## COMPUTER INFORMATION SYSTEMS: MCSE - CERTIFICATE OF ACHIEVEMENT LEVEL 2

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, MCSA, CCNA, General Networking, and UNIX Networks are offered.

Upon successful completion of this program, students will be able to:

- 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.

## **Certificate Requirements**

Course	Title	Credits
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

Complete one of the following courses:

CIS 068	Administering Microsoft SQL Server (Complete one of the following courses:)	3	
Complete an additional 6 units from the following courses:			
CIS 014A	Internet Principles and Protocols	3	
CIS 041	Introduction to Computer Information Systems	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 073	Visual Basic Programming	3	
Total Units		21	