Take Requisites: previously. Required. Take GRD-152 WEB-140; 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 2 **Advertising Copywriting** Take ENG-110(S20133) or ENG-111(S13673); Take previously. Required.Take 1 group; Option: Requisites: Take GRD-110 ENG-110(S22173); Option: Take GRD-110 ENG-111(S13673); Option: Take GRD-151 ENG-110(S22173); Option: Take GRD-151 ENG-111(S1367 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 2 0 2 1 Take 1 group; Option: Take GRD-142 GRA-121; Option: Take GRD-142 GRA-152; Option: Take Requisites:

GRD-142 GRD-152; Take previously. Required.Take 1 group; Option: Take GRD-142 GRA-121 GRA-152; Option: Take GRD-142 GRA-121 GRD-152 ENG-1

This course introduces media pricing, scheduling, and business ethics. Emphasis is placed on communication with clients and determination of clients' advertising needs. Upon completion, students should be able to use professional communication skills to effectively orchestrate client/media relationships. Additional topics include evaluation of career choices, resources, job search techniques and for students to consider an appropriate personal direction of career specialization.

GRD-292 Selected Topics in Adv & Graphic Design 1 2 0 2

Requisites: Take GRD-152; Take previously. Required.

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.

GERONTOLOGY (GRO Prefix)

GRO-120 Gerontology 3 0 0 3

Requisites: Take DRE-098(S23643); 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.

HEALTHCARE BUSINESS INFORMATIC (HBI Prefix)

HBI-110 Issues and Trends in Healthcare Business Informatics 3 0 0 3

Requisites:

This course is a survey of current and emerging technology applications and data standards in the healthcare industry. Topics include the history, implementation, use, management, and impact of information technology in healthcare settings. Upon completion, students should have an understanding of the current trends and issues in healthcare informatics.

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.

HBI-250 Data Management and Utilization 2 2 0 3

Requisites: Take DBA-110 DBA-120 or DBA-210; Take previously. Required.

This course covers the management and usage of data in healthcare settings according to current practices in healthcare informatics. Topics include data warehousing, data integrity, data security, data mining, and report generating in healthcare settings. Upon completion, students should be able to demonstrate an understanding of using healthcare data to support reporting and decision making in healthcare settings.

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 Requisites:	First Aid & CPR	1	2	0	2	
This course intro- for choking and b	duces the basics of emergency first aid treatment. bleeding, and other first aid procedures. Upon cor emergency care for the sick and injured until med	npletion, stu	dents sh	ould be a		
HEA-120 Requisites:	Community Health	3	0	0	3	
This course provides information about contemporary community health and school hygiene issues. Topics include health education and current information about health trends. Upon completion, students should be able to recognize and devise strategies to prevent today's community health problems.						
	HEAVY EQUIPMENT OPERATION	I (H	EO Pre	fix)		
HEO-111 Requisites:	Heavy Equipment Operations I	8	8	0	12	
This course cove operator employr maintenance, and	rs the beginning processes of heavy equipment oment options, heavy equipment safety, identification displayed basic operational techniques. Upon completion, heavy equipment operations utilized in the constructions.	on of heavy of students sh	equipme	nt, equipr	nent systems and	
HEO-112	Heavy Equipment Operations II	8	8	0	12	
purpose, function equipment. Upon	Take HEO-111; Take previously. Required. ides instruction regarding advanced operations of a, design features, controls, manipulation, limitation completion, students should be able to demonstruit in the construction field.	ns, and safe	operation	on of popu	ılar mobile heavy	
HEO-113	Grades and Drawings	3	0	0	3	
Requisites: This course is designed to develop the knowledge and skills required to interpret construction drawings, civil blueprints, and grades. Topics include basic terms for construction drawings, dimensions, setting grades, interpreting grade stakes, reading site plans, safety, and legal issues. Upon completion, students should be able to demonstrate a general knowledge of civil blueprints, construction drawings and the theory behind finish grade selection.						
	HEAVY EQUIPMENT MAINTENA	NCE (HE	T Prefi	<u>x)</u>		
HET-110 Requisites:	Diesel Engines	3	9	0	6	
This course intro	duces theory, design, terminology, and operating of operation, inspection, measuring, and rebuilding pon completion, students should be able to meas	ıg diesel enç	gines acc	cording to	factory	
HET-114	Power Trains	3	6	0	5	
planetary gears,	duces power transmission devices. Topics include drive lines, differentials, and transmissions. Upon ations, repair, and adjust power train components	completion				
HET-115	Electronic Engines	2	3	0	3	
Requisites: This course intro	duces the principles of electronically controlled die	esel engines	. Empha	sis is plad	ced on testing and	

adjusting diesel engines in accordance with manufacturere' specifications. Upon completion, students should be able

to diagnose, test, and calibrate electronically controlled diesel engines.

HET-125 Requisites:	Preventive Maintenance	1	3	0	2	
This course introduses assemblies. Topic	duces preventive maintenance practices used on ics include preventive maintenance schedules, se , students should be able to set up and follow a pr	rvices, DO7	rules a	nd regulat	ions, and r	road ability
HET-128 Requisites:	Medium/Heavy Duty Tune Up	1	2	0	2	
This course introd troubleshooting e	duces tune-up and troubleshooting according to magine systems, tune-up procedures, and use and ents should be able to troubleshoot, diagnose, and nent.	care of spe	cial test	tools and	equipment	t. Upon
HET-134 Requisites:	Diesel Fuel and Power System	2	3	0	3	
This course introdincluding newer a theories of older of should be able to	duces the principles of fuel injection and other powered that cleaner technology. Emphasis is placed on test conventional and newer and cleaner Tier III and T diagnose and service fuel systems and explain pheavy equipment industry.	st equipmentier IV fuels	it, compo ystems.	onent fund Upon con	ctions, safe	ety, and udents
HET-192A Requisites:	Selected Topics in Heavy Equip & Trans	2	0	0	2	
Emphasis is place be able to demon explore areas of o	des an opportunity to explore areas of current into ed on subject matter appropriate to the program on strate an understanding of the specific area of sicurrent interest in heavy equipment and transport e to heavy equipment.	or discipline tudy. This o	e. Upon course p	completion	n, student n opportuni	s should ity to
HET-217 Requisites:	Tractor Performance	1	2	0	2	
This course cover problem solving u	rs procedures for attaining optimum performance using dynamometers, test procedures, and safety. diagnose engines and drive components and adj	Upon com	pletion,	student s	should be a	able to use
systems on media	Medium/Heavy Duty Brake Systems Lab Take HET-231; Take either previously or concur des a laboratory setting to enhance the skills for t um and heavy duty vehicles. Emphasis is placed 231. Upon completion, students should be able ed in HET 231.	roubleshoot on practica	ing, adju I experie	nces that	enhance t	he topics
HET-233	Suspension and Steering	2	4	0	4	
Topics include wh	duces the theory and principles of medium and he neel and tire problems, frame members, fifth whee ents should be able to troubleshoot, adjust, and re by duty vehicles.	el, bearings,	and cou	upling sys	tems. Upo	n
	HEALTH AND FITNESS SCIENC	E (HF	S Pref	ix)		
HFS-110	Exercise Science	4	0	0	4	

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** 0 4 **Fitness Facility Management** 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** Take HFS-110 HFS-111; Take previously. Required. Requisites: 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-218** Lifestyle Chng & Wellness 3 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-111 **World Civilizations I** 3 Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); Take previously. Required. This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. HIS-112 **World Civilizations II** 0 0 3 Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); 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 Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); 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 Requisites: Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take DRE-098(S23643); 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** Requisites: Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take DRE-098(S23643); 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 Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); 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. HIS-151 **Hispanic Civilization** 3 0 0 3 Requisites: Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take DRE-098(S23643); Take previously. Required. This course surveys the cultural history of Spain and its impact on the New World. Topics include Spanish and Latin American culture, literature, religion, and the arts. Upon completion, students should be able to analyze the cultural history of Spain and Latin America. **HIS-167** The Vietnam War 3 3 Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); Take previously. Required. This course covers the American political and military involvement in Vietnam from 1944 to 1975. Topics include the French colonial policy, Vietnamese nationalism, the war with France, American involvement, and resolution of the conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments that influenced the Vietnam War. **HIS-216 Twentieth-Century Europe** 3 Requisites: Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take

This course provides an in-depth survey of twentieth-century Europe. Topics include World Wars I and II, and political, social, and cultural movements of the twentieth century. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in twentieth-century Europe.

DRE-098(S23643); Take previously. Required.

Requisites: DRE-098(S23643	African-American History Take 1 group; Option: Take ENG-090 RED-090 3); Take previously. Required.					
the slave trade, th African Americans	rs African-American history from the Colonial per ne Civil War, Reconstruction, the Jim Crow era, the s. Upon completion, students should be able to the ents in the history of African Americans. This class or oral format.	he civil rig analyze si	nts movem gnificant po	ent, and o	contributions o	of and
Requisites: DRE-098(S23643 This course cover of slavery, Africar African-American	African-American History I Take 1 group; Option: Take ENG-090 RED-090 Take previously. Required. Take African American history through the Civil Ward-American participation in the American Revolut culture. Upon completion, students should be a sopments in early African-American history.	period. T	opics inclu	de Africar	n origins, the r	nature stinct
HIS-223	African-American History II	3	0	0	3	
Requisites:	Take 1 group; Option: Take ENG-090 RED-090); Option:	Take ENG	i-111(S13	673); Option:	Take
This course cover Jim Crow era, urb African-American	(a); Take previously. Required. The African American history from the Civil War to the Parliam Renaissance, the Civil Right leaders. Upon completion, students should be also to present in African-American history since the Completion.	ghts mover able to ana	ment, and	the philoso	ophies of majo	or
HIS-226	The Civil War	3	0	0	3	
Requisites: DRE-098(S23643	Take 1 group; Option: Take ENG-090 RED-090 Take previously. Required.); Option:	Take ENG	i-111(S13	673); Option:	Take
This course exam Reconstruction. the War's socioed	ines the social, political, economic, and ideologic Topics include regional conflicts and sectionalism conomic impact, aftermath, and consequences. Let political, socioeconomic, and cultural development	n, dissoluti Jpon comp	on of the U	Inion, milit dents shou	ary campaigr uld be able to	
HIS-231	Recent American History	3	0	0	3	
Requisites:	Take 1 group; Option: Take ENG-090 RED-090 Take previously. Required.); Option:	Take ENG	i-111(S13	673); Option:	Take
This course is a s the Cold War, soo students should b	tudy of American society from the post-Depressi sial unrest, the Vietnam War, the Great Society, are able to analyze significant political, socioecond uire a research project to be presented in a writt	and curren omic, and o	t political t cultural de	rends. Up velopment	on completio	n,
HIS-236	North Carolina History	3	0	0	3	
Requisites:	Take 1 group; Option: Take ENG-090 RED-090 Take previously. Required.); Option:	Take ENG	i-111(S13	673); Option:	Take
•	tudy of geographical, political, economic, and so	cial condit	ions existir	ng in North	n Carolina from	m
	ery to the present. Topics include native and imm	-	-			
•	eriods; party politics; race relations; and the trans students should be able to analyze significant p		-			-
	This class will require a research project to be				-	momo
	HEALTHCARE MANAGEMENT	(I	HMT Pref	<u>ix)</u>		
HMT-211	Long-Term Care Administration	3	0	0	3	
Requisites:	Take 1 group; Option: Take RED-090 ENG-090	_	_			

098(S23643) HMT-110(S20232); Option: Take ENG-111(S24022) 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 1 group; Option: Take RED-090 ENG-090 HMT-110(S20232); Option: Take DRE-098(S23643) HMT-110(S20232); Option: Take ENG-111(S24022) 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-112 Landscape Design I

2 3 0 3

Requisites:

This course covers landscape principles and practices for residential and commercial sites. Emphasis is placed on drafting, site analysis, and common elements of good design, plant material selection, and proper plant utilization (encouraged use of native plants and discouraged use of invasive species). Upon completion, students should be able to read plans and draft a landscape design according to sustainable practices.

HOR-114 Landscape Construction

2 0 3

2

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.

HIGH PERFORMANCE COMPUTING (HPC Prefix)

HPC-140 Introduction to High Performance Computing Architecture 2 2 0 3

Requisites: Take CTI-193A; Take previously. Required.

This course introduces students to hardware architecture for the High Performance Computing environment (HPC).

Topics include distributed and shared memory systems, hardware design issues, vector parallel machines and communication issues of remote massively parallel machines and clusters. Upon completion, students should be able to discuss and evaluate architectural design issues in an HPC system.

HPC-152 Hpc Development Tools

Requisites:

2 2 0 3

This course introduces students to performance analysis tools to measure, predict, locate, and analyze bottleneck situations in parallel and cluster application. Topics include system software, parallel software life-cycle issues and a review of parallel developmental options in a HPC environment. Upon completion, students should be able discuss various HPC development tools and their appropriate usage in the HPC environment.

HPC-162 Hpc Security

2 2 0

3

Requisites:

This course provides an overview of distributed computer security issues as related to HPC services. Topics include cryptographic technologies, protocols used to construct secure and private systems, internet service security mechanisms, firewalls, auditing, and related topics. Upon completion, students should be able to implement security procedures for a HPC system.

HPC-170 Intro to Hpc Data Mining

2 2 0 3

Requisites:

This course provides an introduction to data intensive computing on HPC machines. Topics include distributed mass storage, efficient retrieval techniques, data management tools, appropriate data structures and case studies. Upon completion, students should be able to define and discuss performance evaluation of a database in a HPC environment.

HPC-172 Hpc Applications

2 2 0 3

Requisites:

This course introduces students to currently available HPC applications highlighting software approaches and hardware platforms. Topics include a review of successfully deployed HPC systems in industry and research environments and decision-making techniques when selecting HPC. Upon completion, students should be able to discuss, in oral as well as written form, current HPC applications highlighting strengths and weaknesses.

HPC-230 Adv Hpc Communication

2 2 0 3

Requisites:

This course introduces students to advanced communication and networking topics in a HPC environment. Topics include switch queuing strategy, performance modeling, review of current high-speed communication networks and available tools and libraries for improving high-speed communications. Upon completion, students should be able to design and defend a reliable high-speed communication model for a HPC environment.

HPC-240 Adv Hpc Architecture

2 2 0 3

Requisites:

This course introduces students to advanced hardware architecture for a (HPC) system. Topics include topology of parallel computer architecture, arithmetic pipeline design, array machines, distributed architecture, multi-processor computers, SIMD, MIMD machines and current recent parallel machines. Upon completion, students should be able to design and discuss a user specified HPC architecture system.

HPC-245 Grid Technologies

2 2 0 3

Requisites:

This course introduces students to Grid technologies and distributed computing architecture. Topics include distributed security architecture, data formats, distributed file systems, access control of shared resources and multi-institutional collaborative environments. Upon completion, students should be able to discuss, in oral and written form, issues related to creating a scalable, distributed and secure HPC Grid environment.

HPC-262	Advanced Hpc Security	2	2	0	3
Requisites:					
authentication for databases, distrib	duces students to advanced security topics and various distributed systems, authorization models, developinated intrusion detection, advanced cryptographic algrecure distributed system in a HPC environment.	g secure	distributed	d operatir	ng systems and
_					
HPC-270 Requisites:	Adv Hpc Data Mining	2	2	0	3
This course introd Topics include da models, data fusio	duces students to advance data mining and database ta retrieval algorithms, text mining techniques, documen and software design for information retrieval. Upor database using data mining techniques in a HPC env	nent cluste n complet	ering, que ion, stude	ry cluster	rs, mathematical
HPC-272 Requisites:	Emerging Hpc Technologies	3	0	0	3
This course introd Emphasis is place	duces students to emerging technologies in the field of ced on the new technologies in the HPC field and a revon completion, students should be able to discuss, in	view of HF	PC and clu	uster syst	ems already
HPC-280	Adv Cluster Computing	2	2	0	3
include a review of Upon completion,	duces students to advanced design techniques and re of successfully deployed cluster systems used in com- students should be able to summarize findings and of ss emerging technology trends and clusters of the fut	merce, in	dustry and	d researc	h environments.
HPC-285 Requisites:	Sys Analysis and Design	3	0	0	3
This course provious instructor support	des an opportunity for students to complete a signification. Emphasis is placed on project definition, documentate able to complete a HPC project.				
	HOTEL & RESTAURANT MANAGEMEN	T (HRM Pre	efix)	
HRM-110	Introduction to Hospitality and Tourism	3	0	0	3
Requisites: 070; Option: Take Take previously.	Take 1 group; Option: Take MAT-070 RED-090 ENde DMA-030 RED-090 ENG-090 or DRE-098(S23643)); Option:	Take DM	IA-030 EI	NG-111(S13673);
gaming, restaurar	nts, foodservice and clubs. Upon completion, student the background, context, and career opportunities that	ts should	be able to	demons	trate an
Take previously.	Front Office Procedures Take 1 group; Option: Take MAT-070 RED-090 ENGe DMA-030 RED-090 ENG-090 or DRE-098(S23643) Required. duces a systematic approach to lodging front office p); Option:	Take DIV	IA-030 EI	NG-111(S13673);
	t satisfaction, occupancy and revenue management, services. Upon completion, students should be able	-	-		

current front office operating systems, including efficient and courteous guest services.

070; Option: Take DMA-030 RED-090 ENG-090 or DRE-098(S23643); Option: Take DMA-030 ENG-111(S13673);

This course covers the rights and responsibilities that the law grants to or imposes upon the hospitality industry. Topics include federal and state regulations, historical and current practices, safety and security, risk management, loss prevention, relevant torts, and contracts. Upon completion, students should be able to demonstrate an understanding of the legal system and the concepts necessary to prevent or minimize organizational liability.

