

CAREER PROGRAMS

Computer Information Systems

Advanced LAN Management Certificate

This 32 credit-hour certificate program is designed to prepare a student to find employment in a network administration area or similar areas in a business.

Required:

CIS 101	Introduction to Computer Information Systems.....	3
CIS 134	Command Line Scripting	3
CIS 147	Windows.....	2
CIS 162	PC Operating System (3) and	
CIS 163	Network Operating System (3) and	
CIS 260	Network Infrastructure Administration (3) and	
CIS 261	Directory Services Administration (3) or	
CIS 165	Linux Fundamentals (3) and	
CIS 275	Linux System Administration (3) and	
CIS 276	Linux Networking and Security Administration (3) and	
CIS 277	Linux Shell Scripting and Server Services (3).....	12

Electives: Group I (Select six credit hours¹):

CIS 106	Computer Logic and Programming Technology	3
CIS 137	Computer Internship I	3
CIS 146	Operating System–OS/2	3
CIS 149	Personal Computer UNIX.....	3
CIS 171	Introduction to Local Area Networks.....	3
CIS 203	Systems Analysis and Design I	3
CIS 204	Advanced Systems Analysis and Design II.....	3
CIS 259	Network Troubleshooting	3
CIS 262	Designing a Network Infrastructure	3
CIS 263	Designing for Network Security.....	3
CIS 264	Implementing Directory Services	3
CIS 265	Exchange Server Administration	3

Electives: Group II (Select six credit hours¹):

CIS 102	NetPrep™ Networking Fundamentals.....	3
CIS 107	NetPrep™ Local Area Networks	3
CIS 155	NetPrep™ TCP/IP.....	3
CIS 157	NetPrep™ Internetworking Devices and Concepts	3
CIS 159	NetPrep™ Network Analysis Design	3

¹ Students must satisfy prerequisite for each course selected.

LAN Management Certificate

This 20 credit-hour certificate program is designed to familiarize a student with LAN management. The student will gain exposure to microcomputers— hardware, software and networks. This will be useful to the person who would like to help in network administration areas in a business or to help install hardware and software.

CIS	101	Introduction to Computer Information Systems.....	3
CIS	102	NetPrep™ Networking Fundamentals.....	3
CIS	107	NetPrep™ Local Area Networks.....	3
CIS	134	Command Line Scripting.....	3
CIS	144	Advanced PC Operating Systems.....	3
CIS	145	PC Hardware.....	3
CIS	147	Windows.....	2

Microcomputers in Business Certificate

This is a 16 credit-hour certificate program designed to familiarize a student with the business uses of microcomputers. The student will gain exposure to microcomputers and microcomputer software. This exposure will be useful to the person whose job or business requires the use of a microcomputer.

Required:

CIS	100	Computer Literacy or	
CIS	101	Introduction to Computer Information Systems.....	3
CIS	120	Introduction to Business Software Packages (3) or	
CIS	122	Data Base for Micros (1) and	
CIS	123	Spreadsheet/Budget for Micros (1) and	
CIS	125	Word Processing for Micros (1).....	3
CIS	126	Graphics for Micros.....	1
CIS	134	Command Line Scripting.....	3

Electives: Select six credit hours from the following:¹

CAS	110	Core Microsoft Office Specialist Certification: Word.....	1
CAS	120	Core Microsoft Office Specialist Certification: Excel.....	1
CAS	130	Core Microsoft Office Specialist Certification: Access.....	1
CAS	140	Core Microsoft Office Specialist Certification: PowerPoint.....	1
CAS	150	Core Microsoft Office Specialist Certification: Outlook.....	1
CAS	210	Expert Microsoft Office Specialist Certification: Word.....	1
CAS	220	Expert Microsoft Office Specialist Certification: Excel.....	1
CIS	104	Multimedia Presentations.....	2
CIS	105	Introduction to Multimedia.....	3
CIS	106	Computer Logic and Programming Technology.....	3
CIS	117	Introduction to Windows.....	1
CIS	118	Introduction to the Internet.....	1
CIS	119	Web Site Development I.....	3
CIS	121	General Accounting Application for Micros.....	2
CIS	124	Advanced Spreadsheet for Micros.....	1
CIS	127	Advanced Business Graphics.....	1
CIS	129	Personal Information Management.....	1
CIS	130	Visual Basic Programming I.....	4
CIS	132	Advanced Business Software Packages.....	4

