COMPUTER INFORMATION SYSTEMS – SYSTEM AND NETWORK ADMINISTRATION – ASSOCIATE IN SCIENCE DEGREE, CERTIFICATE OF ACHIEVEMENT

Top Code:

0708.20
This system and network administration program prepares students with necessary skills to seek entry-level employment in the field of Information Technology to administer an enterprise network infrastructure and/or a network operating system infrastructure. Instruction includes training in installing, configuring, maintaining, and troubleshooting network devices and end devices with an emphasis on Cisco enterprise network infrastructure administration. Upon completion of coursework, students will have the foundation needed to pursue industry certifications including but not limited to CompTIA Network+, CompTIA Security+, Cisco CCNA CyberOps, and Microsoft MCSA Windows Server or CompTIA Linux+/LPI Linux Administrator.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

Program Outcomes

- Explain the key components of basic enterprise system and network administration.
- Administer a Cisco enterprise network infrastructure for an organization of any size.
- Administer a network operating system infrastructure for an organization of any size.

Requirements for the Certificate of Achievement

Code	Title	Units
Required Courses		
CIS 040 or CIS 045	UNIX/LINUX ADMINISTRATION MCP. MICROSOFT WINDOWS SYSTEM ADMINISTRATION	3-4
CIS 041	CCNA: INTRODUCTION TO NETWORKS	3
CIS 042	CCNA: ROUTING, SWITCHING, AND WIRELESS ESSENTIALS	3
CIS 061	INTRODUCTION TO INFORMATION SYSTEMS SECURITY	3
CIS 164	CCNA: ENTERPRISE NETWORKING, SECURITY, AND AUTOMATION	3
Required Electives		

Code	Title	Units
Select one of the following:		3-4
CIS 011	INFORMATION AND COMMUNICATION TECHNOLOGY ESSENTIALS	
CIS 012	INTRODUCTION TO PROGRAMMING USING PYTHON	
CIS 031	INTRODUCTION TO DATABASE MANAGEMENT SYSTEMS	
CIS 040	UNIX/LINUX ADMINISTRATION	
CIS 045	MCP. MICROSOFT WINDOWS SYSTEM ADMINISTRATION	
CIS 063	INTRODUCTION TO CYBERSECURITY: ETHICAL HACKING	
CIS 065	DIGITAL FORENSICS FUNDAMENTALS	
CIS 146	MCSA: MICROSOFT WINDOWS SYSTEM ADMINISTRATION 2	
CIS 151	VCP-DCV: VMWARE VSPHERE ADMINISTRATION	
CIS 170	CISCO IP TELEPHONY ADMINISTRATION	
Total Units		**18-20**

Visit the Program Mapper (https://pasadena-city.programmapper.ws/academics/interest-clusters/35afad1b-8598-4ecf-a320-0ed4834a7df8/programs/8e4b3611-d011-f9b6-088d-040478eb2a0b/) for a suggested sequence of courses.

General Education Requirements for the Associate in Science Degree

- General Information (https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/)
- PCC Local Gen Ed (https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#pcclocaltext)
- CSU Breadth (https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#csubreadthtext)
- IGETC (https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/#igetctext)