CIS UNIX NETWORKS - CERTIFICATE OF ACHIEVEMENT LEVEL 1

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

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.

Certificate Requirements

Course	Title	Credits
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		3
Total Units		**14**

Approved Major Electives

Course	Title	Credits
(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	CCNAv7: Introduction to Networks	3
CIS 018B	CCNAv7: Switching, Routing, and Wireless Essentials	3
CIS 018C	CCNAv7: Enterprise Networking, Security And Automation (ENSA)	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 Programming	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	Introduction to Web Development	3
CIS 054	C/C++ Programming	3
CIS 055	Data Structures: Programming	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