CIS	133	Personal Computer Programming— Assembler Language	4
CIS	141	Advanced Data Base for Micros	1
CIS	144	Advanced PC Operating Systems.....	3
CIS	145	PC Hardware	3
CIS	146	Operating System-OS/2.....	3
CIS	147	Windows.....	2
CIS	148	Personal Computer Utilities.....	2
CIS	152	Data Base Programming Microcomputers	3
CIS	153	Expert Systems.....	3
CIS	154	Desktop Publishing	3
CIS	166	C++ Programming I	4
CIS	168	Java Programming I.....	4
CIS	170	Introduction to Data Communications.....	3
CIS	171	Introduction to Local Area Networks.....	3
CIS	176	C++ Programming II	4
CIS	186	C Programming for Graphical User Interfaces	4
CIS	196	Advanced C Programming for Graphical User Interfaces.....	4
CIS	203	Systems Analysis and Design I	3
CIS	204	Systems Analysis and Design II.....	3
CIS	205	Multimedia Development.....	3
CIS	223	Spreadsheet Graphics	1
CIS	224	Spreadsheet Macros and Other Advanced Topics	1
CIS	231	Visual Basic Programming II.....	4
CIS	266	C++ Programming III.....	4

¹ Students must satisfy prerequisite for each course selected.

Microcomputer Support Specialist Certificate

This 30 credit-hour certificate program is designed to prepare students for employment as HELP Desk personnel or other computer support positions.

Required:

CIS	101	Introduction to Computer Information Systems.....	3
CIS	102	NetPrep™ Networking Fundamentals.....	3
CIS	107	NetPrep™ Local Area Networks	3
CIS	119	Web Site Development I	3
CIS	120	Introduction to Business Software Packages (3) or	
CIS	122	Data Base for Micros (1) and	
CIS	123	Spreadsheet/Budgeting for Micros (1) and	
CIS	125	Word Processing for Micros (1).....	3
CIS	126	Graphics for Micros	1
CIS	134	Command Line Scripting	3
CIS	147	Windows.....	2
ENG	130	Business Writing (3) or	
OFC	105	Administrative Human Relations (1) and	
OFC	247	Professional Development (2).....	3
MGT	111	Introduction to Business Organization.....	3

Electives: Select three credit hours from the following courses¹:

CIS	105	Introduction to Multimedia.....	3
CIS	118	Introduction to the Internet.....	1
CIS	124	Advanced Spreadsheet for Micros	1
CIS	141	Advanced Data Base for Micros	1
CIS	154	Desktop Publishing	3
CIS	170	Introduction to Data Communications.....	3
CIS	224	Spreadsheet Macros and Other Advanced Topics	1

¹ Students must satisfy prerequisite for each course selected.

NetPrep™ Senior Network Specialist Certificate

This 12 credit-hour certificate program is designed to provide the student with in-depth, vendor-neutral, platform-independent training to become a network specialist/technician. This certificate provides students with basic knowledge for entry-level network designer and technician positions.

Required: Select 12 credit hours from either NetPrep™ or Cisco course sequence.

CIS	156	NetPrep™-The Internet.....	3
CIS	157	NetPrep™ Internetworking Devices and Concepts	3
CIS	158	NetPrep™ Protocol Analysis	3
CIS	159	NetPrep™ Network Analysis and Design	3

Network Specialist Certificate

This is a 12 credit-hour certificate program designed to familiarize a student with the basic components of network computing. The certificate provides an introduction to the computer network career area. The student will be ready to embark on further network training or be qualified for an entry-level job as an associate network specialist/technician.

Required:

CIS	102	NetPrep™ Networking Fundamentals (3) and	
CIS	107	NetPrep™ Local Area Networks (3) and	
CIS	115	NetPrep™ Wide Area Networks (3) and	
CIS	155	NetPrep™ TCP/IP.....	12

or

CIS	173	Cisco Networking Basics (3) and	
CIS	174	Cisco Routers and Routing Basics (3) and	
CIS	175	Cisco Switching Basics and Intermediate Routing (3) and	
CIS	177	Cisco WAN Technologies (3).....	12

Programming Certificate

This is an 18 credit-hour certificate program to familiarize a student with the business use of programming on the microcomputer. The student will gain experience using a choice of three programming languages, C++, Visual Basic, or Java. This exposure will be useful to a person whose job or business requires the use of these programming languages in a business environment. The student will be prepared for an entry-level programming position.

Required:

CIS	101	Introduction to Computer Information Systems.....	3
CIS	106	Computer Logic and Programming Technology	3

Electives: Choose a language and complete all three courses in that sequence (12 credit hours):

CIS	166	C++ Programming I (4) and	
CIS	176	C++ Programming II (4) and	
CIS	266	C++ Programming III (4).....	12

or

CIS	130	Visual Basic Programming I (4) and	
CIS	231	Visual Basic Programming II (4) and	
CIS	280	Visual Basic Programming III (4).....	12

or

CIS	168	Java Programming I (4) and	
CIS	178	Java Programming II (4) and	
CIS	278	Java Programming III (4)	12

Technical Certificate

Any combination of 15 credit hours may be selected from the courses listed below, providing the appropriate prerequisites have been satisfied.

