

CIS COMPUTER PROGRAMMING - CERTIFICATE OF ACHIEVEMENT LEVEL 2

CIS 084	Java Programming	3
Total Units		18

The department of Computer Information Systems (CIS) offers degrees and certificates in three major areas: Computer Programming, Network Administration and Web Developer. See the respective major sheets for additional information about the specific certificates and degrees. A grade of "C" or better is required in all certificate, major and major elective courses.

The CIS Computer Programming Certificate and Degree Programs are designed to provide students with skills in computer programming to enable graduates to gain employment as an entry-level programmer. Courses will emphasize skills on how to organize a computer program, and how to program in several different languages such as Java and C++. An Associate in Science Degree and two levels of certificates are offered.

Program Learning Outcomes

- Recognize the components that constitute a computer information system. Identify various hardware, software, data, computer number systems, and procedures.
- Demonstrate understanding of the impact and application of computers in business, government, and social organizations. Students solve common business problems with computer applications and the internet.
- Receive and process written and oral technology related information. Students Interpret technology communication concepts including wired and wireless networks, servers and clients, users interfaces, operating systems, applications, utilities, and programming languages.
- Recognize the influence of the Internet on business and terms relating to the World Wide Web. Students perform the fundamental functions that operating systems and applications software provides. Students demonstrate skills in word processing, spreadsheets, presentation graphics, and use of Internet. Students will recognize a programming language and demonstrate steps involved in developing an application.
- Demonstrate the ability to work and interact effectively in teams consisting of individuals with differing interests, gender, global backgrounds and professions.
- Student demonstrates ability to exercise professional, ethical responsibility in the use of technology in society.

Certificate Requirements

Course	Title	Credits
CIS 041	Introduction to Computer Information Systems	3
CIS 054	C/C++ Programming	3
CIS 055	Data Structures: Programming	3
CIS 059	Object Oriented Design and Programming	3
CIS 073	Visual Basic Programming	3