

# COMPUTER INFORMATION SYSTEMS – HELP DESK/ USER SUPPORT – ASSOCIATE IN SCIENCE DEGREE, CERTIFICATE OF ACHIEVEMENT

Top Code:

0708.20

This help desk / user support program prepares students with necessary skills to seek employment in help desk / user support in the field of Information Technology. Instruction includes training in computer hardware, software, Microsoft Windows server operating systems and Microsoft Windows client operating systems in a networked environment with an emphasis on Local Area Networks (LANs) and network security. Upon completion of coursework, students will have the foundation needed to pursue industry certifications including and not limited to CompTIA A+, CompTIA Server+, CompTIA Network+, CompTIA Security+, Cisco CCT Routing & Switching, Cisco Certified CyberOps Associate, and Microsoft Windows System Administration.

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

## Program Outcomes

- Explain the key concepts of help desk / user support in a variety of working environments and networking technologies and techniques.
- Install, configure, maintain, and troubleshoot hardware and software for a computer in a networked environment.
- Implement and support basic enterprise network technologies.
- Implement and support basic enterprise server technologies.
- Implement and support basic enterprise network security technologies.

## Requirements for the Certificate of Achievement

Code	Title	Units
<b>Required Courses</b>		
CIS 011	INFORMATION AND COMMUNICATION TECHNOLOGY ESSENTIALS	4
CIS 041	CCNA: INTRODUCTION TO NETWORKS	3
CIS 042	CCNA: ROUTING, SWITCHING, AND WIRELESS ESSENTIALS	3
CIS 045	MCP: MICROSOFT WINDOWS SYSTEM ADMINISTRATION	4
CIS 061	INTRODUCTION TO INFORMATION SYSTEMS SECURITY	3

### Required Electives

Select one of the following:		3
CIS 012	INTRODUCTION TO PROGRAMMING USING PYTHON	
CIS 031	INTRODUCTION TO DATABASE MANAGEMENT SYSTEMS	
CIS 040	UNIX/LINUX ADMINISTRATION	
CIS 063	INTRODUCTION TO CYBERSECURITY: ETHICAL HACKING	
CIS 065	DIGITAL FORENSICS FUNDAMENTALS	
CIS 151	VCP-DCV: VMWARE VSPHERE ADMINISTRATION	
CIS 164	CCNA: ENTERPRISE NETWORKING, SECURITY, AND AUTOMATION	

**Total Units** 20

Visit the Program Mapper (<https://pasadena-city.programmapper.ws/academics/interest-clusters/35afad1b-8598-4ecf-a320-0ed4834a7df8/programs/8d399732-27a3-68d4-d9f2-2486bffa3cd/>) 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>)