CAS	110	Core Microsoft Office Specialist Certification: Word.....	1
CAS	120	Core Microsoft Office Specialist Certification: Excel.....	1
CAS	130	Core Microsoft Office Specialist Certification: Access.....	1
CAS	140	Core Microsoft Office Specialist Certification: PowerPoint	1
CAS	150	Core Microsoft Office Specialist Certification: Outlook.....	1
CAS	210	Expert Microsoft Office Specialist Certification: Word	1
CAS	220	Expert Microsoft Office Specialist Certification: Excel	1
CIS	101	Introduction to Computer Information Systems.....	3
CIS	104	Multimedia Presentations	2
CIS	105	Introduction to Multimedia.....	3
CIS	106	Computer Logic and Programming Technology	3
CIS	120	Introduction to Business Software Packages ¹	3
CIS	121	General Accounting Applications for Micros ¹	2
CIS	122	Data Base for Micros ¹	1
CIS	123	Spreadsheet/Budgeting for Micros ¹	1
CIS	124	Decision Support for Micros ¹	1

CIS	125	Word Processing for Micros ¹	1
CIS	126	Graphics for Micros ¹	1
CIS	127	Advanced Business Graphics ¹	1
CIS	128	Command Line Basics ¹	1
CIS	129	Personal Information Management ¹	1
CIS	130	Visual Basic Programming I	4
CIS	132	Advanced Business Software Packages	4
CIS	133	Personal Computer Programming— Assembler Language	4
CIS	134	Command Line Scripting	3
CIS	152	Data Base Programming, Microcomputers	3
CIS	153	Expert Systems.....	3
CIS	154	Desktop Publishing	3
CIS	166	C++ Programming I	4
CIS	168	Java Programming I.....	4
CIS	170	Introduction to Data Communication.....	3
CIS	171	Introduction to Local Area Networks	3
CIS	176	C++ Programming II	4
CIS	186	C Programming for Graphical User Interfaces	4
CIS	196	Advanced C Programming for Graphical User Interfaces	4
CIS	202	Programming Systems.....	3
CIS	203	Systems Analysis and Design I	3
CIS	204	Systems Analysis and Design II.....	3
CIS	220	Topics in Data Processing.....	1-6
CIS	223	Spreadsheet Graphics	1
CIS	224	Spreadsheet Macros and Other Advanced Topics	1
CIS	231	Visual Basic Programming II.....	4
CIS	266	C++ Programming III.....	4
CIS	280	Visual Programming III	4

¹ No more than four hours may be selected from this group.

Web Development Certificate

This 21 credit-hour certificate program provides a background in Web development with emphasis on scripting and programming techniques. Individuals seeking entry-level positions in the field of Web page development and maintenance will find these skills helpful. This program will also be useful to individuals whose job scope has expanded to include Web site responsibilities.

Required:

CIS	101	Introduction to Computer Information Systems.....	3
CIS	106	Programming Logic and Technology	3
CIS	119	Web Site Development I	3
CIS	138	Web Site Development II.....	3
CIS	219	Web Site Management	3

Electives: Select six credit hours from the following courses:

CIS	118	Introduction to the Internet.....	1
CIS	122	Data Base for Micros	1
CIS	147	Windows.....	2
CIS	161	Introduction to Perl Programming	3
CIS	189	Extensible Markup Languages	3
CIS	218	E-Commerce Development.....	3
CIS	239	Web Site Development III.....	3

Web Visual Design Certificate

This 21 credit-hour certificate program provides a background in Web development with emphasis on graphic and visual elements. Individuals seeking entry-level positions in the field of Web page development and maintenance will find these skills helpful. This program will also be helpful to individuals whose job scope has expanded to include Web site responsibilities.

Required:

CIS	101	Introduction to Computer Information Systems.....	3
CIS	109	Web Graphics.....	3
CIS	119	Web Development I	3
CIS	138	Web Development II.....	3
CIS	139	Web Authoring Tools.....	3
CIS	219	Web Site Management	3

Electives: Select three credit hours from the following courses:

ART	121	Design I	3
CIS	105	Introduction to Multimedia.....	3
CIS	118	Introduction to the Internet.....	1
CIS	122	Data Base for Micros	1
CIS	126	Graphics for Micros	1
CIS	147	Windows.....	2
CIS	205	Multimedia Development.....	3
JNM	230	Graphic Design Communication	3