COMPUTER TECHNOLOGIES

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

FIRST SEMESTER

CSC	120	Computing Fundamentals I	4
CSC	121	Python Programming	3
CTI	110	Web, Pgm, and DB Foundations	3
CTI	120	Network & Sec Foundations	3
___	___	MAT 121 or Higher	3
ACA	111	Student Success	1

SECOND SEMESTER

CSC	153	C # Programming	3
DBA	120	Database Programming I	3
WEB	115	Web Markup and Scripting	3
NOS	110	Operating System Concepts	3
ENG	111	Writing and Inquiry	3

FIRST SUMMER SEMESTER

___	___	Major Elective	3
CSC	253	Adv C# Programming	3

THIRD SEMESTER

COM	120	Introduction to Interpersonal Comm	3
CSC	174	Server-Side JavaScript	3
WEB	180	Active Server Pages	3
CSC	163	C# Applications Development	3
CSC	154	Software Development	3

FOURTH SEMESTER

CSC	226	.NET Programming	3
ECO	251	Prin of Microeconomics	3
CTS	115	Info Sys Business Concepts	3
___	___	HUM/Fine Arts Elective	3
___	___	Project Elective	3

Humanities and Fine Arts
(Select 1 Courses)

ART	111	Art Appreciation	3
HUM	115	Critical Thinking	3
MUS	110	Music Appreciation	3
PHI	240	Introduction to Ethincs	3

Major Electives I
Select 3 hours from the following courses

CSC	116	Introduction to Functional Programming	3
CSC	122	Python Applications	3
CSC	256	Software Quality Assurance	3
DBA	130	Introduction to NoSQL Databases	3
DBA	221	SQL Server DB Programming II	3
WEB	215	Advanced Web Markup and Scripting	3
WEB	187	Programming for Mobile Devices	3
CTS	285	Systems Analysis and Design	3

Project Electives
Select 3 hours from the following courses

CSC	227	Cloud Applications	3
CSC	289	Programming Capstone	3
*WBL	111	Work-Based Learning	1
*WBL	112	Work-Based Learning	2
*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