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Take 1 group; Option: Take MAT-070 RED-090 ENG-090; Option: Take ENG-111(S13673) MAT-

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-	Take 1 group; Option: Take MAT-070 RED-090 le DMA-030 RED-090 ENG-090; Option: Take DM 3673); Take previously. Require		•		, ,	
This course introduced meetings, and for conventions, even	duces concepts related to the planning and operations of the control of the contr	of marketir d environm	ng, sellir ental va	ng, organiz lue. Upor	zing, and produc completion,	cing
HRM-220	Cost Control-Food and Beverage	3	0	0	3	
Requisites: This course introdinclude reports, collabor controls and	Take MAT-110(S23926); Take previously. Requiduces controls and accounting procedures as appliest control, planning and forecasting, control systems scheduling. Upon completion, students should be poor cost control systems for operational troubleshood.	ired. ied to costs ms, financia e able to de	in the hal stater	nospitality ments, ope ate an unc	industry. Topics erational efficien	cies,
Take previously. This course introd trends; service, p non-alcoholic bev	Beverage Management Take 1 group; Option: Take MAT-070 RED-090 to DMA-030 RED-090 ENG-090 or DRE-098(S236 Required. Duces the management of beverages served in hor rocurement and storage; knowledge and control or verages, coffees, and teas. Upon completion, studies responsible alcohol service and the knowledge of	43); Option spitality ope wines and ents should	rations. ferment	Topics ir ted/distille to demoi	ENG-111(S136 aclude history and d beverages; an astrate an	73); nd nd
HRM-240 Requisites: 070; Option: Tak Take previously.	Marketing for Hospitality Take 1 group; Option: Take MAT-070 RED-090 le DMA-030 RED-090 ENG-090 or DRE-098(S236 Required.					
This course cove industry. Emphasicurrent media, sa	rs planning, organizing, directing, and analyzing the sis is placed on target marketing, marketing mix, a les planning, advertising, public relations, and coll apply the marketing process as it relates to the ho	nalysis, pro ateral mate	duct and rials. U	d image d	evelopment, use	-
HRM-245	Human Resource Management-Hospitality	3	0	0	3	
=	Take 1 group; Option: Take MAT-070 RED-090 le DMA-030 RED-090 ENG-090 or DRE-098(S236		•		, ,	
Take previously.	Required. duces a systematic approach to human resource n	anagaman	t in tha l	hoenitality	industry Tonic	00
include training/d	evelopment, staffing, selection, hiring, recruitment, gulations/laws, discipline, motivation, productivity,	evaluation	, benefit	administr	ation, employee	
	Iture. Upon completion, students should be able to		-			r the

hospitality industry.

HRM-140

HRM-210

Requisites:

Take previously. Required.

Legal Issues-Hospitality

Meetings and Event Planning

Take previously. This course proviously operations. Employerations of processing of pr	Procurement for Hospitality Take 1 group; Option: Take MAT-070 RED-090 e DMA-030 RED-090 ENG-090 or DRE-098(S2: Required. des information for management decisions regalnasis is placed on supply chain sourcing, environducts such as food, beverages, supplies, furnitured demonstrate competence in planning and executive demonstrate competence.	3643); Option rding needs a nmental impa e, and equip	n: Take analysis acts, pro ment. U	and fulfilln curement	ENG-111(S nent for hos technologie letion, stude	s13673); pitality s, and
Take previously. This course introduced while developing defining effective hospitality industriality industriality industriality industriality industriality industriality industriality industriality.	duces leadership traits, styles, and the roles and the student?s personal leadership skills. Topics and ineffective leadership behavior; and leaders y. Upon completion, students will be able to apper from local to global hospitality environments.	responsibiliti responsibiliti include form ship organiza bly appropria	n: Take les of su nal and i tional ch te leade	DMA-030 accessful h nformal ho nange and arship actio	ENG-111(S ospitality lea planning wins in real-w	s13673); aders dership; ithin the
students into a maresources. Upon	Management Problems-Hospitality Take HRM-110(S10998); Take previously. Resigned to introduce students to timely issues with an agerial mindset. Emphasis is placed on problecompletion, students should be able to demonst applied to real challenges facing industry management.	hin the hospi em-solving s rate knowled	tality ind kills usir	lustry and i	is intended y available	to move
	HUMAN SCIENCES	(HSC Prefi	<u>x)</u>			
management of formanagement of e	rs the basic knowledge and skills for the perform preign body airway obstruction. Emphasis is playmergency care. Upon completion, students shound body airway obstructions.	ced on recog	gnition, a	assessmer	nt, and prop	er
	HUMAN SERVICES	(HSE Prefi	<u>x)</u>			
This course introd facilitated by expe Upon completion,	Group Process I Take 1 group; Option: Take DRE-098(S23643) 2); Take previously. Required. duces interpersonal concepts and group dynamic eriential learning in small groups with analysis of students should be able to show competence in rinteractions in group settings.	cs. Emphasi personal exp	s is plac perience	ed on selfes and the	-awareness behavior of	others.
placed on observ	Interviewing Techniques Take DRE-098(S23643) HSE-110; Take previous the purpose, structure, focus, and techniques ing, attending, listening, responding, recording, a completion, students should be able to performanship.	employed in and summari	effective zing of p	oersonal hi	stories with	instructo

HSE-125 Counseling 2 0 3 Take DRE-098(S23643) HSE-110; Take previously. Required. Requisites: 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 2 2 0 3 **Conflict Resolution** Requisites: Take DRE-098(S23643); 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-135** 0 2 1 Orientation Lab I 0 Requisites: This course is designed to promote professional, program, and personal identification with the human services field. Emphasis is placed on interpersonal communication, verbal and non-verbal interactions, and team building. Upon completion, students should be able to identify with the human services profession and demonstrate basic teambuilding skills. **HSE-145 Child Abuse & Neglect** 3 3 Take DRE-098(S23643); Take previously. Required. Requisites: 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); 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. 2 HSE-212 **Group Process II** 0 2 Take HSE-112; Take previously. Required. Requisites: This course is a continuation of the study of interpersonal concepts and group dynamics. Emphasis is placed on selfawareness facilitated by experiential learning in small groups with analysis of personal experiences and the behavior of others. Upon completion, students should be able to demonstrate their ability to communicate with others and facilitate communications between others. **HSE-225 Crisis Intervention** 0 3 3 Take 1 group; Option: Take DRE-098(S23643); Option: Take RED-090 ENG-090; Option: Take Requisites: ENG-111(S24022); 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 Mental Retardation** Take PSY-150; Take previously. Required. Take DRE-098(S23643) DMA-010 DMA-020 DMA-Requisites: 030; Take previously. Required. This course covers mental retardation and related issues. Emphasis is placed on the theoretical perspectives, causes, prevention, and treatment of mental retardation. Upon completion, students should be able to demonstrate a

general knowledge of the mentally retarded individual.

HSE-226 **Intellectual Disabilities** 3 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); 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. 2 3 **HSE-245** Stress Management 0 Requisites: Take DRE-098(S23643); Take previously. Required. This course covers stressors and techniques for stress management. Topics include anger, assertiveness, breathing, change, coping skills, family, time management, meditation, guided imagery, and journaling. Upon completion, students should be able to identify areas of stress and the skills and management techniques for dealing with stressors. **HSE-251 Activities Planning** 2 3 Take DRE-098(S23643); Take previously. Required. Requisites: 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; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take DRE-098(S23643); 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 1 group; Option: Take DRE-098(S23643); Option: Take ENG-095; Option: Take RED-090 ENG-090; 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-130** Myth in Human Culture Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); 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** 3 Introduction to Film 2 0

This course introduces the fundamental elements of film artistry and production. Topics include film styles, history,

Take ENG-111(S13673); Take previously. Required.

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.

HUM-170 The Holocaust 3 0 0 3

Requisites: Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take DRE-098(S23643); Take previously. Required.

This course provides a survey of the destruction of European Jewry by the Nazis during World War II. Topics include the anti-Semitic ideology, bureaucratic structures, and varying conditions of European occupation and domination under the Third Reich. Upon completion, students should be able to demonstrate an understanding of the historical, social, religious, political, and economic factors which cumulatively resulted in the Holocaust.

HUM-211 Humanities I 3 0 0 3

Requisites: Take ENG-111(S13673); Take previously. Required.

This course introduces the humanities as a record in literature, music, art, history, religion, and philosophy of humankind's answers to the fundamental questions of existence. Emphasis is placed on the interconnectedness of various aspects of cultures from ancient through early modern times. Upon completion, students should be able to identify significant figures and cultural contributions of the periods studied.

HUM-212 Humanities II 3 0 0 3

Requisites: Take ENG-111(S13673); Take previously. Required.

This course introduces the humanities as a record in literature, music, art, history, religion, and philosophy of humankind's answers to the fundamental questions of existence. Emphasis is placed on the interconnectedness of various aspects of cultures from early modern times to the present. Upon completion, students should be able to identify significant figures and cultural contributions of the periods studied.

HUM-220 Human Values and Meaning 3 0 0 3

Requisites: Take ENG-111(S13673); Take previously. Required.Invalid block level for block "L57553" Take previously. Required.

This course presents some major dimensions of human experience as reflected in art, music, literature, philosophy, and history. Topics include the search for identity, the quest for knowledge, the need for love, the individual and society, and the meaning of life. Upon completion, students should be able to recognize interdisciplinary connections and distinguish between open and closed questions and between narrative and scientific models of understanding.

HUM-230 Leadership Development 3 0 0 3

Requisites: Take ENG-111(S13673); Take previously. Required.

This course explores the theories and techniques of leadership and group process. Emphasis is placed on leadership styles, theories of group dynamics, and the moral and ethical responsibilities of leadership. Upon completion, students should be able to identify and analyze a personal philosophy and style of leadership and integrate these concepts in various practical situations.

HYDRAULICS AND PNUEMATICS (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 Requisites:	Hydraulic/Hydrostatic Construction	2	4	0	4	
This course cover Topics include to hydraulics and to	ers the hydraulic/hydrostatic components of co esting, adjusting, repair, and replacement of co ransmissions along with other related topics. It c procedures and identify, repair, and replace	emponents that a Upon completion	re app	lied to cons	truction equipe able to u	uipment Ise
	<u>IMAGING</u> (IMG Prefix)				
IMG-110	Fundamentals of Imaging I	2	0	6	4	
radiation therapy medicine, ultraso	vides an overview of the principles of imaging for the principles	d anatomical rela , students should	tionshi I be ab	ps in radio le to identif	graphy, nuc y basic ana	lear
IMG-111	Fundamentals of Imaging II	2	0	6	4	
image productio	Take IMG-110; Take previously. Required. vides an overview of the principles of imaging to an and anatomical relationships in CT, PET, CT asic anatomy on, and differentiate between, C	PET, and MRI.	Upon c	ompletion,	students sl	
IMG-120	Patient Care Medical Imaging	1	2	0	2	
and emergent pa	esigned to provide the basic concepts of patien atient care procedures, infection control proced lents should be able to demonstrate competen	dures, and usage	of uni			
IMG-130	Imaging Ethics & Law	3	0	0	3	
professional mal	ers the legalities of relationships between heal practice, patient rights, legal and professional lents should be able to demonstrate the legal a	standards, and e	thical	consideration	ons. Upon	
	INTERNATIONAL BUSIN	IESS (INT Pr	efix)			
INT-110	International Business	3	0	0	3	
business. Topic and strategies, in	vides an overview of the environment, concept is include forms of foreign involvement, interna international organizations, multinational corpo in completion, students should be able to descr	tional trade theo rations, personne	ry, gov el mana	ernmental i agement, a	nfluences ond internati	n trade
INT-180	Travel Study Abroad	3	0	0	3	
foreign country. and confidence i	esigned to apply language and theoretical skill Emphasis is placed on strengthening foreign in the international workplace, and completing be able to understand and utilize cultural patte	anguage skills, pobjectives outlin	erform ed in tr	ing with gro aining plan	eater compe . Upon com	etence pletion,
INT-220	International Economics	3	0	0	3	

This course introduces the forces and criteria for the development of a new international economic order. Emphasis is

Take ECO-151 ECO-251 or ECO-252; Take previously. Required.

Requisites:

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.

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.

INDUSTRIAL SCIENCE (ISC Prefix)

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-132 Manufacturing Quality Control 2 3 0 3

Requisites: Take EGR-115(S20666); Take previously. Required.

This course introduces quality concepts and techniques used in industry. Topics include elementary statistics and probability, process control, process capability, and quality improvement tools. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality and apply them to the work environment.

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-136 Productivity Analysis I 2 3 0 3

Requisites:

This course covers modern methods of measuring, analyzing, and improving productivity. Topics include methods analysis, standardized practices, process analysis, and human factors. Upon completion, students should be able to apply productivity improvement techniques.

ISC-230 Requisites:	Simulation Production Processes	1	3	0	2
This course introc Emphasis is place and productivity in	duces fundamental principles and procedures for sed on problem-solving and engineering application mprovement. Upon completion, students should be productive operations.	s of simula	tion mode	ing for	quality enhancemen
ISC-237 Requisites:	Quality Management	2	3	0	3
This course cover processes in the benchmarking, ar students should be	rs the process by which successful manufacturing organization. Topics include quality models and and Deming's 14 Points, and the incorporation of Stope able to integrate SPC techniques with successful continuous quality improvement.	proaches, PC improve	such as M ment techi	BNQA, niques.	ISO 9000, Upon completion,
ISC-243	Production and Operations Management I	2	3	0	3
Requisites: Take previously.	Take 1 group; Option: Take DFT-110; Option: T	ake DFT-1	51; Option:	Take	ARC-114(S10248);
This course introdoperations strateg	duces concepts used to analyze and solve product gy, forecasting, resource allocation, and materials ize, analyze, and solve a variety of productivity an	manageme	ent. Upon c	omplet	
ISC-255 Requisites:	Engineering Economy	2	2	0	3
This course cover selection, replace money, income to	rs the process of economic evaluation of manufactument studies, and cost reduction proposals. Topic ax considerations, internal rates of return, and complex students should be able to analyze complex manes.	s include d parison of	iscounted alternative	cash flo s using	ows, time value of computer programs
ISC-277	Quality Technology	4	0	0	4
management con	ents quality assurance topics relating to an effective cepts, including sampling and reliability. Upon codege required to take the ASQC Certified Quality Te	mpletion, st	tudents sh	-	
ISC-278 Requisites:	cGMP Quality Systems	2	0	0	2
This course focus environment. Top training, developr	ses on the development, implementation, and ongo bics include the cGMP standard, components of co ment of documentation such as SOPs, and system identify the components of a quality system and co	GMP quality review pro	y systems, ocedures.	quality Upon c	function roles and ompletion, students
ISC-280	Validation Fundamentals	1	2	0	2
Emphasis is place	rs the fundamental concepts of components of a vector on FDA requirements concerning validation, types on completion, students should be able to discuss to	es of valid	ation, docu	ımentat	tion, procedures, and

JOURNALISM (JOU Prefix)

Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Take

3

JOU-110

Requisites:

validation process, and effectively utilize sample documentation.

Introduction to Journalism

previously. Required.

This course presents a study of journalistic news, feature, and sports writing. Emphasis is placed on basic news writing techniques and on related legal and ethical issues. Upon completion, students should be able to gather, write, and edit news, feature, and sports articles.

LANDSCAPE ARCHITECTURE (LAR Prefix)

4

Requisites:
This course introduces landscape architecture construction materials and their methodologies. Topics include landscape construction terminology, materials and their properties, manufacturing processes, landscape construction

landscape construction terminology, materials and their properties, manufacturing processes, landscape construction techniques, and other related topics. Upon completion, students should be able to detail landscape construction materials and properties.

LAR-113 Residential Landscape Design 1 6 0 3

Requisites: Take LAR-111(S10088); Take previously. Required.

Landscape Materials & Methods

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:

LAR-112

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-193 Selected Topics in Landscape Arch 2 2 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. This course provides an opportunity to explore areas of current interest in Landscape Architectural Technology. Emphasis is placed on subject matter appropriate to landscape architecture. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

LAR-211 Commercial Site Design 1 6 0 3

Requisites: Take LAR-113(S10075); Take previously. Required.

This course covers commercial landscape design techniques. Topics include creation of site analysis drawings, commercial landscape architectural plans, and other related topics. Upon completion, students should be able to perform a site analysis, design a commercial landscape, and generate scaled drawings within landscape architectural standards.

LAR-223 Land Design Project 2 6 0 4

Requisites: Take ARC-114(S10248) LAR-211(S22167); Take previously. Required. Take CIV-125(S21521); Take either previously or concurrently. Required.

This course provides the opportunity to design and prepare landscape contract documents. Topics include schematic design, design development, grading, roadway and parking lot design, and other related topics. Upon completion, students should be able to prepare drawings within landscape architectural standards.

LAR-230 Principles of Exterior Planting 3 3 0 4

Requisites:

This course introduces the identification and installation of landscape plants. Topics include ornamental plant

selection, anatomy, physiology, ecology, installation, fertilization, pruning, pest and disease control, and other related topics. Upon completion, students should be able to select plants for different landscape situations.

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-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

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

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0

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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.

3

LOG-245 Logistics Security 3 0 0

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.

MACHINING (MAC Prefix)

MAC-111B Machining Technology I 1 6 0 3

Requisites: Take MAC-111A; Take previously. Required.

This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.

MATHEMATICS (MAT Prefix)

MAT-001 Math Skills Support 0 2 0

Requisites: Take MAT-110(S23926) MAT-121(S23927) MAT-143 MAT-152 or MAT-171(S23934); Take either previously or concurrently. Required.

