

CIS UNIX NETWORKS - ASSOCIATE IN SCIENCE

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 Network Administration certificate and degree programs are designed to provide students with the necessary skills to gain employment as a network administrator. Most business computers are being connected in networks. The industry needs skilled people to configure, troubleshoot, and maintain these networks. The Network Administration Program is designed to train students to fill these needs. Five certificates and three Associate in Science Degrees specializing in MCSA, MCCA, CCNA, General Networking, and UNIX Networks 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.
- Demonstrates ability to exercise professional, ethical responsibility in the use of technology in society.

A.S. Degree Requirements

| Code | Title | Units |
|--|---|-------|
| Complete the following: | | |
| CIS 014A | Internet Principles and Protocols | 3 |
| CIS 062A | Introduction to PC Hardware and Diagnostics | 2 |
| CIS 157 | Introduction to Unix/Linux | 3 |
| CIS 158 | Linux System Administration | 3 |
| Non-duplicated units from approved major electives | | 24 |
| General Education Requirements | | 24 |

| | |
|-------------------|----|
| Physical Activity | 1 |
| Total Units | 60 |

Approved Major Electives

| Code | Title | Units |
|--|---|-------|
| (CIS classes not used in the sequence above) | | |
| CIS 014A | Internet Principles and Protocols | 3 |
| CIS 017A | Windows | 3 |
| CIS 017B | Windows Server | 3 |
| CIS 017C | Microsoft Windows Server Active Directory | 3 |
| CIS 017D | Microsoft Windows Server Network Infrastructure | 3 |
| CIS 018A | CCNA R&S: Introduction to Networks | 3 |
| CIS 018B | CCNA R&S: Routing and Switching Essentials | 3 |
| CIS 018C | CCNA R&S: Scaling Networks | 3 |
| CIS 018D | CCNA R&S: Connecting Networks | 3 |
| CIS 020 | XML Fundamentals | 3 |
| CIS 020A | Advanced XML | 3 |
| CIS 022 | Database Technology | 3 |
| CIS 023 | JavaScript Programming | 3 |
| CIS 023A | Advanced Javascript | 3 |
| CIS 024A | Perl Programming | 3 |
| CIS 024B | PHP Programming | 3 |
| CIS 024C | Python Programming | 3 |
| CIS 036 | Web 2.0 Programming | 3 |
| CIS 041 | Introduction to Computer Information Systems | 3 |
| CIS 047 | Apache, PHP, MySQL | 3 |
| CIS 054 | C/C++ Programming | 3 |
| CIS 055 | Data Structures | 3 |
| CIS 059 | Object Oriented Design and Programming | 3 |
| CIS 060 | Systems Analysis and Design | 3 |
| CIS 062A | Introduction to PC Hardware and Diagnostics | 2 |
| CIS 062B | A+ PC Hardware Technology | 2 |
| CIS 062C | A+ Core PC Operating Systems Technology | 2 |
| CIS 068 | Administering Microsoft SQL Server | 3 |
| CIS 073 | Visual Basic Programming | 3 |
| CIS 084 | Java Programming | 3 |
| CIS 098 | Directed Study in Computer Information Systems | 0.5-9 |
| CIS 157 | Introduction to Unix/Linux | 3 |
| CIS 158 | Linux System Administration | 3 |