COMPUTER AND INFORMATION SCIENCES: NETWORK/SYSTEMS ADMINISTRATION (A.S.)

ASSOCIATE OF SCIENCE

The network/systems administration program at Cerritos College is designed to prepare students for a career in the information industry. Graduates of the program will have a comprehensive understanding of the current communication technologies and commonly used operating systems, will be equipped with the knowledge and skills needed to design and implement a network infrastructure, and will be able to deploy and administer multiple systems in an organization. The graduates of the program have possible career opportunities including the following occupations: entry-level technical support technician, system administrator, network technician, network administrator, and network engineer.

Program Student Learning Outcomes

- Students configure and utilize servers based on Windows and Unix operating systems.
- Students differentiate between wide, metropolitan, and local area networks.
- Students identify the essential requirement for supporting an Apple Macintosh.
- Students recognize the use of TCP/IP in internet communications.
- Students set up and configure routers.

Program Requirements

Code Number	Course Title	Units
Required Courses		
CIS 170A	Networking Fundamentals	3.5
CIS 170B	Network + Certification	3.5
CIS 170E	Router Configurations and Protocol	3.5
CIS 170F	Advanced Switching and Routing	3.5
CIS 213F	Microsoft Windows Server Administration	3.5
CIS 214	Unix and Linux Operating Systems	3.5
CIS 170H	TCP/IP Fundamentals	3.0
CIS 200A	Apple Mac OS Support Essentials	3.5
Electives		
Select at least 14 units from the following:		14.0
CIS 58A	PC Operating System A+ Certification	
CIS 58B	PC Core Hardware A+ Certification	
CIS 101	Introduction to Computer Information Systems	
CIS 102	Introduction To Microcomputer Hardware and Applications Software	
CIS 103	Computer Programming Logic	
CIS 162	HTML and CSS	
CIS 164	JavaScript Programming	
CIS 170G	Wide Area Networks	
CIS 170I	Cisco Network Security	
CIS 170K	Introduction to Wireless Networking	
CIS 170L	Cybersecurity Fundamentals	
CIS 170P	Introduction to Ethical Hacking	
CIS 170R	Computer and Digital Forensics	
CIS 170S	Network Defense	
CIS 171A	Introduction to Cloud Computing	
CIS 171B	Amazon Web Services-Data Storage	
CIS 171C	Amazon Web Services-Computing Services	
CIS 171D	Amazon Web Services-Security	
CIS 183	Java Programming	
CIS 212	Introduction to Microsoft Windows Administration	
Total Units		**41.5**

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS

Meet the requirements of a certificate of achievement in computer and information sciences network systems/administration and complete general education requirements and electives to achieve a minimum of 60 units.