This course provides opportunities for students to build a stronger foundation for success in their corequisite math course by obtaining skills through a variety of instructional strategies. Emphasis is placed on foundational skills as well as concepts, skills, vocabulary and definitions necessary to master student learning outcomes of the co-requisite math course. Upon completion, students should be able to apply mathematical concepts and critical thinking skills to solve problems relevant to the student's co-requisite math course.

MAT-001P Math Skills Support 0 2 0 1

Requisites:

This course provides opportunities for students to build a stronger foundation for success in their corequisite math course by obtaining skills through a variety of instructional strategies. Emphasis is placed on foundational skills as well as concepts, skills, vocabulary and definitions necessary to master student learning outcomes of the co-requisite math course. Upon completion, students should be able to apply mathematical concepts and critical thinking skills to solve problems relevant to the student's co-requisite math course. This course provides opportunities for students to build a stronger foundation for success in their corequisite math course by obtaining skills through a variety of instructional strategies. Emphasis is placed on foundational skills as well as concepts, skills, vocabulary and definitions necessary to master student learning outcomes of the co-requisite math course. Upon completion, students should be able to apply mathematical concepts and critical thinking skills to solve problems relevant to the student's co-requisite math course. MAT 001P students will be registered for a corequisite section of MAT 171.

MAT-001S Math Skills Support 0 2 0 1

Requisites:

This course provides opportunities for students to build a stronger foundation for success in their corequisite math course by obtaining skills through a variety of instructional strategies. Emphasis is placed on foundational skills as well as concepts, skills, vocabulary and definitions necessary to master student learning outcomes of the co-requisite

math course. Upon completion, students should be able to apply mathematical concepts and critical thinking skills to solve problems relevant to the student's co-requisite math course.

MAT-050 **Basic Math Skills** 3 2 0 4

Requisites:

This course is designed to strengthen basic math skills. Topics include properties, rounding, estimating, comparing, converting, and computing whole numbers, fractions, and decimals. Upon completion, students should be able to perform basic computations and solve relevant mathematical problems. This course will also include work with percents and geometry, using technology where appropriate.

Mathematical Measurement and Literacy MAT-110 2 2 0 3

Take 1 group; Option: Take DMA-010 DMA-020 DMA-030; Option: Take MAT-060; Take Requisites:

previously. Required.

This course provides an activity-based approach that develops measurement skills and mathematical literacy using technology to solve problems for non-math intensive programs. Topics include unit conversions and estimation within a variety of measurement systems; ratio and proportion; basic geometric concepts; financial literacy; and statistics including measures of central tendency, dispersion, and charting of data. Upon completion, students should be able to demonstrate the use of mathematics and technology to solve practical problems, and to analyze and communicate results.

MAT-121 Algebra/Trigonometry I 2 3

Take 1 group; Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 DMA-060(S24128); Requisites: Option: Take MAT-060 MAT-070; Option: Take MAT-060 MAT-080; Option: Take MAT-060 MAT-090; Option: Take MAT-095; Take previously. 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-142 Mathematical Concepts II 3

Take MAT-141(S13022); Take previously. Required. Take MAT-142A(S20301); Take either Requisites: previously or concurrently. Required.

This course is the second of a two-course sequence that develops a deeper understanding and appreciation of the basic concepts of mathematics. Emphasis is placed on probability, statistics, functions, introductory geometry, and mathematics of finance. Upon completion, students should be able to communicate orally and in writing these basic mathematical concepts and utilize technology as a mathematical tool.

MAT-152 Statistical Methods I 3 2 0 4

Take 1 group; Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 DRE-098(S23643); Requisites: Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 ENG-095; Option: Take DMA-010 DMA-020 DMA-020 DMA-040 DMA-050 ENG-095; Option: Take DMA-010 DMA-050 DMA-050 ENG-095; Option: Take DMA-010 DMA-050 DMA-050 ENG-095; Option: Take DMA-050 D 030 DMA-040 DMA-050 ENG-090 RED-090; Option: Take MAT-06

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

Take 1 group; Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 DMA-060(S24128) Requisites: DMA-070(S24129) DMA-080(S24130); Option: Take MAT-121(S23927); Option: Take DMA-010 DMA-020 DM 030 DMA-040 DMA-050 DMA-065; Option: Take MAT-060 MAT-08

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

Requisites: Take MAT-171(S23934); Take previously. Required.Take MAT-171(S23934); 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-223 Applied Calculus 2 2 0 3

Requisites: Take MAT-122(S16423); Take previously. Required.

This course provides an introduction to the calculus concepts of differentiation and integration by way of application and is designed for engineering technology students. Topics include limits, slope, derivatives, related rates, areas, integrals, and applications. Upon completion, students should be able to demonstrate an understanding of the use of calculus and technology to solve problems and to analyze and communicate results.

MAT-263 Brief Calculus 3 2 0 4

Requisites: Take MAT-171(S23934); Take previously. Required.Take MAT-171(S23934); 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-271 Calculus I 3 2 0 4

Requisites: Take MAT-172(S23935); Take previously. Required.Take MAT-172(S23935); Minimum grade C; Take previously. Required.

This course is designed to develop the topics of differential and integral calculus. Emphasis is placed on limits, continuity, derivatives and integrals of algebraic and transcendental functions of one variable. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to derivative-related problems with and without technology.

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-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.

MCO-115 Mission Critical Operations Infrastructure 2 2 0 3 Requisites:

This course provides a survey of critical infrastructure and its impact on mission critical operations. Topics include an introduction to concepts, theory, terminology, and best practices regarding critical infrastructure assets essential for the economy and the functioning of society. Upon completion, students should be able to name critical infrastructure sectors, explain relationships between infrastructure sectors, discuss the roles government and private entities play in maintaining critical infrastructure, and their impact on daily life.

MCO-210 Critical Site Operations 2 3 0 3

Requisites:

This course introduces critical site operations and the multidisciplinary concepts and infrastructure involved in maintaining performance, security, and safety in a high uptime environment. Topics include safety, security, cybersecurity, operating procedures, operating processes, site-wide monitoring, utilities infrastructure, and regulatory agency compliance. Upon completion, students should be able to identify infrastructure systems, discuss infrastructure performance, demonstrate an understanding of infrastructure system interoperability, apply safety and security principles, and generate a cybersecurity framework for critical sites.

MCO-260 Mission Critical Operations Facility Infrastructures 3 3 0 4

Requisites: Take MCO-115; Take previously. Required.

This course covers the infrastructure systems requirements of mission critical operation (MCO) facilities. Topics include chillers, cooling system design and efficiency, raised access floors, plumbing, fire suppression, and security systems. Upon completion, students should be able to demonstrate an understanding of the operation, testing, maintenance, and troubleshooting of MCO infrastructure systems.

MCO-265 Critical Facility Management 3 0 0 3

Requisites: Take MCO-110; Take previously. Required.

This course covers management practices and operational requirements that are unique to mission critical facilities. Topics include critical infrastructure assessment and maintenance, network management, budget and finance, documentation and compliance, and personnel management. Upon completion, students should be able to participate as a member of a critical facility management team.

MCO-266	Industrial Control System Cyber Security	2	3	0	3		
Requisites: This course covers the cyber security concerns that are unique to industrial control system (ICS) networks. Topics include ICS architecture, ICS vulnerabilities, ICS defense, incident management, and mitigation solutions. Upon completion, students should be able to demonstrate cyber security skills related to the protection of critical infrastructure control system networks.							
	MECHANICAL (MEC	C Prefix)					
MAT-161(S20916 This course introd trains, differential	Mechanisms Take 1 group; Option: Take MAT-121(S20804) are MAT-121(S20804) ARC-114(S10248); Option: 6) DFT-151; Option: Take duces the purpose and action of various mechanis, screws, belts, pulleys, shafts, levers, lubricants analyze, maintain, and troubleshoot the components.	Take MAT- cal devices. s, and other of	161(S20 Topics devices	include ca . Upon co	Г-110; Ор ams, cabl	tion: Take es, gear	
MEC-180	Engineering Materials	2	3	0	3		
Requisites: This course introduces the physical and mechanical properties of materials. Topics include materials testing, preand post-manufactufing processes, and material selection of ferrous and non-ferrous metals, plastics, composities, 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.							
161(S20916) PH' This course introd systems, and hea	Thermal Systems Take PHY-131(S13319) or PHY-151(S16517); 20804) PHY-131(S20809); Option: Take MAT-12 Y-131(S20809); Option: Ta duces the fundamental laws of thermodynamics. at engines. Upon completion, students should be ply to thermal power.	21(S20804) Topics inclu	PHY-15	1(S20924 and ener	gy, open	Take MAT	
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 Requisites: This course cove malpractice, med professional attitu	Medical Law and Ethics rs legal relationships of physicians and patients, or ical practice acts, informed consent, and bioethic udes, and the principles and basic concepts of ethe completion, students should be able to meet the legal transfer of the second of the completion of the second of the	2 contractual a al issues. E nics and laws	mphasis involve	s is placed ed in provi	d on legal iding med	terms, ical	

health professional.

MED-120 **Survey of Medical Terminology** 2 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. 3 **MED-121** Medical Terminology I 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 3 3 Medical Terminology II 0 0 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. 2 **MED-131 Administrative Office Procedures II** 1 2 Take MED-130; Take previously. Required. Requisites: 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** 5 Take BIO-161 ENG-111(S13673) MAT-110(S20801) MED-110 MED-121 MED-130 MED-138; Requisites: Take previously. Required. Take MED-150; Take either previously or 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** 5 Take BIO-161 ENG-111(S13673) MAT-110(S20801) MED-110 MED-121 MED-130 MED-138; Requisites: Take previously. Required. Take MED-140; Take either previously or 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-183 **Electronic Medical Records I** 3 2 Take CIS-110(S21058) CIS-111(S21059) or OST-131; Take either previously or concurrently. Requisites:

This course introduces students to the design and creation of Electronic Methods Records using a variety of EMR

Required.

models. Topics include historial background of electronic medical records, legal/ethical principles inherent to healthcare information, patient flow, scheduling, call processing and tasking using the EMR. Upon completion, students should be able to discuss the history of EMR, identify emerging issues, apply ethical principles, and use basic modules of an EMR.

MED-232 Medical Insurance Coding 1 3 0 2

Requisites: Take MED-130 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-140 MED-150; Take previously. 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-262 Clinical Perspectives 1 0 0 1

Requisites: Take MED-140 MED-150; Take previously. Required.Take MED-260(S13597); Take either previously or concurrently. Required.

This course is designed to explore personal and occupational responsibilities of the practicing medical assistant. Emphasis is placed on problems encountered during externships and development of problem-solving skills. Upon completion, students should be able to demonstrate courteous and diplomatic behavior when solving problems in the medical facility.

MED-270 Symptomatology 2 2 0 3

Requisites: Take 1 group; Option: Take MED-122 BIO-161; Option: Take MED-122 BIO-163; Take previously. 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 MED-122; 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.

MED-276 Patient Education 1 2 0 2

Requisites: Take MED-140 MED-150; Take previously. Required.

This course is designed to provide communication skills, basic education principles, and knowledge of available community resources and to apply this knowledge to the clinical setting. Emphasis is placed on identifying appropriate community resources, developing patient education materials, and perfecting written and oral communication skills. Upon completion, students should be able to instruct, communicate effectively, and act as a liaison between the patient and community agencies.

MENTAL HEALTH (MHA Prefix)

MHA-150 **Mental Health Systems** 3 Requisites: Take HSE-110; Take previously. Required. Take DRE-098(S23643) DMA-010 DMA-020 DMA-030; 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 0 **Psychological Assessment** 3 0 3 Requisites: Take PSY-150; Take previously. Required. Take DRE-098(S23643) DMA-010 DMA-020 DMA-030; 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 Requisites: Take HSE-110; Take previously. Required.Take DRE-098(S23643) DMA-010 DMA-020 DMA-030; 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. 3 MKT-221 **Consumer Behavior** 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** 3 **Customer Service** 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-224 **International Marketing** 3 3 Requisites: This course covers the basic concepts of international marketing activity and theory. Topics include product promotion, placement, and pricing strategies in the international marketing environment. Upon completion, students should be able to demonstrate a basic understanding of the concepts covered.

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.

Take MKT-120(S24159); Take previously. Required.

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Marketing Research

MKT-225

MKT-227 Requisites:	Marketing Applications	3	0	0	3		
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-232 Requisites:	Social Media Marketing	3	2	0	4		
This course is de on experience in technologies into	esigned to build students' social media marketing aplementing social media marketing strategies. To a marketing plan, creating social media marketing on completion, students should be able to use so a for businesses.	opics include ng campaigns	integra	ting differe	ent social media propriate social		
	MEDICAL LABORATORY TECHNO	LOGY	(MLT F	Prefix)			
MLT-110 Requisites:	Introduction to MIt	2	3	0	3		
This course intro organization, pro	duces all aspects of the medical laboratory profes fessional ethics, basic laboratory techniques, saf a, students should be able to demonstrate a basic laboratory skills.	ety, quality as	ssurance	e, and spe	cimen collection.		
MLT-111	Urinalysis & Body Fluids	1	3	0	2		
microscopic exar	duces the laboratory analysis of urine and body f mination of the urine and body fluids. Upon comp rehension in performing and interpreting urinalysi	oletion, studer	nts shou	ıld be able			
MLT-118	Medical Lab Chemistry	3	0	0	3		
Requisites: This course introduces the basic medical 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 basic chemical principles and the medical laboratory function.							
MLT-120	Hematology/Hemostasis I	3	3	0	4		
include hematolo demonstrate the	Take BIO-163 MLT-110 MLT-111 MLT-115 ML duces the theory and technology used in analyzingy, hemostasis, and related laboratory testing. Uporetical comprehension of hematology/hemostasigs with disorders.	ng blood cells Jpon complet	and the	e study of l	hemostasis. Topics ald be able to		
and applications banking techniqu students should	Immunohematology I Take BIO-163 MLT-110 MLT-111 MLT-115 MLT duces the immune system and response; basic of in transfusion medicine and serodiagnostic testing uses including concepts of cellular and humoral imbe able to demonstrate theoretical comprehensioned blood bank procedures.	concepts of ar g. Emphasis munity and p	ntigens, is place retransfu	antibodies d on immu usion testi	s, and their reactions unological and blood ng. Upon completion		
	Clinical Chemistry I Take BIO-163 MLT-110 MLT-111 MLT-115 ML ⁻ duces the quantitative analysis of blood and body inical biochemistry, methodologies, instrumentati	fluids and th	eir varia	ations in he	ealth and disease.		

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** 3 0 1 Take MLT-230 MLT-266 MLT-280; Take previously. Required. Requisites: 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 0 3 Take MLT-120 MLT-125 MLT-130 MLT-240; Take previously. Required. Requisites: 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 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-254 4 **MLT Practicum I** 12 Take MLT-120 MLT-125 MLT-130 MLT-240; Take previously. Required. Requisites: 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 18 6 Take MLT-220 MLT-254; Take previously. Required. Requisites: 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.

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 2 Requisites: This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards. MNT-222 **Industrial Systems Schematics** 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. MAGNETIC RESONANCE IMAGING (MRI Prefix) MRI-213 **MR Patient Care & Safety** 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. 2 MRI-214 MRI Procedures I 2 0 Λ 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-216 2 MRI Instrumentation 2 0 n Take MRI-213 MRI-250; Take either previously or concurrently. Required. Requisites: 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 Take MRI-216; Take previously. Required.Take MRI-214 MRI-241 MRI-260; Take either Requisites: 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 Take MRI-217; Take previously. Required.Take MRI-215 MRI-242 MRI-270; Take either Requisites: 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-223 Requisites:	MRI Clinical Practicum	0	0	9	3		
This course provides experience in the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in magnetic resonance imaging. Upon completion, students should be able to assume a variety of duties and responsibilities within the magnetic resonance clinical environment.							
MRI-224 Requisites:	MRI Clinical Practicum	0	0	12	4		
This course provides experience in the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in magnetic resonance imaging. Upon completion, students should be able to assume a variety of duties and responsibilities within the magnetic resonance clinical environment.							
MRI-226 Requisites:	MRI Clinical Practicum	0	0	18	6		
and positioning, s	des experience in the computed tomography cli canning procedures, and image production in note able to assume a variety of duties and respor	nagnetic reson	ance imag	ging. Up	on completion,		
MRI-227	MRI Clinical Practicum	0	0	21	7		
Requisites: This course provides experience in the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in magnetic resonance imaging. Upon completion, students should be able to assume a variety of duties and responsibilities within the magnetic resonance clinical environment.							
MRI-228	MRI Clinical Practicum	0	0	24	8		
Requisites: This course provides experience in the computed tomography clinical setting. Emphasis is placed on patient care and positioning, scanning procedures, and image production in magnetic resonance imaging. Upon completion, students should be able to assume a variety of duties and responsibilities within the magnetic resonance clinical environment.							
MRI-242	MRI Anatomy & Pathology II	2	0	0	2		
Requisites: previously or con-	Take MRI-241; Take previously. Required.Ta currently. Required.	Ke MRI-215 M	RI-218 MI	RI-270;	Take either		
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: previously or con-	Take MRI-250; Take previously. Required.Ta currently. Required.	ке MRI-214 М	KI-217 MI	≺I-241; ⁻	l ake either		
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 Take MRI-260; Take previously. Required.Take MRI-215 MRI-218 MRI-242; Take either Requisites: 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** 1 **MRI Capstone** 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. MILITARY SCIENCE (MSI Prefix) MSI-110 1 0 0 1 Military Science I Requisites: This course introduces military-style training and confidence building, including military weapons firing, rappelling, and other related material. Emphasis is placed on US Army and ROTC organization, leadership and management techniques, principles of war, evolution of weapons, and military tactics. Upon completion, students should be able to identify and explain the basics of military science and put into practice the art of organizing, motivating, and leading others. MSI-210 Military Science III 2 Requisites: This course emphasizes basic concepts in leadership, team building, and management. Topics include land navigational skills, basic first aid, oral communication, military briefings and personal management skills. Upon completion, students should be able to manage and communicate effectively in a small team environment. 2 0 0 MSI-220 Military Science IV 2 Requisites: This course completes the preparation for accession into the ROTC advanced program. Topics include introduction to the Leadership Development Program (LDP), operation orders, advance land navigation techniques, small unit tactics, and physical training. Upon completion, students will be eligible to apply for entry into the ROTC Advanced Program. THERAPEUTIC MASSAGE (MTH Prefix) MTH-110 10 **Fundamentals of Massage** Take BIO-163 ACA-111; Take either previously or concurrently. Required. Requisites: 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 q 3 10 Take MTH-110(S22033); Take previously. Required.Take BIO-163 MTH-110(S22033); Take Requisites: 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) MTH-120(S22036); Take either previously o 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. 2 2 MTH-125 0 0 **Ethics of Massage** 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-210 **Advanced Skills of Massage** 8 Take MTH-120(S22036) or MTH-121; Take previously. Required. Requisites: 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** 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. MTH-221 Clinical Supplement II 0 0 6 2 Requisites: Take MTH-110(S22033); Take previously. Required. Take MTH-120(S22036) MTH-125(S20862) MTH-210(S22034) or MTH-220(S22035); Take either previously or concurrently. Required. This course is designed to be offered as an advanced clinical experience. Emphasis is placed on applying an advanced therapeutic massage process across the lifespan. Upon completion, students should be able to demonstrate delivery of massage at an advanced level in a clinical setting. null **MUSIC** (MUS Prefix) **Music Appreciation** MUS-110 3 Take 1 group; Option: Take RED-080 ENG-080; Option: Take DRE-097(S23642); Take Requisites: 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. 3 MUS-111 **Fundamentals of Music** 0 Requisites: Take 1 group; Option: Take RED-080 ENG-080; Option: Take DRE-097(S23642); Take previously. Required. This course is an introductory course for students with little or no music background. Emphasis is placed on music notation, rhythmic patterns, scales, key signatures, intervals, and chords. Upon completion, students should be able to demonstrate an understanding of the rudiments of music. MUS-112 0 3 **Introduction to Jazz** 3 0 Take 1 group; Option: Take RED-080 ENG-080; Option: Take DRE-097(S23642); Take Requisites: 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-121 Music Theory I 3 2 0 4

Requisites: Take 1 group; Option: Take RED-080 ENG-080; Option: Take DRE-097(S23642); Take previously. Required.

