

Computer Information Systems

Computer Programming



Business • Management • Marketing • Technology

Career Pathways

The associate of applied science degree in computer programming is designed to train students as programmers. Students completing this program of study should be able to write and update programs in a variety of languages.

Job opportunities include:

- Entry-level programming positions in C + +, Java and Visual Basic
- Entry-level Systems Analysis

Take CIS 255 and CIS 274 from the list of additional required CIS courses to earn the database application development certificate in addition to the AAS in computer programming.

Take CIS 179 and CIS 274 from the list of additional required CIS courses to earn the Web development certificate in addition to the AAS in computer programming.

Credits

Required General Education Courses	19
ENGL 151 (English Composition I) or ENGL 101 (Written & Oral Communication).....	3
ENGL 152 (English Composition II) or ENGL 102 (Business Writing)	3
¹ MATH.....	3
POLSC 151 (Introduction to Political Science).....	3
² Science Elective.....	4
† CIS 130 (Introduction to Computer Information Systems).....	3

Required Courses 37-39

1st Semester

† ADMN 102 (Keyboarding)	1
† CIS 132 (Introduction to Computer Programming).....	2
CIS 112 (Database Software).....	3
CIS 177 (Markup Languages)	3

2nd Semester

CIS 150 (Computer Science I)	3
CIS 152 (Visual Basic Programming)	3
BUSAD 151 (Introduction to Business).....	4

3rd Semester

CIS 205 (Systems Analysis & Design).....	3
CIS 175 (Java Programming).....	3
CIS 155 (Database Management Systems).....	3
CIS 272 (Database Web Development).....	3

Additional Required CIS Courses

(Choose 2 of the following)

CIS 179 (Web Script Programming)	3
CIS 250 (Computer Science II)	3
CIS 252 (Advanced Visual Basic Programming).....	4
CIS 255 (Microsoft SQL)	4
CIS 266 (Windows Programming in C + +)	3
CIS 267 (Beginning Game Programming).....	3
CIS 268 (Assembly Language and Computer Architecture)	4
CIS 274 (Advanced Database Web Development (with ASP.NET)	3
CIS 275 (Advanced Java Programming)	3

General Elective Courses (As required to complete 60 hours)

Total Degree Requirements 60

Certificate Programs: Database Application Development

This certificate program focuses on database systems and database development concepts.

Required Courses

† ADMN 102 (Keyboarding)	1
CIS 112 (Database Software).....	3
† CIS 130 (Introduction to Computer Information Systems).....	3
† CIS 132 (Introduction to Computer Programming)	2
CIS 150 (Computer Science I)	3
CIS 152 (Visual Basic Programming)	3
CIS 155 (Database Management Systems)	3
CIS 177 (Markup Languages)	3
CIS 255 (Microsoft SQL).....	4
CIS 272 (Database Web Development)	3
CIS 274 (Advanced Database Web Development (with ASP.NET).....	3

Total Certificate Requirements 31

Application Development

This certificate program focuses on computer programming and systems analyst skills.

Required Courses

† ADMN 102 (Keyboarding)	1
CIS 112 (Database Software)	3
† CIS 130 (Introduction to Computer Information Systems)	3
† CIS 132 (Introduction to Computer Programming)	2
CIS 150 (Computer Science I)	3
CIS 152 (Visual Basic Programming)	3
CIS 205 (Systems Analysis and Design)	3
<i>(Choose any 2 of the following)</i>	
CIS 175 (Java Programming)	3
CIS 250 (Computer Science II)	3
CIS 252 (Advanced Visual Basic Programming)	4
CIS 266 (Windows Programming in C++)	3
CIS 267 (Beginning Game Programming)	3
CIS 268 (Assembly Language and Computer Architecture)	4
CIS 275 (Advanced Java Programming)	3

Total Certificate Requirements 24

- † Tech Prep course. See page 14.
- ¹† BSMTM 101 (Business Mathematics), †MATH 121 (Technical Mathematics), MATH 150 or higher. It is suggested that math be taken in the first semester.
- ² See the science alternatives listed on page 38.
Students interested in pursuing a baccalaureate degree should see the notes on the computer science program.