

# Computer Programming

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Associate in Applied Science

Contact: (336) 334-4822, ext. 50325

The Computer Programming curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. 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, computer operators, systems technicians, or database specialists.

## Program Outcomes:

Upon completion, students should be able to:

- Analyze the technical needs of end-users
- Analyze a problem using the Software Development Life Cycle
- Design a program to meet end-user specifications
- Code a program to meet end-user specifications
- Develop a program that integrates with a relational database
- Develop a program that incorporates Object-Oriented programming methodologies
- Develop a programming solution within a 3-tier architecture
- Identify inefficiencies in programming practices
- Select an appropriate programming language to most effectively meet project requirements
- Examine emerging technologies within the industry

Fall Semester I			Credits
CIS	110	Introduction to Computers	3
CIS	115	Intro to Prog & Logic	3
MAT	140	Survey of Mathematics	3
NOS	110	Operating System Concepts	3
ENG	111	Expository Writing	3
<b>Total</b>			<b>15</b>

Spring Semester I			Credits
CSC	139	Visual BASIC Prog	3
CTS	115	Info Sys Bus Concepts	3
NET	110	Networking Concepts	3
COM	120	Intro to Interpersonal Communication	3
—	—	Social/Behavior Science Elective <sup>3</sup>	3
<b>Total</b>			<b>15</b>

## Summer Semester I

DBA	110	Database Concepts	3
SEC	110	Security Concepts	3
<b>Total</b>			<b>6</b>

## Fall Semester II

CSC	239	Adv Visual BASIC Prog	3
CSC	151	JAVA Programming	3
CTS	285	Systems Analysis & Design	3
NOS	120	Linux/UNIX Single User	3
—	—	Computer Programming Technical Elective <sup>1</sup>	3
<b>Total</b>			<b>15</b>

## Spring Semester II

CSC	289	Programming Capstone Project	3
DBA	120	Database Programming I	3
CSC	251	Adv JAVA Programming	3
—	—	Computer Programming Technical Elective <sup>1</sup>	3
—	—	Computer Programming Technical Elective <sup>1</sup>	3
—	—	Humanities/Fine Arts Elective <sup>2</sup>	3
<b>Total</b>			<b>18</b>

**Total credit hours required for degree: 69**

### <sup>1</sup>Computer Programming Technical Electives

Choose 9 credits from:

CSC 134	WEB 110
CSC 153	WEB 125
CSC 234	WEB 151
CSC 253	WEB 141
CSC 258	WEB 180
DBA 115	NOS 130

### <sup>2</sup>Humanities/Fine Arts Electives

ART 114	MUS 110
ART 115	PHI 215
DRA 111	REL 110
HUM 115	PHI 240

### <sup>3</sup>Social/Behavioral Science Electives

ECO 251	HIS 122
ECO 252	POL 120
HIS 111	PSY 150
HIS 112	SOC 210
HIS 121	

*Gateway Courses: CIS 115 and CSC 139. A minimum grade of C required in both.*