This course provides an in-depth introduction to melody, rhythm, and harmony. Emphasis is placed on fundamental melodic, rhythmic, and harmonic analysis, introduction to part writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above.

MUS-122 Music Theory II 3 2 0 4

Requisites: Take MUS-121; Take previously. Required.

This course is a continuation of studies begun in MUS 121. Emphasis is placed on advanced melodic, rhythmic, and harmonic analysis and continued studies in part-writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above.

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-141 Ensemble I 0 2 0 1

Requisites: Take 1 group; Option: Take RED-070(S10648) ENG-070(S16349); Option: Take DRE-096(S23641); Take previously. Required.

This course provides an opportunity to perform in any combination of instrumental, vocal, or keyboard groups of two or more. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

MUS-142 Ensemble II 0 2 0 1

Requisites: Take MUS-141; Take previously. Required.

This course is a continuation of MUS 141. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance.

MUS-151 Class Music I 0 2 0 1

Requisites: Take 1 group; Option: Take RED-070(S10648) ENG-070(S16349); Option: Take DRE-096(S23641); Take previously. Required.

This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

MUS-151D Class Music I Drums 0 2 0 1

Requisites: Take 1 group; Option: Take RED-070(S10648) ENG-070(S16349); Option: Take DRE-096(S23641); Take previously. Required.

This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through drum performance.

MUS-151G Class Music I:quitar 0 2 0 1 Requisites: Take 1 group; Option: Take RED-070(S10648) ENG-070(S16349); Option: Take DRE-096(S23641); Take previously. Required. This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through guitar performance. MUS-151J **Class Music I Jazz** 2 1 Requisites: Take ENG-080 RED-080; Take previously. Required. This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Upon completion, students should be able to demonstrate proficiency in the studied skill and repertoire through jazz performance. MUS-151P Class Music I Piano 0 2 0 1 Take 1 group; Option: Take RED-070(S10648) ENG-070(S16349); Option: Take DRE-Requisites: 096(S23641); Take previously. Required. This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through piano performance. MUS-152 0 0 1 Class Music II Take MUS-151; Take previously. Required.Take 1 group; Option: Take MUS-151; Option: Take Requisites: MUS-151D(L50127); Option: Take MUS-151G(L50447); Option: Take MUS-151J; Option: Take MUS-151P; Option: Take MUS-151V; Take previo This course is a continuation of MUS 151. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. MUS-152D 0 **Class Music II Drum** 0 1 Take MUS-151; Take previously. Required. Requisites: This course is a continuation of MUS 151. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through drum performance. MUS-152P 0 2 1 **Class Music II Piano** 0 Take MUS-151; Take previously. Required. Requisites: This course is a continuation of MUS 151. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through piano performance. MUS-152V **Class Music II Voice** 0 2 0 1 Take MUS-151; Take previously. Required.Take 1 group; Option: Take MUS-151; Option: Take MUS-151D(L50127); Option: Take MUS-151G(L50447); Option: Take MUS-151J; Option: Take MUS-151P; Option: Take MUS-151V; Take previo This course is a continuation of MUS 151. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied

skills and repertoire through performance.

MUS-161 **Applied Music I** 1 2 0 2 Take 1 group; Option: Take RED-080 ENG-080; Option: Take DRE-097(S23642); Take Requisites: previously. Required. This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. MUS-162 2 Applied Music II Take MUS-161(S16445); Take previously. Required. Requisites: This course is a continuation of MUS 161. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Colleges may use a letter suffix to designate a specific instrument or voice, for example MUS 162P for piano. MUS-221 **Music Theory III** 3 4 Take MUS-122; Take previously. Required. Requisites: This course is a continuation of MUS 122. Emphasis is placed on altered and chromatic harmony, common practice era compositional techniques and forms, and continued studies in part-writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. MUS-231 Chorus III Take MUS-132; Take previously. Required. Requisites: 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 0 1 Take MUS-231; Take previously. Required. Requisites: 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. MUS-241 2 0 Ensemble III 0 1 Take MUS-142; Take previously. Required. Requisites: This course is a continuation of MUS 142. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. MUS-242 **Ensemble IV** 0 1 Requisites: Take MUS-241; Take previously. Required. This course is a continuation of MUS 241. Emphasis is placed on the development of performance skills and the study of styles of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. MUS-251 **Class Music III** 0 1 Requisites: Take MUS-152; Take previously. Required. This course is a continuation of MUS 152. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. MUS-251P 0 Class Music III Piano 2 0 1 Take MUS-152; Take previously. Required. This course is a continuation of MUS 152. Emphasis is placed on techniques and styles and the exploration and

study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied

skills and repertoire through performance. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through piano performance.

MUS-252 **Class Music IV** 0

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Requisites: Take MUS-251; Take previously. Required.

This course is a continuation of MUS 251. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

MUS-252P **Class Music IV Piano** 0

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Requisites: Take MUS-251; Take previously. Required.

This course is a continuation of MUS 251. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through piano performance.

MUS-262 **Applied Music IV**

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Take MUS-261(S16449); Take previously. Required. Requisites:

This course is a continuation of MUS 261. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance.

MUS-271 Music History I

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Take MUS-122; Take previously. Required. Take 1 group; Option: Take MUS-122 RED-090 ENG-Requisites: 090; Option: Take MUS-122 DRE-098(S23643); Option: Take MUS-122 ENG-111(S24022); Take previously. Required.

This course is the first of a two-semester, in-depth study of music history. Emphasis is placed on the history and literature of music from Antiquity through the Baroque Period. Upon completion, students should be able to trace important musical developments and demonstrate an understanding of the composers' styles.

MUS-272 **Music History II** 3

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Take MUS-271; Take previously. Required. Requisites:

This course is the second of a two-semester, in-depth study of music history. Emphasis is placed on the history and literature of music from the Classical Period to the present. Upon completion, students should be able to trace important musical developments and demonstrate an understanding of the composers' styles.

NURSING ASSISTANT (NAS Prefix)

NAS-101 Nurse Aide I 3

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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

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Requisites:

Take NAS-101(S24247); Take 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.

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

Requisites:

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 Networking Basics 1 4 0 3

Requisites: Take 1 group; Option: Take CIS-110(S21058) NOS-110(S20980) ENG-111(S13673) MAT-121(S23927); Option: Take CTI-120(S22511) CTI-130(S22512) ENG-111(S13673) MAT-121(S23927); Take previously. Required.

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. 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 NET-126(S24383); 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-198A Seminar in Networking 2 2 0 3

Requisites: Take NET-126(S21096); Take previously. Required.

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For Spring 2016, this course will be used to teach CCNA Wireless certification preparation; students must have CCENT certification or NET-125 and NET-126 completed before taking this course.

NET-225 Routing & Switching I

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Take NET-126(S24383); Take previously. Required. Requisites:

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-226 Routing and Switching II 1

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Take NET-225(S21098); Take previously. Required.

This course introduces WAN theory and design, WAN technology, PPP, Frame Relay, ISDN, and additional case studies. Topics include network congestion problems, TCP/IP transport and network layer protocols, advanced routing and switching configuration, ISDN protocols, PPP encapsulation operations on a router. Upon completion, students should be able to provide solutions for network routing problems, identify ISDN protocols, and describe the Spanning Tree protocol.

NET-240 Network Design 3

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Requisites:

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

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Requisites:

Take NET-226(S24386); 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

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

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Requisites:

Take NET-270(S24391) NET-272(S24392); 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 Requisites: **Networking Project**

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Take CTI-110(S22510) CTI-120(S22511) CTS-115(S20996); Take previously. Required.Take 1

group; Option: Take CTI-110(S22510) CTI-120(S22511) CTS-115(S20996) NET-226(S24386) NET-270(S24391); Option: Take CTI-110(S22510) CTI-120(S22511) CTS-11

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.

NETWORKING OPERATING SYSTEMS (NOS Prefix)

NOS-110 Operating Systems Concepts 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. 2 3 **NOS-120** Linux/UNIX Single User Requisites: Take CTI-130(S22512) NOS-110(S20980) or CET-211(S21575); 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-125 Linux and Unix Scripting** 2 0 3 Requisites: Take NOS-120(S24396); Take previously. Required. This course covers the concepts and features of shell scripting. Topics include process control, shell scripting, advanced search techniques and power user utilities. Upon completion, students should be able to successfully perform various shell scripting tasks. NOS-130 **Windows Single User** 2 2 3 Take 1 group; Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 DMA-060(S23172) Requisites: NOS-110(S20980); Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 DMA-060(S23172) CTI-130(S22512); Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 D This course introduces operating system concepts for single-user 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 introduces operating system concepts for single-user 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 taught within the Microsoft IT Academy as a Microsoft Official Academic Course (MOAC). 2 NOS-220 Linux/Unix Administration I 3 Requisites: Take NOS-120(S20982); 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-222 Linux/UNIX Administration III 2 2 0

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.

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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.

NOS-233 Windows Administration IV 2 2 0 3

Requisites: Take NOS-230(S24041); Take previously. Required.

This course covers the design of a Windows Server operating system. Emphasis is placed on the design of network infrastructure, Active Directory, group policies and access controls. Upon completion, students should be able to design and manage services on a Windows Server operating system.

NURSING (NUR Prefix)

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-211 Health Care Concepts 3 0 6 5 Take NUR-111; Take previously. Required. Requisites: 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-212 Health System Concepts** 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 grief/loss, violence, health-wellness-illness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course **NUR-213 Complex Health Concepts** 3 15 10 Take NUR-111; Take previously. Required.Take NUR-112 NUR-113 NUR-114 NUR-211 NUR-Requisites: 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) BIO-155; 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 evidencedbased 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-154 **Customer Satisfaction** 2 0 0 2 Take CTS-118; Take previously. Required. 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. OPERATING SYSTEMS MANAGEMENT (OSS Prefix) **OSS-120** Introduction to Aix 2 2 3 Requisites: This course introduces students to customizing and handling common AIX system administrator tasks in a multi-user environment. Topics include installation, system management tools, print queues, device drivers, file systems

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security, user administration, and scheduling techniques. Upon completion, students should be able to install AIX systems, manage file systems and group accounts, configure devices and implement customized access and security

Aix Sys Administrat I

tasks.

OSS-160

This course introduces students to customizing and handling common AIX system administrator tasks in a multi-user environment. Topics include installation, system management tools, print queues, device drivers, file systems security, user administration, and scheduling techniques. Upon completion, students should be able to install AIX systems, manage file systems and group accounts, configure devices and implement customized access and security tasks.

OSS-220 Aix Sys Administrat II 2 2 0 3

Requisites:

This course introduces students to the administrator skills to develop and build advanced AIX. Topics include AIX boot sequence, disk management theory and procedures, diagnostics tools, error log, volume group techniques, damp facilities, online file system backups and security. Upon completion, students should be able to perform system problem determination procedures, recovery techniques, understand disk management theory and configure auditing in an AIX environment.

OFFICE SYSTEMS TECHNOLOGY (OST Prefix)

OST-122 Office Computations 2 2 0 3

Requisites: Take MAT-050; Take previously. Required.

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-131 Keyboarding 1 2 0 2

Requisites:

This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system.

OST-132 Keyboard Skill Building 1 2 0 2

Requisites: Take OST-080(S12295) OST-131 or OST-134(S22142); Take previously. Required.

This course is designed to increase speed and improve accuracy in keyboarding. Emphasis is placed on diagnostic tests to identify accuracy and speed deficiencies followed by corrective drills. Upon completion, students should be able to keyboard rhythmically with greater accuracy and speed.

OST-134 Text Entry & Formatting 2 2 0 3

Requisites: Take OST-080(S12295) or OST-131; Take previously. Required.

This course is designed to provide 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 Software Applications 2 2 0 3

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 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-140 Internet Communication and Research** 2 Requisites: This course provides a working knowledge of Internet usage and research for the modern office. Emphasis is placed on using search engines, email, Web sites, Web servers, communication services, and e-business to obtain information vital to the current office environment. Upon completion, students should be able to use the Internet to research any office topics required for employment. OST-141 **Medical Office Terms I** 3 0 0 3 Requisites: Take 1 group; Option: Take RED-090 ENG-090; Option: Take DRE-098(S23643); Option: Take ENG-111(S24022); 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** 0 3 Take MED-121 or OST-141(S24691); Take previously. Required. Requisites: 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-148 Medical Coding Billing & Insurance** Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); Take previously. Required. This course introduces fundamentals of medical coding, billing, and insurance. 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 Take 1 group; Option: Take RED-090 ENG-090; Option: Take DRE-098(S23643); Option: Take Requisites: ENG-111(S13673); 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** 2 Office Finance Solutions 1 0

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-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.							
Requisites: 136(S22144) OST 134(S22142); Ta This course cover in the law office in criminal, and civil	Legal Office Procedures Take OST-134(S13818); Take previously. I-155(S22150) OST-134(S11818); Option: Take previously. Required. Its legal office functions involved in the operativolving the court system, legal research, litiglaw. Upon completion, students should be a office duties. This course focuses on docume dds of law.	ake OST-136(S22 tion of a law office pation, probate, an ble to demonstrate	Emphas d real esta e a high le	r-155(S2 is is place ate, perso evel of co	2150) OST- ed on procedures onal injury, mpetence in		
OST-164 Office Editing 3 0 0 3 Requisites: Take 1 group; Option: Take RED-090 ENG-090; Option: Take DRE-098(S23643); Option: Take ENG-111(S24022); 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.							
Requisites: This course is des is placed on the a	Advanced Text Editing Applications Take OST-164(S12524); Take previously. signed to develop proficiency in advanced ed pplication of creating effective electronic officenced editing skills to compose text.	liting skills needed					
OST-181 Requisites:	Office Procedures	2	2	0	3		
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 Requisites:	Records Management	2	2	0	3		
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-188	Issues in Office Technology	2	0	0	2		

This course is designed to develop critical thinking skills concerning roles in business and how these contribute to society. Topics include an examination of social, racial, and gender issues and how they affect self-identity. Upon

completion, students should be able to demonstrate an understanding of social issues in written and oral assignments.

OST-233 Office Publications Design 2 2 0 3

Requisites: Take OST-136(S13837); Take previously. Required.

This course provides entry-level skills in using software with desktop publishing capabilities. Topics include principles of page layout, desktop publishing terminology and applications, and legal and ethical considerations of software use. Upon completion, students should be able to design and produce professional business documents and publications.

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-241 Med Ofc Transcription I 1 2 0 2

Requisites: Take MED-121 or OST-141(S11561); Take previously. Required.Take 1 group; Option: Take MED-121 OST-164(S12524) OST-134(S22142); Option: Take OST-141(S11561) OST-164(S12524) OST-134(S22142); Take previously. Required.

This course introduces machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as vocabulary building. Upon completion, students should be able to prepare accurate and usable transcripts of voice recordings in the covered specialties.

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-244 Medical Document Production 1 2 0 2

Requisites: Take OST-134(S11818); Take previously. Required.

This course provides production-level skill development in processing medical documents. Emphasis is placed on producing mallable documents through the use of medical-related materials. Upon completion, students should be able to perform competently in preparing accurate, correctly formatted, and usable documents.

