

## COMPUTER INFORMATION SYSTEMS (CIS)

### About the program

The Computer Information Systems (CIS) Networking program is a certified Cisco Networking Academy and provides training in local area network (LAN) and wide area network (WAN) installation, and management. Students also learn skills in computer programming, PC maintenance and repair, and network security from CompTIA Security + certified instructors.

### Degrees/Certificates within this Program:

- Associate of Science Degree, CIS Networking
- Certificate of Achievement, CIS Networking
- Certificate of Recognition, Network Technician

### Similar Degrees/Certificates offered at CR:

- Associate of Science Degree, Computer Office Support Specialist
- Associate of Science Degree, Digital Media
- Certificate of Achievement, Digital Media

### Career Opportunities

*Employment opportunities in this field include:*

- Computer and Network Installers
- Computer Support Specialist
- Technical Support Technicians
- Network Technicians
- Network Systems Analyst
- Information Security Analyst

### For more information

- Dan Calderwood, Professor, Computer Information Systems  
707-476-4365 | dan-calderwood@redwoods.edu
- Chris Romero, Professor, Computer Information Systems  
707-476-4366 | chris-romero@redwoods.edu
- [www.redwoods.edu/cis/](http://www.redwoods.edu/cis/)
- Career & Technical Division, 707-476-4341
- Counseling & Advising, 707-476-4150

### Associate of Science Degree, CIS Networking

	Units
<b>General Education Requirements</b>	<b>18.0</b>
<b>Program Requirements</b>	
<b>Core Courses</b>	<b>39.0</b>
BT 50 Database Applications	4.0
BUS 10* Introduction to Business	3.0
CIS 1* Computer Information Systems	4.0
CIS 12 Programming Fundamentals	4.0
CIS 18 Object Oriented Programming - Java	4.0
CIS 30 CCNA: Computer Network Fundamentals	4.0
CIS 31 Network Operating Systems	4.0
CIS 33 CCNA: Scaling and Connecting Networks	4.0
CIS 35 Network Security Fundamentals	4.0
CIS 98 PC Computer Repair and Maintenance	4.0
<b>Restricted Electives</b>	<b>4.0</b>
<i>Choose 4 units from the following:</i>	
BT 16 Word Processing I	4.0
BT 17 Word Processing II	4.0
BT 51 Spreadsheet Applications	4.0
CET 10* Survey of Electronics	3.0
DM 10 Digital Storytelling	4.0
DM 20 Media Development for the Web	4.0
DM 30 Interactive Media	4.0
DT 23 Engineering Design Graphics	3.0
or ENGR 23 Engineering Design Graphics	3.0
DT 80 Modeling and Animation	4.0
<b>Unrestricted Electives</b> - as needed to complete 60 units total	
<b>Total Units</b>	<b>60.0</b>
<i>*Course may be double counted toward General Education.</i>	

### About this Degree

The CIS Networking AS degree provides educational opportunities for students seeking careers in local area network (LAN) and wide area network (WAN) installation, and management. Students also learn skills in computer programming, PC maintenance and repair, and network security from CompTIA Security + certified instructors.

### Program Learning Outcomes

- Demonstrate professional and effective communication skills.
- Support end user technology needs.
- Configure and troubleshoot TCP/IP networks and verify end-to-end connectivity across local area and wide area networks.
- Develop applications with emphasis on critical thinking approach to programming.
- Apply fundamental security concepts to network communication, infrastructure and operations.

### Suggested Program Sequence

#### Fall Start

Semester 1 BUS 10, CIS 1  
 Semester 2 BT 50, CIS 98  
 Semester 3 CIS 12, CIS 30, CIS 31  
 Semester 4 CIS 18, CIS 33, CIS 35  
 Plus 4 units from Restricted Electives

#### Spring Start

Semester 1 BUS 10, CIS 1  
 Semester 2 CIS 12, CIS 98  
 Semester 3 BT 50, CIS 18  
 Semester 4 CIS 30, CIS 31  
 Semester 5 CIS 33, CIS 35