OST-247 Procedure Coding 2 2 0 3

Requisites: Take MED-121 or OST-141(S24691); Take previously. Required.Take 1 group; Option: Take OST-141(S24691) OST-142(S24692) OST-148(S24693); Option: Take OST-141(S24691) MED-122 OST-148(S24693); Option: Take MED-121 OST-142(S24692) OST-148(

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; Option: Take OST-141(S24691) OST-142(S24692) OST-148(S24693); Option: Take OST-141(S24691) MED-122 OST-148(S24693); Option: Take MED-121 OST-142(S24692) OST-148(

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-252 Legal Transcription I 2 2 0 3

Requisites: Take 1 group; Option: Take OST-134(S22142) OST-155(S22150); Option: Take OST-

136(S22144) OST-155(S22150); Take previously. Required.

This course provides experience in transcribing legal correspondence, forms, and documents. Emphasis is placed on

developing listening skills to transcribe documents. Upon completion, students should be able to transcribe documents with accuracy.

OST-260 **Advanced Coding Methodologies** 2 3 Take OST-247(S24704) OST-248(S24705); Take previously. Required. Take 1 group; Option: Requisites: Take OST-142(S24692) OST-247(S24704) OST-248(S24705); Option: Take MED-122 OST-247(S24704) OST-248(\$24705); 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-281 **Emer Issues in Med Ofc** 3 0 0 3 Requisites: Take OST-148(S22148); Take previously. Required. This course provides a comprehensive discussion of topics familiar to the health care setting. Topics include emerging issues in the health care setting. Upon completion, students should be able to demonstrate an understanding of current medical office procedures and treatments. 0 2 OST-284 **Emerging Technologies** 1 Requisites: Take OST-140 or OST-137(S22113); Take previously. Required. This course provides opportunities to explore emerging technologies. Emphasis is placed on identifying, researching, and presenting current technological topics for class consideration and discussion. Upon completion, students should be able to understand the importance of keeping abreast of technological changes that affect the office professional. **OST-286 Professional Development** 3 0 0 3 Take OST-134(S22142) or OST-136(S22144); Take previously. Required. Requisites: 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 3 Take OST-148(S24693) or HMT-210(S24675); Take previously. Required. Take 1 group; Option: Requisites: Take OST-137(S24689) OST-141(S24691) OST-148(S24693); Option: Take OST-137(S24689) OST-141(S24691) HMT-210(S24675); Option: Take OST-137(S24689) This course is designed to be a capstone course for the medical office professional and provides a working knowledge of medical office procedures. Emphasis is 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.

OST-289 Office Administration Capstone

3 2 Requisites: Take 1 group; Option: Take OST-134(S22142) OST-164(S24696); Option: Take OST-136(S22144) OST-164(S24696); Take previously. Required.Take 1 group; Option: Take OST-134(S22142) OST-164(S24696) OST-138(S24690) CTS-130(S24366); Option

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.

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.

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.

PCI-171 Fieldbus Systems 3 3 0 4

Requisites: Take ELC-128(S23522); Take previously. Required.

This course is a survey of fieldbus systems found in the industrial setting. Topics include industrial data communication fieldbus and control networks for linking various control systems in an industrial environment. Upon completion, students should be able to demonstrate an understanding of fieldbus systems used to connect control systems.

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-261 Process Measurement 2 3 0 3

Requisites: Take ATR-215(S21583); Take previously. Required.

This course introduces the concepts associated with the measurement of different process variables. Topics include theory and applications involved with the process variables of flow, level, pressure, and temperature. Upon completion, students should be able to understand basic process measurements and demonstrate the ability to calibrate process control instrumentation.

PCI-262 Intro to Process Control 3 3 0 4

Requisites:

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-112 **Physical Fitness II** Requisites: Take PED-111; Take previously. Required. This course is an intermediate-level fitness class. Topics include specific exercises contributing to fitness and the role exercise plays in developing body systems. Upon completion, students should be able to implement and evaluate an individualized physical fitness program. PED-114 **Aerobics II** 0 0 1 Take PED-113; Take previously. Required. Requisites: This course provides a continuation of a program of cardiovascular fitness involving rhythmic exercise. Emphasis is placed on a wide variety of aerobic activities which include cardiovascular efficiency, strength, and flexibility. Upon completion, students should be able to participate in and design a rhythmic aerobic exercise routine. 0 PED-117 Weight Training I 0 3 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. Weight Training II 1 **PED-118** 0 Take PED-117; Take previously. Required. Requisites: 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 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. 0 3 PED-121 Walk, Jog, Run 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. 2 **PED-123** 0 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-129 Golf-Intermediate 0 2 0 1

Requisites: Take PED-128; Take previously. Required.

This course covers the more advanced phases of golf. Emphasis is placed on refining the fundamental skills and learning more advanced phases of the games such as club selection, trouble shots, and course management. Upon completion, students should be able demonstrate the knowledge and ability to play a recreational round of golf.

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-131 Tennis-Intermediate 0 2 0 1

Requisites: Take PED-130; Take previously. Required.

This course emphasizes the refinement of playing skills. Topics include continuing the development of fundamentals, learning advanced serves, and strokes and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis. Personalized stroke improvement is stressed along with the introduction of advanced strokes and drills which promote consistency and the use of more advanced strategy.

PED-138 Archery 0 2 0 1

Requisites:

This course introduces basic archery safety and skills. Topics include proper techniques of stance, bracing, drawing, and releasing as well as terminology and scoring. Upon completion, students should be able to participate safely in target archery. Individualized instruction on fundamental skills enhance performance during class shooting and competition.

PED-139 Bowling-Beginning 0 2 0 1

Requisites:

This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance, and delivery along with rules and etiquette. Upon completion, students should be able to participate in recreational bowling. Classes stress individualized correction of the approach and delivery along with the introduction of spot bowling and league bowling.

PED-142 Lifetime Sports 0 2 0 1

Requisites:

This course is designed to give an overview of a variety of sports activities. Emphasis is placed on the skills and rules necessary to participate in a variety of lifetime sports. Upon completion, students should be able to demonstrate an awareness of the importance of participating in lifetime sports activities.

PED-143 Requisites:	Volleyball-Beginning	0	2	0	1			
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 ir recreational volleyball. Individualized instruction enhances fundamental skills along with their use in drills and class play.								
PED-145 Requisites: This course cover	Basketball-Beginning rs the fundamentals of basketball. Emphasis is placed	0 on skill d	2 evelopme	0 ent, know	1 ledge of the rules,			
and basic game strategy. Upon completion, students should be able to participate in recreational basketball.								
	Basketball-Intermediate Take PED-145; Take previously. Required. rs more advanced basketball techniques. Emphasis is ies and techniques. Upon completion, students should	-	-					
PED-147	Soccer	0	2	0	1			
This course introd	Requisites: This course introduces the basics of soccer. Emphasis is placed on rules, strategies, and fundamental skills. Upon completion, students should be able to participate in recreational soccer.							
PED-148	Softball	0	2	0	1			
	duces the fundamental skills and rules of softball. Empring softball. Upon completion, students should be able	-			-			
PED-150 Requisites:	Baseball - Beginning	0	3	0	1			
This course covers the fundamentals of baseball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational baseball.								
PED-151	Baseball/Intermediate	0	3	0	1			
	Take PED-150; Take previously. Required. rs more advanced baseball techniques. Emphasis is plies and techniques. Upon completion, students should		-					
PED-169	Orienteering	0	2	0	1			
Requisites: This course introduces the various types of orienteering and proper orienteering techniques. Emphasis is placed on defining various types of orienteering and recognizing and drawing topographic map symbols. Upon completion, students should be able to draw topographic map symbols and negotiate a 3-5 km cross-country orienteering course in a specified time period.								
PED-177	Ice Skating	0	2	0	1			
Requisites: This course introduces the fundamentals of ice skating. Emphasis is placed on basic positioning, balance, and form on ice. Upon completion, students should be able to demonstrate skills necessary for recreational ice skating.								
PED-217	Pilates I	0	2	0	1			
•	des an introduction to the pilates method of body concernediate pilates exercises using a mat or equipment,	_		-				

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. PED-233 Ju-Jitsu 0 3 0 1 Requisites: This course introduces martial arts using the ju-jitsu form. Topics include proper conditioning exercises, proper terminology, historical foundations, etiquette, and drills. Upon completion, students should be able to perform skills and techniques related to this form of martial arts. **PED-239** 0 1 **Kickboxing** Requisites: This course introduces martial arts using the kickboxing form. Topics include proper conditioning exercises, proper terminology, historical foundations, etiquette, and drills. Upon completion, students should be able to perform skills and techniques related to this form of martial arts. PHILOSOPHY (PHI Prefix) PHI-210 **History of Philosophy** 3 0 0 3 Take ENG-111(S13673); Take previously. Required. Take ENG-111(S13673); Minimum grade C; Requisites: Take previously. Required. This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao-Tzu, Confucius, Augustine, Aguinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre. Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied. **Philosophical Issues** PHI-215 3 0 0 3 Take ENG-111(S24022); Take previously. Required. Take ENG-111(S24022); Minimum grade C; Requisites: 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-220 Western Philosophy I 0 3 Requisites: Take ENG-111(S13673); Take previously. Required.Take ENG-111(S13673); Minimum grade C; Take previously. Required. This course covers Western intellectual and philosophic thought from the early Greeks through the medievalists. Emphasis is placed on such figures as the pre-Socratics, Plato, Aristotle, Epicurus, Epictetus, Augustine, Suarez, Anselm, and Aquinas. Upon completion, students should be able to trace the development of leading ideas regarding reality, knowledge, reason, and faith. PHI-221 Western Philosophy II 3 0 0 3 Take ENG-111(S13673); Take previously. Required. Take ENG-111(S13673); Minimum grade C; Requisites: Take previously. Required. This course covers Western intellectual and philosophic thought from post-medievalists through recent thinkers. Emphasis is placed on such figures as Descartes, Spinoza, Leibnitz, Locke, Berkeley, Hume, Kant, Hegel, Marx, Mill, and representatives of pragmatism, logical positivism, and existentialism. Upon completion, students should be able to trace the development of leading ideas concerning knowledge, reality, science, society, and the limits of reason. PHI-230 **Introduction to Logic** Take ENG-111(S13673); Take previously. Required.Take ENG-111(S13673); Minimum grade C; Requisites:

This course introduces basic concepts and techniques for distinguishing between good and bad reasoning. Emphasis is placed on deduction, induction, validity, soundness, syllogisms, truth functions, predicate logic,

Take previously. Required.

analogical inference, common fallacies, and scientific methods. Upon completion, students should be able to analyze arguments, distinguish between deductive and inductive arguments, test validity, and appraise inductive reasoning.

PHARMACY (PHM Prefix)

PHM-110 Requisites:	Introduction to Pharmacy	3	0	0	3		
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	3		
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 Requisites:	Pharmacology II Take PHM-120; Take previously. Required.	3	0	0	3		

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-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-138 Pharmacy Clinical 0 0 24 8

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: Take PHM-118; Take either previously or concurrently. Required.

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.

PHYSICS (PHY Prefix)

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-121 Applied Physics I 3 2 0 4

Requisites: Take DMA-010 DMA-020 DMA-030; Take previously. Required.

This algebra-based course introduces fundamental physical concepts as applied to industrial and service technology fields. Topics include systems of units, problem-solving methods, graphical analyses, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied in industrial and service fields.

PHY-131 Physics-Mechanics 3 2 0

Requisites: Take MAT-121(S23927) or MAT-171(S23934); 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(S23934); Take previously. Required.Take MAT-171(S23934); 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

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 4 6 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-110AB Modern Plumbing 4 6 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-110AC Modern Plumbing 2 3 0 3

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 0 9 0

Requisites: Take PLU-110AB(L52924); 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-110BB Modern Plumbing 0 9 0

Requisites: Take PLU-110AB(L52926); 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

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completion, students should be able to safely assemble various pipes and fittings in accordance with state code requirements.

PLU-110BB Modern Plumbing

0 9 0 4

Requisites: Take PLU-110AB(L52928); 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-110BC Modern Plumbing

2 3 0 3

Requisites: Take PLU-110AC; 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-110CC Modern Plumbing

0 9 0 3

Requisites: Take PLU-110BC; 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-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-120A Plumbing Applications

3 6 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. This is part one of a two-part course.

PLU-120AB Plumbing Applications

4 6 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-120AB Plumbing Applications

4 6 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-120B Plumbing Applications

1 9 0 4

Requisites: Take PLU-120A; Take previously. 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. This is part two of a two-part course.

PLU-120BB Plumbing Applications

9 0 4

Requisites: Take PLU-120AB(LS

Take PLU-120AB(L54050); 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-120BB Plumbing Applications

0 9 0 4

Requisites: Take PLU-120AB(L54052); 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-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-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-192 Selected Topics in Plumbing

1 2 0 2

Requisites:

This course provides an opportunity to explore areas of current interest in the 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. This course provides an opportunity to explore areas of current interest in Plumbing. Emphasis is placed on subject matter appropriate to plumbing. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

PLU-192A Selected Topics in Plumbing

1 2 0 2

Requisites:

This course provides an opportunity to explore areas of current interest in the 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.

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-110 Introduction to Project Management 3 0 0 3

Requisites: Take 1 group; Option: Take MAT-143 CTS-115(S20996) CTI-120(S22511); Option: Take MAT-143 CTS-115(S20996) CIS-110(S21058); Take previously. Required.

This course introduces project management fundamentals and principles for organizing, planning, implementing, and controlling nonroutine activities to achieve schedule, budget and performance objectives. Topics include project life cycles; work breakdown structures; responsibility matrixes; as well as planning and control methods such as PERT/CPM and Gantt charts. Upon completion, students should be able to demonstrate knowledge, strategies, and techniques needed to create and execute plans for project development and management.

POLITICAL SCIENCE (POL Prefix) POL-110 **Introduction to Political Science** 3 3 Requisites: Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take DRE-098(S23643); Take previously. Required. This course introduces basic political concepts used by governments and addresses a wide range of political issues. Topics include political theory, ideologies, legitimacy, and sovereignty in democratic and non-democratic systems. Upon completion, students should be able to discuss a variety of issues inherent in all political systems and draw logical conclusions in evaluating these systems. **POL-120** 0 **American Government** 3 0 3 Requisites: Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S24022); Option: Take DRE-098(S23643); 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-130 State & Local Government** Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); Take previously. Required. This course includes state and local political institutions and practices in the context of American federalism. Emphasis is placed on procedural and policy differences as well as political issues in state, regional, and local governments of North Carolina. Upon completion, students should be able to identify and discuss various problems associated with intergovernmental politics and their effect on the community and the individual. POL-210 **Comparative Government** 3 0 n 3 Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Take Requisites: previously. Required. This course provides a cross-national perspective on the government and politics of contemporary nations such as Great Britain, France, Germany, and Russia. Topics include each country's historical uniqueness, key institutions, attitudes and ideologies, patterns of interaction, and current political problems. Upon completion, students should be able to identify and compare various nations' governmental structures, processes, ideologies, and capacity to resolve major problems. PHYSCIAL FITNESS TECHNOLOGY (PSF Prefix) **PSF-110 Exercise Science** 4 0 0 Requisites: Option: Take DRE-098(S23643); Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050; Take previously. Required. 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. **PSF-111** Fitness & Exer Testing I 3 2 4 Option: Take DRE-098(S23643); Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050; Requisites: Take previously. Required. 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. **PSF-114** Phys Fit Theory & Instr 4 4 Take PSF-110; Take previously. Required. Requisites:

This course provides information about related components of fitness and general information about the industry.

Topics include the study of the components of fitness, theories of exercise and fitness, and information about the industry. Upon completion, students should be able to identify fitness components and demonstrate these in an exercise setting.

PSF-116 Pvnt & Care Exer Injuries 2 2 0

Requisites: Option: Take DRE-098(S23643); Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050; Take previously. Required.

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.

PSF-118 Fitness Facility Management 4 0 0 4

Requisites: Option: Take DRE-098(S23643); Option: Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050; Take previously. Required.

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.

PSF-120 Group Exercise Instruction 2 2 0 3

Requisites: Take PSF-110; Take previously. Required.Take PSF-110; Minimum grade C; 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.

PSF-210 Personal Training 2 2 0 3

Requisites: Take PSF-110 PSF-111; Take previously. Required.Take PSF-110 PSF-111; Minimum grade C; 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.

PSF-212 Exercise Programming 2 2 0 3

Requisites: Take PSF-110; Take previously. Required.Take PSF-110 PSF-111; Minimum grade C; 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.

PSYCHOLOGY (PSY Prefix)

PSY-110 Life Span Development 3 0 0 3

Requisites:

This course provides an introduction to the study of human growth and development. Emphasis is placed on 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 and apply this knowledge to their specific field of study.

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; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take DRE-098(S23643); 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-231 Forensic Psychology

3 0 0 3

Requisites: Take PSY-150; Take previously. Required.

This course introduces students to concepts which unite psychology and the legal system. Topics include defining competency, insanity, involuntary commitment, as well as introducing forensic assessment techniques, such as interviewing process, specialized assessments, and collecting collateral information. Upon completion, students should be able to demonstrate knowledge in areas of forensic psychology: risk assessment, criminal competencies, insanity, psychopathology, and mentally disordered offenders.

PSY-237 Social Psychology

3 0 0 3

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.

Requisites:

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-249 Psychology of Aging

3 0 0 3

Requisites: Take PSY-150; Take previously. Required.

This course covers the particular needs and behaviors of the maturing adult. Emphasis is placed on psychosocial processes; biological and intellectual aspects of aging; adjustments to retirement, dying, bereavement; and the stereotypes and misconceptions concerning the elderly. Upon completion, students should be able to show an understanding of the psychological factors related to the aging process.

PSY-263 Educational Psychology

3 0 0 3

Requisites: Take PSY-150; Take previously. Required.Take PSY-150; Minimum grade C; Take previously. Required.

This course examines the application of psychological theories and principles to the educational process and setting. Topics include learning and cognitive theories, achievement motivation, teaching and learning styles, teacher and

learner roles, assessment, and developmental issues. Upon completion, students should be able to demonstrate an understanding of the application of psychological theory to educational practice.

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-193 Selected Topics in Industrial Pharm Tech 2 2 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. This course provides an opportunity to explore areas of current interest in Industrial Pharmaceutical Technology. Emphasis is placed on subject matter appropriate to industrial pharmaceutical. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

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-222 **Pharmaceutical Process Control** 2 2 0 3 Requisites: This course provides a systematic study of the control of all processes within the pharmaceutical industry. Topics include production economics, plant layout, computer-integrated manufacturing, planning and controls, materials management, routing and scheduling, progress reports, and relationship with quality control. Upon completion, students should be able to demonstrate an understanding of process flow controls, economic considerations, and materials management in modern pharmaceutical manufacturing. PTC-226 3 3 Validation Take PTC-110; Take previously. Required. Requisites: 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 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. RADIOGRAPHY (RAD Prefix) **RAD-110 Rad Intro & Patient Care** 3 0 3 Requisites: Take RAD-111 RAD-151; 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 4 Take RAD-110 RAD-151; Take either previously or concurrently. Required. Requisites: This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the chest, abdomen, extremities, spine, and pelvis. Upon completion, students should be able to demonstrate competence in these areas. **RAD-112 RAD Procedures II** 3 3 Take RAD-110 RAD-111 RAD-151; Take previously. Required. Take RAD-121(S13711) RAD-161; Requisites: 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, bony thorax, and gastrointestinal, biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas. **RAD-121** Radiographic Imaging I 2 3 0 3 Requisites: Take RAD-110 RAD-111 RAD-151; Take previously. Required. Take RAD-112(S13039) RAD-161; Take either previously or concurrently. Required. This course provides the basic principles of imaging. Emphasis is placed on the factors that impact density, contrast, recorded detail, and distortion. Upon completion, students should be able to demonstrate an understanding of basic radiographic imaging. **RAD-122** Radiographic Imaging II 1 2

131(S22449) RAD-171; Take either previously or concurrently. Required.

Take RAD-112(S13039) RAD-121(S22447) RAD-161; Take previously. Required.Take RAD-

Requisites:

This course provides advanced principles of imaging including digital radiography. Emphasis is placed on the factors that impact brightness, contrast, recorded detail, and distortion. Upon completion, students should be able to demonstrate an understanding of advanced principles of imaging.

RAD-151 Requisites:	RAD Clinical Ed I Take RAD-110 RAD-111; Take either previously or	0 concur	0 rently. Red	6 quired.	2	
placed on masteri	duces patient management and basic radiographic ping positioning of the chest and extremities, manipulation, students should be able to demonstrate su	ating eq	uipment, a	nd apply	ing principles	of
Requisites:	RAD Clinical Ed II Take RAD-110 RAD-111 RAD-151; Take previousl ke either previously or concurrently. Required.	0 y. Requ	0 iired.Take	15 RAD-11	5 2(S13039) RA	رD-
Emphasis is place	des additional experience in patient management an ed on mastering positioning of the spine, pelvis, head et patient variations. Upon completion, students sho ical objectives.	d and ne	ck, and the	orax and	adapting	res.
This course providures. Emp	RAD Clinical Ed III Take RAD-112(S13039) RAD-121(S13711) RAD-10-131(S20872); Take either previously or concurrent des experience in patient management specific to flushasis is placed on applying appropriate technical factor durological studies. Upon completion, students ship ical objectives.	itly. Red loroscop ctors to a	quired. pic and adv all studies	anced ra	adiographic tering position	
Requisites: 231(S22451) RAI This course provid Emphasis is place	Radiographic Procedures III Take RAD-122(S22448) RAD-131(S23864) RAD-1 D-241(S20874) RAD-251; Take either previously or des the knowledge and skills necessary to perform seed on radiographic specialty procedures, sectional arounds should be able to demonstrate an understanding	concurre tandard natomy,	ently. Req and speciand advar	uired. alty radio	ographic proce	
RAD-231	Radiographic Physics II	1	3	0	2	
This course provide Computed Tomogo	Take RAD-171 or RAD-131(S23864); Take previous D-251; Take either previously or concurrently. Requires advanced principles of radiation characteristics agraphy (CT). Emphasis is placed on imaging equipment understanding of radiation characteristics and produced in the produced of the p	iired. and proc ent. Up	luction incl	uding di	gital imaging a	and
231(S12795); Ta This course cover radiation on body monitoring device	Radiobiology/Protection Take RAD-122(S13744) RAD-131(S11316) RAD-120-231(S20873) RAD-251; Take either previously or ke either previously or concurrently. Recommended to the principles of radiation protection and radiobiological tissues, protective measures for limiting exposure to s. Upon completion, students should be able to denote the diagnostic radiology.	concurred. J. Dogy. Topo the pat	ently. Req pics include ient and pe	uired.Ta e the effe	ke RAD- ects of ionizing , and radiatior	g n
•	Image Analysis Take RAD-211(S23865) RAD-231(S23866) RAD-24AD-261(S23868) RAD-271; Take either previously of image analysis and introduces manalysis and introduces manalysis.	or concu	rrently. Re	equired.	•	ıclude

image evaluation, pathology, quality control, and quality assurance. Upon completion, students should be able to

demonstrate a basic knowledge of image analysis and quality management.

RAD-251 RAD Clinical Ed IV 0 0 21 7 Take RAD-122(S13744) RAD-131(S11316) RAD-171; Take previously. Required.Take RAD-Requisites: 211(S11492) RAD-231(S12795) RAD-241(S13626); 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. 1 **RAD-271** Radiography Capstone 0 3 0 Take RAD-211(S11492) RAD-231(S12795) RAD-241(S13626) RAD-251; Take previously. Requisites: Required. Take RAD-245(S13636) RAD-261(S13976); Take either previously or concurrently. 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 demonstrat the knowledge required of an entry-level radiographer. **REAL ESTATE APPRAISAL (REA Prefix) REA-210 Site Value Cost Approach** 1 0 0 1 Requisites: Take REA-219; Take previously. Required. This course teaches the concepts and methodology used for determining site value and the valuation of residential improvements using the cost approach. Topics include methods in site valuation, replacement/reproduction cost, estimating accrued depreciation, concepts/definitions, and case studies. Upon completion, students should be able to understand the concepts and applications of site valuation and cost approaches for residential properties. **REA-214 Basic Appraisal Principle** 2 0 2 Requisites: This course introduces the student to the entire concept of real estate appraisal and the valuation process. Topics include real property concepts and characteristics, legal considerations, influences on real estate value, types of values, and economic principles. Upon completion, students should be able to present an overview of real estate markets and analysis, and ethics, applying it to appraisal theory and practice. 2 **REA-215 Basic Appraisal Procedure** 0 0 Requisites: Take REA-214; Take previously. Required. This course introduces procedures used to develop an estimate of value and how the various principles of value relate to the application of such procedures. Topics include an overview of approaches to value, valuation procedures, property description and residential applications. Upon completion, students should be able to identify and utilize the approaches to value for residential properties. **REA-217 National Uniform Standards of Professional Appraisal Practice** 0 0 Requisites: Take REA-215; Take previously. Required. This course introduces all aspects of the appraisers146 conduct, ethics and competency. Topics include appraisal standards, reviews, reports, and the confidentiality provisions as set forth by the Appraisal Standards Board. Upon completion, students should be able to sit for the national Uniform Standards of Professional Appraisal Practice (USPAP) examination. **REA-219** 0 1 **Residential Market Analysis** 1 0 Take REA-217; Take previously. Required. Requisites:

best use. Topics include market fundamentals, characteristics and definitions, supply/demand analysis, use of market analysis, test constraints and application of the highest/best use, special considerations and case studies. Upon completion, students should be able to analyze residential markets and know the test constraints for highest and best use.

This course introduces students to the components of a market analysis and how to test for and analyze highest and

REFRIGERATION (REF Prefix)

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Commercial Systems I Requisites: Take AHR-115; Take previously. Required.

REF-116

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.

RELIGION (REL Prefix)

REL-110 World Religions

Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); 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-112 Western Religions 3

Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); Take previously. Required.

This course introduces the major western religious traditions. Topics include Zoroastrianism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. Students will be required to complete a research project which will be presented orally to the class.

REL-211 Introduction to Old Testament 3

Requisites: Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take DRE-098(S23643); 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 3 **Introduction to New Testament** 3 0 0

Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); 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.

REL-221 Religion in America

Requisites: Take 1 group; Option: Take ENG-090 RED-090; Option: Take ENG-111(S13673); Option: Take DRE-098(S23643); Take previously. Required.

This course is an examination of religious beliefs and practice in the United States. Emphasis is placed on mainstream religious traditions and non-traditional religious movements from the Colonial period to the present. Upon completion, students should be able to recognize and appreciate the diversity of religious traditions in America. Students will be required to complete a research project which will be presented orally to the class.

REAL ESTATE (RLS Prefix)

RLS-112 Broker Prelicensing 5 5

Requisites:

This course provides basic instruction in real estate principles and practices. Topics include law, finance, brokerage, closing, valuation, management, taxation, mathematics, construction, land use, property insurance, and NC License

Law and Commission Rules. Upon completion, students should be able to demonstrate basic knowledge and skills necessary for real estate sales.

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-120 Intake and Assessment 3 0 0 3

Requisites: Take DRE-098(S23643); Take previously. Required.

This course develops processes for establishment of client rapport, elicitation of client information on which therapeutic activities are based, and stimulation of client introspection. Topics include diagnostic criteria, functions of counseling, nonverbal behavior, collaterals and significant others, dual diagnosis, client strengths and weakness, uncooperative clients, and crisis interventions. Upon completion, students should be able to establish communication with clients, recognize disorders, obtain information for counseling, and terminate the counseling process.

SAB-125 SA Case Management 2 2 0 3
Requisites: Take DRE-098(S23643) DMA-010 DMA-020 DMA-030; 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-210 Sub Abuse Counseling 2 2 0 3

Requisites: Take DRE-098(S23643); 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 HSE-112 DRE-098(S23643); 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); 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: Take CTI-120(S22511); Take previously. Required.

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 1 group; Option: Take SEC-110(S21053) NET-110(S21056); Option: Take SEC-

110(S21053) NET-125(S21095); 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-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-160 Security Administration I 2 2 0 3

Requisites: Take 1 group; Option: Take SEC-110(S23204) NET-110(S21056); Option: Take SEC-

110(S23204) NET-125(S21095); Take previously. Required.

This course provides an overview of security administration and fundamentals of designing security architectures. Topics include networking technologies, TCP/IP concepts, protocols, network traffic analysis, monitoring, and security best practices. Upon completion, students should be able to identify normal network traffic using network analysis tools and design basic security defenses.

SEC-160 Security Administration I 2 2 0 3

Requisites: Take 1 group; Option: Take SEC-110(S23204) NET-110(S21056); Option: Take SEC-

110(S23204) NET-125(S24501); Take previously. Required.

This course provides an overview of security administration and fundamentals of designing security architectures. Topics include networking technologies, TCP/IP concepts, protocols, network traffic analysis, monitoring, and security best practices. Upon completion, students should be able to identify normal network traffic using network analysis tools and design basic security defenses.

SEC-210 Intrusion Detection 2 2 0 3

Requisites: Take SEC-160(S21109); 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-210 Intrusion Detection 2 2 0 3

Requisites: Take SEC-160(S24399); 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-220 Defense-In-Depth 2 2 0 3

Requisites: Take SEC-160(S21109); Take either previously or concurrently. Required.

This course introduces students to the concepts of defense-in-depth, a security industry best practice. Topics include firewalls, backup systems, redundant systems, disaster recovery, and incident handling. Upon completion, students should be able to plan effective information security defenses, backup systems, and disaster recovery procedures.

SEC-270 Secure Routing/Firewalls 1 4 0 3

Requisites: Take NET-226(S21099) SEC-110(S21053); Take previously. Required.

This course introduces the principles of securing networks using routers and firewalls. Topics include networking

protocols, threat mitigation, firewall configuration, authentication, authorization, intrusion detection, encryption, IPSec, VPNs, and remote access technologies. Upon completion, students should be able to secure internal networks using router and firewall technologies.

SEC-289 Security Capstone Project 1 4 0 3

Requisites: Take SEC-220; Take previously. Required.Take SEC-220 CTS-115(S20996) NOS-230(S24041)

SEC-150(S21054) SEC-210(S21111) NET-126(S21096); Take previously. Required.

This course provides the student the opportunity to put into practice all the skills learned to this point. Emphasis is

This course provides the student the opportunity to put into practice all the skills learned to this point. Emphasis is placed on security policy, process planning, procedure definition, business continuity, 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.

SIMULATION AND GAME DEVELOPMENT (SGD Prefix)

SGD-112 Simulation and Game Development Design 2 3 0 3

Requisites: Take DRE-098(S23643) DMA-050; 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 Simulation and Game Development Programming 2 3 0 3

Requisites: Take 1 group; Option: Take DRE-096(S23641) DMA-050; Option: Take RED-090 MAT-060; Option: Take DRE-096(S23641) MAT-060; Option: Take RED-090 DMA-050; 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 3D Modeling 2 3 0 3

Requisites: Take SGD-116; 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-115 Physically-Based Modeling 2 2 0 3

Requisites: Take MAT-121(S23927) or MAT-171(S23934); Take previously. Required.

This course introduces fundamental physical concepts as applied to the simulation and game design fields. Topics include hands-on programming of vectors, matrices, graphical analyses, forces, laws of motion, work, energy, momentum, properties of matter, and problem-solving methods. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied to the simulation and game design fields.

SGD-116 Graphic Design Tools 2 2 0 3

Reguisites: Take DRE-098(S23643) DMA-050; Take previously. Required.

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 DRE-098(S23643) DMA-050; Take previously. 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-122 Requisites:	Simulation and Game Database Programming		3	0	3	
placed on various	rs the creation and application of databases for single database and software development kits. Upon abases to the creation of simulations and games.		•	•	•	
placed on expert	Simulation and Game Artificial Intelligence Take SGD-113 CSC-134(S21066) or CSC-151; duces the artificial intelligence concepts related to systems. Upon completion, students should be a velopment of artificial intelligence systems used in	simulation a	and gam ibe the b	e develop asic cond	-	
education. Empl	Serious Games Take SGD-111(S21240) SGD-112 SGD-116 ENdides students with an overview of serious games anasis is placed on developing games for education completion, students should be able to design the	and their app n, corporate	olications training,	s in immei and medi	rsive learning	
serious games, p	SGD Business Management Take ENG-111(S13673) SGD-111(S21240) SGE duces the business side of the interactive game in sychological profiling, publisher/developer relation ents should be able to understand how a game even	dustry. Emp	hasis wi	ill be place otiation sk	ed on license tills. Upon) S,
project. Emphasi	SGD Production Management Take SGD-111(S21240); Take previously. Requires the techniques and methods used in interacts is placed on scheduling, production plans, marked manage a team, track production, and understand	ctive game peting and bu	dgeting.	Upon cor	mpletion, stu	
is placed on histocompletion, stude	Simulation and Game Animation Take SGD-116; Take previously. Required. duces the fundamental principles of animation use prical survey of animation, aspects of the animation ents should be able to produce character sketches essional storyboards.	n process a	nd anima	ation tech	niques. Upo	n
Emphasis is plac completion, stude	Simulation and Game 3-D Animation Take SGD-114; Take previously. Required. duces the fundamental principles of 3D animation ed on a historical survey of 3D animation, aspects ents should be able to produce 3D character sketc op professional storyboards.	of the 3D a	nimatior	n techniqu	es. Upon	
documents. Emp	Simulation and Game Documentation Take ENG-111(S13673) SGD-111(S21240); Talduces the techniques and methods used to create chasis is placed on the design document to include completion, students should be able to create de	simulation e scheduling	and gam J, produc	ne product	s, marketing	and
SGD-164 Requisites:	Simulation and Game Audio and Video Take SGD-111(S21240) SGD-174; Take previous aspects of audio and video and their	-		0	3	onios

include techniques for producing and editing audio and video for multiple digital mediums. Upon completion, students should be able to produce and edit audio and video for simulations and games.

SGD-165 Simulation and Game Character Development 2 3 0 3

Requisites: Take SGD-114; 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-167 Simulation and Game 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 Mobile Simulation and Game Programming I 2 3 0 3

Requisites: Take SGD-113 CIS-115(S24352) CSC-134(S21066) or CSC-151; 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-171 Flash Simulation and Game Programming 2 3 0 3

Requisites: Take SGD-111(S21240) or SGD-116; Take previously. Required.

This course introduces the Flash programming environment for use in simulation and game development. Topics include timeline effects, extensibility layers, alias text, globalization tools, ActionScript and lingo programming. Upon completion, students should be able to create a simple simulation or game using Flash.

SGD-172 Virtual Simulation and Game Environments 2 3 0 3

Requisites: Take SGD-116 SGD-114; 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 Simulation and Game Level Design 2 3 0 3

Requisites: Take SGD-114; 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 Simulation and Game Development Hypertext Markup Language Programming I 2

0 3

Requisites: Take SGD-113 CIS-115(S24352) CSC-134(S21066) or CSC-151; 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-192 Selected Topics in Simulation/Game Dev 1 2 0 2

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. This course provides an opportunity to explore areas of current interest in Simulation and Game Development. 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.

SGD-193 Selected Topics in Simulation/Game Dev 2 2 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.

SGD-213 Simulation Game Development Programming II 2 3 0 3
Requisites: Take SGD-113 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 3D Modeling II 2 3 0 3

Requisites: Take SGD-114; 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; Take previously. Required.Take SGD-162; 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-244 3D Modeling III 2 3 0 3

Requisites: Take SGD-214; Take previously. Required.

This course is designed to further a student's knowledge in creating visually compelling 3D models through the use of industry-standard software. Emphasis is placed on learning how to develop accurate textures and normal maps. Upon completion, students should be able to develop industry caliber 3D models.

SGD-268 Mobile Simulation and Game 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-271 Advanced Flash Programming 2 3 0 3

Requisites: Take SGD-171; Take previously. Required.

This course is designed to expand students' previous knowledge of the Flash programming environment. Emphasis is placed on learning advanced Flash techniques for use in the simulation and game industry. Upon completion, students should be able to create industry-quality simulations or games using Flash.

SGD-274 Simulation and Game Level Design II 2 3 0 3

Requisites: Take SGD-174; 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-280 Simulation and Game Development Hypertext Markup Language **Programming II** 0 3 3 Take SGD-180; Take previously. Required. Requisites: This course is designed to expand knowledge of HTML based technologies as it relates to simulation and game development. Emphasis is placed on creating advanced 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 advanced industry standard quality HTML based games or simulations. SGD-288 Simulation and Game Development Portfolio Design 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 Simulation and Game Development Project 3 Take SGD-212 SGD-213(S21266) SGD-214 or SGD-285(S22374); Take previously. Requisites: Required.Take 1 group; Option: Take SGD-212 SGD-163 SGD-164 SGD-134 SGD-165; Option: Take SGD-212 SGD-163 SGD-164 SGD-134 SGD-285(S22374); Take previously. Require 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. SGD-293A 2 2 0 3 Selected Topics in Maya for 3Ds Max Use Requisites: Take SGD-114; Take previously. Required. This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on the subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study. This course provides an opportunity to explore areas of current interest in Simulation and Game Development. 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. (SOC Prefix) SOCIOLOGY SOC-210 Introduction to Sociology 3 3 Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); 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 0 3 0 3 Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); 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 Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); 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 3 Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); 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-230 **Race and Ethnic Relations** 3 0 3 Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S13673); Option: Take Requisites: DRE-098(S23643); Take previously. Required. This course includes an examination of the various aspects of race and ethnicity and how these lead to different experiences, opportunities, problems, and contributions. Topics include prejudice, discrimination, perceptions, myths, stereotypes, and intergroup relationships. Upon completion, students should be able to identify and analyze relationships among racial and ethnic groups within the larger society. SOC-242 Sociology of Deviance 3 Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-111(S24022); Option: Take Requisites:

DRE-098(S23643); 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.

SPANISH (SPA Prefix)

SPA-111 Elementary Spanish I Requisites:

Take 1 group; Option: Take ENG-090 RED-090; Option: Take DRE-098(S23643); 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 O 3

Take SPA-111; Take previously. Required.Take SPA-111; Minimum grade C; Take previously. Requisites: 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

Take 1 group; Option: Take RED-090 ENG-090; Option: Take ENG-110(S22173); Option: Take Requisites: ENG-111(S13673); Option: Take DRE-097(S23642); 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.

comparable area sociopolitical, eco	Cultural Immersion Take SPA-111; Take previously. Required. res Hispanic culture through intensive study on within the United States. Topics include an over momic, and/or artistic concerns of the area visite knowledge of issues pertinent to the host area a	view of linguised. Upon com	stic, histological	orical, ged students s	ographical, should be able to	
This course provide Emphasis is place the use of various	Spanish Lab 1 Take 1 group; Option: Take ENG-090 RED-090 ired. Take SPA-111; Take either previously or codes an opportunity to enhance acquisition of the ed on the progressive development of basic lister is supplementary learning media and materials. It is respond with grammatical accuracy to spoken a	oncurrently. F fundamental ning, speakin Jpon complet	Required element g, readin ion, stud	d. ts of the S ng, and w dents sho	Spanish language riting skills throu uld be able to	
Emphasis is place the use of various	Spanish Lab 2 Take SPA-111; Take previously. Required. des an opportunity to enhance acquisition of the ed on the progressive development of basic liste supplementary learning media and materials. It respond with increasing proficiency to spoken a	ning, speakin Jpon complet	g, readir ion, stud	ng, and w dents sho	riting skills throu uld be able to	
This course provide the study of author	Intermediate Spanish I Take SPA-112; Take previously. Required.Tale PA-281; Take either previously or concurrently. It is a review and expansion of the essential skill entic and representative literary and cultural texts ectively, accurately, and creatively about the passes	Required. s of the Span s. Upon comp	ish lang oletion, s	uage. Em students s	phasis is placed	l on
This course provious language. Empha of various suppler	Spanish Lab 3 Take SPA-182(S13968); Take previously. Rec Required.Take SPA-211; Take either previousl des an opportunity to enhance the review and ex asis is placed on the study of authentic and representary learning media and materials. Upon co ately, and creatively about the past, present, and	y or concurrer xpansion of the esentative lite mpletion, stud	ntly. Re e essen rary and	quired. itial skills I cultural t	of the Spanish exts through the	use
language. Emphathrough the use o	Spanish Lab 4 Take SPA-281; Take previously. Required.Take an opportunity to enhance the review and exasts is placed on the continuing study of authent for various supplementary learning media and material pontaneously and accurately with increasing continuing study.	rpansion of th ic and represe terials. Upon	e essen entative comple	tial skills literary ar tion, stude	of the Spanish	٠
	SURVEYING	(SRV Prefix)			
This course introd	Surveying I Take 1 group; Option: Take MAT-121(S23927) B) DMA-070(S24129) DMA-080(S24130); Take duces the theory and practice of plane surveying, and elevations; bearing, azimuth and traverse	either previou . Topics inclu	sly or co	oncurrent recise me	ly. Required. easurement of	ke

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

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.

SUSTAINABILITY TECHNOLOGY (SST Prefix)

SST-110 Introduction to Sustainability 3 0 0 3

Requisites:

This course introduces sustainability issues and individual contributions toward environmental sustainability. Topics include management processes needed to maximize renewable/non-renewable energy resources, economics of sustainability, and reduction of environmental impacts. Upon completion, students should be able to discuss sustainability practices and demonstrate an understanding of their effectiveness and impacts.

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.

SURGICAL TECHNOLOGY (SUR Prefix)

SUR-110	Intro to Surgical Technology	3	0	0	3	
This course provio concepts within the and relationships, management con-	Take SUR-111(S14251); Take either previously of des a comprehensive study of peri-operative care, the profession of surgical technology. Topics include legal, ethical and moral issues, medical terminologicals, and the technological sciences. Upon comparing of the course topics to the practice of surgical sur	patient card e: introducto gy, pharma letion, stude	e concep ory conce cology, a ents sho	ots, and poepts, organism	anizational si a, wound he	tructure
Requisites: This course provid operative, intra-openvironment, instr	Periop Patient Care Take SUR-110(S16542); Take either previously of des the surgical technology student the theoretical perative, and post-operative role. Topics include as trumentation, equipment, peri-operative patient care not should be able to apply the principles and pracment.	knowledge epsis, disir e, and peri-	required fection a operative	to function to the stand sterilized to the steri	zation, physi anagement.	ical Upon
Requisites: either previously of This course proviously to the first clinical theoretical knowle	Surgical Procedures I Take SUR-110(S21499) SUR-111(S14251); Take or concurrently. Required. des an introduction to selected basic and intermed rotation. Emphasis is placed on related surgical a edge of patient care, instrumentation, supplies, and te, integrate, and apply theoretical knowledge of the	iate surgica natomy, pa I equipment	I special thology,	ties that s and proc	students are edures that on, students	exposed enhance
Requisites: Take either previous concurrently. F This course provious SUR 111. Emphatechnique and base	Sur Clinical Practice I Take SUR-110(S23183) SUR-111(S23184); Take ously or concurrently. Required.Take SUR-122(S1 Recommended. des clinical experience with a variety of perioperations is placed on the scrub and circulating roles of sic case preparation for selected surgical procedure th, and dismantle basic surgical cases in both the structure.	0714) SUR ve assignm the surgical es. Upon c	-122(S1) ents to b technolo	6544); Ta build upon ogist inclu n, studen	ake either pr skills learne uding aseptic	reviously ed in
Requisites: This course provide exposed to in the procedures that e	Surgical Procedures II Take SUR-123; Take previously. Required. des a comprehensive study of intermediate and ad second clinical rotation. Emphasis is placed on renhance theoretical knowledge of patient care, instructs should be able to correlate, integrate, and applied environment.	lated surgion	al anato , supplie	my, pathos, and eq	ology, and _l uipment. U	pon
Requisites: concurrently. Red This course provid complex periopera	des clinical experience with a variety of perioperatinative patient care. Emphasis is placed on greater the operative setting. Upon completion, students s	ve assignm technical sk	ents to b	ouild skills cal thinkin	required for g, speed, ef	ficiency,
Requisites:	Professional Success Preparation des employability skills and an overview of theoreti	1 cal knowled	0 dge in pro	0 eparation	1 for certificat	tion.

Topics include test-taking strategies, resume preparation, interviewing strategies, communication skills, and teamwork concepts. Upon completion, students should be able to prepare a resume, demonstrate appropriate interview techniques, and identify strengths and weaknesses in preparation for certification.

SUR-210 Advanced Sur Clinical Practice 0 0 6 2

Requisites:

This course is designed to provide individualized experience in advanced practice, education, circulating, and managerial skills. Emphasis is placed on developing and demonstrating proficiency in skills necessary for advanced practice. Upon completion, students should be able to assume leadership roles in a chosen specialty area.

SUR-211 Advanced Theoretical Concepts 2 0 0 2

Requisites:

This course covers theoretical knowledge required for extension of the surgical technologist role. Emphasis is placed on advanced practice in complex surgical specialties, educational methodologies, and managerial skills. Upon completion, students should be able to assume leadership roles in a chosen specialty area.

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.

THREE DIMENSIONAL PRINTING (TDP Prefix)

TDP-110 Introduction to Three Dimensional Printing 2 3 0 3

Requisites: Take DFT-151; Take previously. Required.

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.

TELECOMMUNICATIONS AND NETWORK ENGINEERING TECHNOLOGY (TNE Prefix)

TNE-193 Selected Topics in Telecommuncations 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.

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-120A Basic Transportation Electrical Lab** 1 Take TRN-120; Take either previously or concurrently. Recommended. Requisites: 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 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** 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. 2 **TRN-140A Transportation Climate Control Lab** 1 0 Take TRN-140; Take either previously or concurrently. Recommended. Requisites: This course provides experiences for enhancing student skills in the diagnosis and repair of transportation climate control systems. Emphasis is placed on reclaiming, recovery, recharging, leak detection, climate control components, diagnosis, air conditioning equipment, tools and safety. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information. 2 **TRN-170** Pc Skills for Transportation 1 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** 1 3 **Basic Welding for Transportation** 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

associated with the setup/operation of processes and other setup.	Basic Welding for Transportation Lab Take TRN-180; Take either previously or concurrent des a laboratory experience for enhancing student ski ne transportation industry. Emphasis is placed on safe f MIG equipment, metal identification, welds/joints, tec her related topics. Upon completion, students should be as and safety procedures according to industry standa	ills in weld ty and prechniques, be able to	ing and c ecautiona inspection	utting pro ry measu n of welds	res, s/joints, cutting		
	WORK-BASED LEARNING	(WBL	Prefix)				
WBL-111 Requisites:	Work-Based Learning I	0	0	0	1		
student's program Upon completion,	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 Requisites: This course descr	Work-Based Learning Seminar I Take WBL-111 WBL-112 WBL-113 or WBL-114; Tal ription may be written by the individual colleges.	1 ke either p	0 previously	0 or concu	1 urrently. Required.		
WBL-121	Work-Based Learning II	0	0	0	1		
student's program Upon completion,	des a work-based learning experience with a college- n of study. Emphasis is placed on integrating classroo students should be able to evaluate career selection, orm work-related competencies.	m learnin	g with rel	ated work	c experience.		
WBL-122	Work-Based Learning II	0	0	0	2		
student's program Upon completion,	des a work-based learning experience with a college- n of study. Emphasis is placed on integrating classroo students should be able to evaluate career selection, orm work-related competencies.	om learnin	g with rel	ated work	k experience.		
WBL-123	Work-Based Learning II	0	0	0	3		
student's program Upon completion,	des a work-based learning experience with a college- n of study. Emphasis is placed on integrating classroo students should be able to evaluate career selection, orm work-related competencies.	om learnin	g with rel	ated work	c experience.		
WBL-131 Requisites:	Work-Based Learning III	0	0	0	1		
This course provide	des a work-based learning experience with a college-an of study. Emphasis is placed on integrating classroo						

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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 3 O 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) 2 **WEB-111 Introduction to Web Graphics** 2 0 3 Requisites: Take DRE-098(S23643); 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 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 industryestablished 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** Mobile Web Design 2 0 3 Take WEB-110(S22058); Take previously. Required. Take WEB-110(S22058) WEB-140; Take Requisites: previously. Required. 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-125** Mobile Web Design 3 Requisites: Take WEB-140; Take previously. Required. 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** 3 **Web Development Tools** Requisites: Take DRE-098(S23643) DMA-030; Take previously. Required. This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites

Take DRE-098(S23643) DMA-030; Take previously. Required.

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and supporting applets.

Mobile Interface Design

WEB-141

Requisites:

This course covers current design standards and emerging approaches related to the design and development of user interfaces for mobile devices. Emphasis is placed on research and evaluation of standard and emerging practices for effective interface and user experience design. Upon completion, students should be able to design effective and usable interfaces for mobile devices.

WEB-151 Mobile Application Development I 2 2 0 3

Requisites: Take CSC-151; Take previously. Required.

This course introduces students to programming technologies, design and development related to mobile applications. Topics include accessing device capabilities, industry standards, operating systems, and programming for mobile applications using an OS Software Development Kit (SDK). Upon completion, students should be able to create basic applications for mobile devices.

WEB-179 JAVA Web Programming 2 3 0 3

Requisites:

This course introduces the development of dynamic, database-driven web applications using the JAVA programming languages. Topics include Object Oriented Programming JAVA Server Pages, servlets, database interactions, and form handling. Upon completion, students should be able to create and modify JAVA-based internet applications.

WEB-180 Active Server Pages 2 2 0 3

Requisites: Take CIS-115(S24352) 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 CIS-115(S21061); Take previously. Required.Take CIS-115(S23954) DBA-110; 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-182 PHP Programming 2 2 0 3

Requisites: Take CIS-115(S24352) 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-185 ColdFusion Programming 2 2 0 3

Requisites: Take CIS-115(S21061); Take previously. Required.

This course introduces ColdFusion Programming. Topics include installing a ColdFusion development environment, using CFQUERY tags to send and receive database information, creating and displaying a form, and other related topics. Upon completion, students should be able to design, code, test, and debug using a ColdFusion environment.

WEB-187 Programming for Mobile Devices 2 2 0 3

Requisites: Take CIS-115(S21061); Take previously. Required.

This course introduces content development for mobile electronic devices with a focus on business-related, social media, and entertainment applications. Emphasis is placed on developing web content and creating applications for mobile devices, including internet/business practices and techniques for delivery on mobile platforms. Upon completion, students should be able to develop web content and business or entertainment applications for use on mobile electronic devices.

WEB-187 Programming for Mobile Devices 2 2 0 3

Requisites:

This course introduces content development for mobile electronic devices with a focus on business-related, social media, and entertainment applications. Emphasis is placed on developing web content and creating applications for mobile devices, including internet/business practices and techniques for delivery on mobile platforms. Upon completion, students should be able to develop web content and business or entertainment applications for use on mobile electronic devices.

WEB-193 Selected Topics in Web Technology 2 2 0 3

Requisites: Take ITN-140 or WEB-140; Take previously. Required.

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. 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.

WEB-210 Web Design 2 2 0 3

Requisites: Take WEB-140; 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-110(S22058) WEB-140; 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 advertizing plans.

WEB-214 Social Media 2 2 0 3

Requisites: Take ENG-111(S24022); Take previously. Required.

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-110(S22058); Take previously. Required.Take CIS-115(S23954) DBA-110; 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.

0 **WEB-225 Content Management Systems** 2 3 Take WEB-182(S24403) DBA-110; Take previously. Required. Requisites: 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. 2 2 WEB-250 **Database Driven Websites** 0 3 Take DBA-110; Take previously. Required.Take DBA-110 WEB-115(S22059); Take previously. Requisites: 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-250 **Database Driven Websites** 2 2 3 Take DBA-110 WEB-110(S22058) or CTI-110(S22510); Take previously. Required. Requisites: 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-251 **Mobile Application Development II** 2 0 3 Take WEB-151; Take previously. Required. Take CIS-115(S24352); Take previously. Required. Requisites: This course covers advanced applications and custom programming to develop applications for mobile devices. Topics include device capabilities, OS specific Software Development Kits (SDK), scripting for functionality and designing interactivity. Upon completion, students should be able to demonstrate effective programming techniques to develop advanced mobile applications. WEB-260 3 **E-Commerce Infrastructure** 0 Take WEB-250(S24410) WEB-182(S24403); Take previously. Required. Requisites: 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 ecommerce Internet web site. 2 **WEB-287** Web E-Portfolio 2 0 Take WEB-210(S22061); Take previously. Required. Requisites: 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. **WEB-298A Seminar in Web Technology** 3 Requisites:

Upon completion, students should be able to critically analyze issues and establish informed opinions.

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions. This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues.

WELDING (WLD Prefix) WLD-110 **Cutting Processes** 1 3 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. 0 2 WLD-112 **Basic Welding Processes** 1 3 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 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 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 2 6 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-121 GMAW (MIG) FCAW/Plate** 2 6 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 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-121L **GMAW (MIG) FCAW/Plate** O 0 2 Take WLD-121C; Take either previously or concurrently. Required. 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,

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horizontal, and overhead positions.

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GMAW (MIG) Plate/Pipe WLD-122 1 6 0 3 Requisites: Take WLD-121(S13138); Take previously. Required. Take WLD-121(S13138) WLD-115(S10891); 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-115(S23304); 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** 6 0 3 Requisites: Take WLD-131(S10437); Take previously. Required. Take WLD-131(S10437) WLD-121(S13138); 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** 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 6 Requisites: Take WLD-115(S10891) WLD-141(S11462) WLD-110(S10913); 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-261 **Certification Practices** O 2 Requisites: Take WLD-115(S10891) WLD-121(S13138) WLD-131(S10437); Take previously. Required. This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for pregualified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes. WLD-262 **Inspection & Testing** 2 2 0 3 Requisites: Take WLD-116; 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.

CAMPUSES AND CENTERS

Courses are offered at Wake Technical Community College locations throughout Wake County.

SOUTHERN WAKE (MAIN) 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.

NORTHERN WAKE CAMPUS

6600 Louisburg Road (401N) Raleigh, North Carolina 27616 919-532-5502 http://northerncampus.waketech.edu

The 127-acre 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. 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 14 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 also houses Wake Tech's College & Career Readiness programs, designed to help adults improve math, reading, and writing skills. College & Career Readiness includes the High School Credential (GED® test) and Adult High School programs, as well as English as a Second Language (ESL) classes, and Adult Basic Education (ABE TOPS), a program for adults with intellectual disabilities. The facility is home to Wake Tech's Advanced Manufacturing Center, with customized training space for local businesses and individuals, and a non-degree Cosmetology program with a lab and salon.

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

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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.

CONTACT INFORMATION

		2000
SERVICE/LOCATION	WEB ADDRESS	PHONE
Southern Wake (Main) Campus 9101 Fayetteville Road (401S) Raleigh NC 27603	http://maincampus.waketech.edu	919-866-5000
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 Paramount Parkway Morrisville NC 27560	http://www.waketech.edu/about-wake- tech/locations/rtp-campus	919-866-5000
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	http://www.wcpss.net/northwakecca	919-694-8650
Wake Forest, NC 27587 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

SOUTHERN WAKE (MAIN) CAMPUS

SERVICE	SOUTHERN WAKE (MAIN) 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

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			

NORTHERN WAKE CAMPUS

SERVICE	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

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 Require	ed
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	HS2 Building, Room 102	919-747-0402				
Campus Police	HS2 Building, Room 135	919-866-5943 (Non-Emergency)				
Career and Employment Resources	HS2, Suite 347	919-866-6160				
Cashier's Office	HS2 Building., Room 131	919-747-0010				
College Bookstore	HS2 Building, Room 2, (ground level)	919-890-5520				
Disability Support Services	HS2 Building, Room 111	919-334-1510				
eLearning Testing Center	Health Science Building (HS), Room 428	919-747-0100				
Financial Aid	HS2 Building, Room 104	919-747-0047				
Individualized Learning Center (Reading, writing, math, and computer tutoring; Health Sciences Skills lab) Student I.D. required	ILC Building http://www.waketech.edu/student- services/individualized-learning-center	919-747-0233				
Library	Health Education Building (HEB), Room 123 http://www.waketech.edu/student-services/libraries	919-747-0002				
Photo ID	Allied Health Building (AHB), Rooms 303/304	919-747-5867				
Registration & Student Records	Student Services Center, HS2, Room 102 (Limited services)	919-747-0402				
SGA (Student Activities)	HS2 Building, Room 157	919-747-0092				
	OPEN COMPUTER AREAS *Student ID Required					
Open Computer Lab	ILC, Room 514 http://www.waketech.edu/student-services/computer-labs	919-747-0042				

CAMPUS LOCATIONS AND CONTACT INFORMATION

	WORKFORCE CONTINUING EDUCATION	
Registration	Allied Health Building (AHB), 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	1 st and 2 nd floor reception areas Suites 100 and 200	919-335-1000 919-335-1001
Business and Industry Center	Suite 200	919-335-1001

SERVICE	PUBLIC SAFETY EDUCATION CAMPUS	PHONE
CERTICE	TODEIO GALETT EDGGATION GAINI GG	THORE

CAMPUS LOCATIONS AND CONTACT INFORMATION

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

PUBLIC SAFETY EDUCATION CAMPUS (PSEC)

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.

2016-2017 Wake Tech Board of Trustees Members	
Thomas F. Looney, Chair	J. Anthony (Andy) Penry
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OFFICE OF THE EXECUTIVE VICE PRESIDE	
D. Gayle Greene, Ed.D	Executive Vice President
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PRESIDENT'S STAFF	
	Vice President of Financial and Business Services
Anthony Caison, M.B.A	Vice President, Workforce Continuing Education
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	Vice President, Information Technology Services

Samuel Strickland III, Ph.D. Snr. Vice President, Military and Veteran Program and Multi-Campus Support

Curriculum and Workforce Continuing Education Faculty (Last updated on 7-6-2017)

Addison, Trinika K., M.S.	
Albahrawy, Diane B., J.D.	Associate Professor, Business Administration
Albing, Virginia A., M.A.	Instructor, Adult Basic Education
Albright, Tammy, A.A.S., CMA (AAMA)	Associate Professor, Medical Assisting
Algood, Willeena J., M.Ed., R.N.	Professor, Nursing
Allen, Benjamin T., M.A.	Instructor, Philosophy
Allen, DeeDee A., Ph.D.	Associate Professor, Chemistry
Allen, John T., M.S.	Instructor, Criminal Justice
Allen, Kathryn M., Ph.D.	
Allen, Phyllis A., B.S.	Assistant Professor, Pre-Curriculum Mathematics
Alston, Estelle M., B.S., R.T. (R)(CT) ARRT	Instructor, Radiography Skills Laboratory
Aman, Natalie, M.A.	Instructional Program Coordinator
Anderton-Brown, Alecia, M.S.	Instructor, Networking Technology
	Associate Professor Criminal Justice
Annis, John G., M.P.A.	Associate Floressor, Criminal Justice
	Instructor, Automotive Systems Technology
Applebaum, Lee	Instructor, Automotive Systems TechnologyInstructional Program Specialist, Adult Basic Education
Applebaum, Lee	Instructor, Automotive Systems TechnologyInstructional Program Specialist, Adult Basic Education Instructor/Coordinator HEP
Applebaum, Lee Archambault, Michel B., M.S. Arias, Hugo, B.S.	Instructor, Automotive Systems TechnologyInstructional Program Specialist, Adult Basic EducationInstructor/Coordinator HEPInstructor, Philosophy
Applebaum, Lee Archambault, Michel B., M.S. Arias, Hugo, B.S. Arias, Sophia, M.A.	
Applebaum, Lee Archambault, Michel B., M.S. Arias, Hugo, B.S. Arias, Sophia, M.A. Arnette, Robyn M., M.A.	
Applebaum, Lee Archambault, Michel B., M.S. Arias, Hugo, B.S. Arias, Sophia, M.A. Arnette, Robyn M., M.A. Asfari, Amin, M.S.	
Applebaum, Lee Archambault, Michel B., M.S. Arias, Hugo, B.S. Arias, Sophia, M.A. Arnette, Robyn M., M.A. Asfari, Amin, M.S. Atkins, Margaret, J.D.	
Applebaum, Lee Archambault, Michel B., M.S. Arias, Hugo, B.S. Arias, Sophia, M.A. Arnette, Robyn M., M.A. Asfari, Amin, M.S. Atkins, Margaret, J.D. Atkinson, Kevin D., B.A.	Instructor, Automotive Systems Technology Instructional Program Specialist, Adult Basic Education Instructor/Coordinator HEP Instructor, Philosophy Instructor, Psychology Instructor, Criminal Justice Technology Instructor, Business Administration Assistant Professor, Pre-Curriculum Instructor, Office Administration
Applebaum, Lee Archambault, Michel B., M.S. Arias, Hugo, B.S. Arias, Sophia, M.A. Arnette, Robyn M., M.A. Asfari, Amin, M.S. Atkins, Margaret, J.D. Atkinson, Kevin D., B.A. Atkinson, Kimberly A., B.S.	Instructor, Automotive Systems Technology Instructional Program Specialist, Adult Basic Education Instructor/Coordinator HEP Instructor, Philosophy Instructor, Psychology Instructor, Criminal Justice Technology Instructor, Business Administration Assistant Professor, Pre-Curriculum Instructor, Office Administration Instructor, Mathematics and Sciences
Applebaum, Lee Archambault, Michel B., M.S. Arias, Hugo, B.S. Arias, Sophia, M.A. Arnette, Robyn M., M.A. Asfari, Amin, M.S. Atkins, Margaret, J.D. Atkinson, Kevin D., B.A. Atkinson, Kimberly A., B.S.	Instructor, Automotive Systems Technology Instructional Program Specialist, Adult Basic Education Instructor/Coordinator HEP Instructor, Philosophy Instructor, Psychology Instructor, Criminal Justice Technology Instructor, Business Administration Assistant Professor, Pre-Curriculum Instructor, Office Administration Instructor, Mathematics and Sciences Associate Professor, Early Childhood Education
Applebaum, Lee Archambault, Michel B., M.S. Arias, Hugo, B.S. Arias, Sophia, M.A. Arnette, Robyn M., M.A. Asfari, Amin, M.S. Atkins, Margaret, J.D. Atkinson, Kevin D., B.A. Atkinson, Kimberly A., B.S. Auman, Stacey, M.S. Austin, Gail R., M.S.	Instructor, Automotive Systems Technology Instructional Program Specialist, Adult Basic Education Instructor/Coordinator HEP Instructor, Philosophy Instructor, Psychology Instructor, Criminal Justice Technology Instructor, Business Administration Assistant Professor, Pre-Curriculum Instructor, Office Administration Instructor, Mathematics and Sciences Associate Professor, Early Childhood Education Instructor, Nursing

Ayers, Tina M., B.S.	Instructor, Radiography
Baggett, Vickie W., M.Ed., M.S., R.N.,	
Baggott, Kathleen L., B.A.	
Bagliani, William M., M.A	Instructor, History
Baker, Susan M., M.S.	
Bales, Philip, A.A.	Instructor, Culinary Technology
Ball, Donald H., Ph.D.	Professor, English
Ball, Eric A., M.S.	
Ballard, Robert L., A.A.S.	
Ballard, Susan E., B.A	Teaching Certificate Program Specialist, Languages and Lifelong Learning
Barbour, Angela W., A.A.S.	
Barrie, N. Ijatu, M.A.	
Barthelmess, Tara K., B.F.A	
Bartlett, Eugene R., Ph.D.	
Barton, Denise H., M.B.A.	
Beaman, Thomas E., M.A.	
Beech, Jacquelyn, M.S.	
Bell, Megan Nichols, M.A.	
Benitez, Juan A.	
Berry, Alden C., M.B.A.	Assistant Professor, Criminal Justice Technology
Berry, Heather L., M.A.	Assistant Professor, English as a Foreign Language
Berry, Matthew W., A.A.S.	
Berry, Rebecca L., M.A.	
Best, Mariah C., M.B.A.	
Betancourt, Kenneth M., A.A.	Instructor, Automotive Systems Technology
Bishop, Valerie, M.A	
Blackwell, Donald	
Blanchard, Brandi, M.S.	Instructor, Office Administration
Blatchford, Deanna C., M.S.	Instructor, Pre-Curriculum Mathematics

Bonner, Diane, PhD.	Instructor, Biopharmaceutical, Applied Engineering and Technologies
Boone, Sarah, M.F.A.	Instructor, English
Bouknight-Lyons, Cyntria, M.S.	Instructor, Computer Information Technology
Bowen, Jimmy M., M.S.	Instructional Program Specialist, Adult Secondary Education
Bowden, Nicholas, M.A.	Instructor, English
Bowers, Joshua M., M.A.	Associate Professor, Mathematics
Brackett, Holly F., M.G.I.S.T.	Instructor, Surveying Technology
Branch-Johnson, Saundra D., A.S.	
Breneman, Reed M., M.A.	Instructor, Pre-Curriculum Integrated Reading and Writing
Breivogel, Kimberly B., M.S., M.A.	
Broden, Jane A., B.A.	Associate Professor, Hospitality Management
Brousseau, Laurie E., A.A.S.	
Browder, Ela K., M.Ed.	Instructor, English
Brown, lan C., M.S.	
Brust, Jason K., M.	
Buchanan, Debra L., M.A.	Instructor, Communications, Arts, Humanities and Social Sciences
Buck, Jocelyn W., M.A.	Associate Professor, Health and Fitness
Budd, Benita A., M.A.	Professor, English
Burford, Brandon S., M.A.	
Burk, Cheryl A., M.Ed.	Associate Professor, Pre-Curriculum Integrated Reading and Writing
Burkart, Kirsten M., M.A.	Associate Professor, English
Burns, Charles L., M.S., M.B.A.	
Burton, Sloan M., B.A.	Instructor, Architectural Technology
Cade, Christine, Ph.D.	
Cahoon, Elizabeth R., M.S.	
Campbell, Ethel, CDA, RDH, M.S.	Instructor, Dental Hygiene & Dental Assisting
Campilongo, Xiomara, M.A.	
Campos Rosa, Suya, A.A.S.	Instructor, Hospitality Management
Carapelle, Beverly, M.A.	

Carawon, Robert E., M.A.	Instructor, Computer Information Technology
Card, David O., M.	Associate Professor, Architectural Technology
Carino, Gloria G., B.A.	Instructor/Coordinator, Math Center
Carreno-Zingaro, Carrie, Ph.D.	Instructor/Coordinator, Biology, Individualized Learning Center
Cash, Vanessa J., A.A.S., NCEMT-P	Associate Professor, Emergency Medical Science
Castellow, Elizabeth S., M.A.	Associate Professor, Spanish
Ceciliano, Lisa U., B.A.	Instructional Program Specialist, ESL
Chao, Frank G., Ph.D.	Associate Professor, Database Administration
Chapman, James J., J.D	Assistant Professor, Criminal Justice Technology
Cheatham, Tracy M., M.S	
Chen, Chen-Pi Peter, M.A.	Associate Professor, Database Administration
Chen, Cheng, M.Ed.	
Cheng, Ngee C., M.S.	Instructor, Electronics Engineering
Chew, Kristine, M.A.	Instructor, Anthropology
Chilton, Jimmie H., Ph.D.	Instructor, Physics
Christie, Mary E., M	Instructor, Biology
Chu, Theresa M., M.A.	
Church, Elizabeth M., M.A.	
Clark, Lesley, A.A.S., R.T. (R) (ARRT)	Assistant Professor, Radiography
Clayton, Jo Anne, M.S.	Associate Professor, Sociology
Clinton, Wendy, M.S.	Instructor, Mathematics
Clower, Dan F., B.F.A.	Instructor, Correction Education
Como, Tina M., B.S.	Instructor, Emergency Medical Science
Corbett, Benjamin L., M.A.	
Corbett, Donna, B.A.	Instructor, Correction Education
Corley, Bethany P., M.Ed.	Instructor, Mathematics
Cornell, Kimberley, M.A.	Instructor, Accounting, Public Services Technology
Covington, Kathryn M., B.A.	Instructor/Coordinator, Special Populations and HEP
Cowper, Edith D., M.A.	Instructional Program Specialist, ESL

Cox, George, M.A.	Instructor, Simulation and Game Development
Cox, Samantha P., M.B.A., CPA	
Creech, Janet C., B.S.	Assistant Professor, Health and Fitness
Crews, Brandon P., B.F.A.	
Cruz, Omayra., M.A.	
Cui, Hong, M.S.	. Associate Professor, Computer Programming/Database Administration
Cunningham, Maureen G., M.Ed.	Instructor, Pre-Curriculum Integrated Reading and Writing
Currie, Christopher J., Ph.D.	Instructor, Art
D'Agata, Nicolas, M.S.	
Daniel, Linda R., M.S.	
Daniels, John, M.A.	Instructor, Human Services Technology
Darvish, Ali, M.S.	Instructor, Computer Information Technology
Davis, Arthur P., M.A.	Instructor, Emergency Medical Science
Davis, Elizabeth R., Ph.D.	Instructor, Psychology
Davis, Howard, M.A.	
Davis, Joseph, M.S.	
Davy, Sheryl F., M.A.	Instructor, English as a Foreign Language
Dawes, Karen R., M.A.	
Dawson, Debra A., M.A.	Instructor, Early Childhood Education
DeAlba, Marlys A., M.L.A.	
Decain, Mark., M.B.A.	
Dees, Lori A., M.A	
Degen, Daniel, B.S.	Instructor/Recruiter/Retention Specialist, Education Technology
DeMarco, Leslie, A.A.S.	Instructor, Baking and Pastry
Dennis, Phillip S., Ph.D.	Instructor, English
Deyneka, Alexandra, M.A.	
Diamond, Ian R., B.S.	
Didonato, Cathleen C., M.Ed.	
Dimichelo, Danielle C., M.B.A.	

Dixit, Ajit S., Ph.D.	
Dixon, Cocoa T., M.S.	
Dockery, Tyler, M.A	Instructor, Advertising & Graphic Design
Dolganiuc, Viorica , M.A	
Donaldson, William C., M.S.	
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