

# CISCO NETWORKING AND SECURITY TECHNOLOGIES - ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

Explore More About This Program: <https://cwi.edu/program/cisco-networking-and-security-technologies>

## Degree Requirements

Course	Course Title	Min Credits
<b>General Education Degree Requirements</b>		
<i>Complete the following course to fulfill the GEM 1 requirement:</i>		
GEM 1 - Written Communication course		3
<i>Complete the following course to fulfill the GEM 2 requirement:</i>		
GEM 2 - Oral Communication course		3
<i>Complete the following course to fulfill the GEM 3 requirement:</i>		
GEM 3 - Mathematical Ways of Knowing course		3
<i>Complete the following course to fulfill the GEM 6 requirement:</i>		
GEM 6 - Social & Behavioral Ways of Knowing course		3
<i>Complete the following course to fulfill the General Education Elective requirement:</i>		
GE Elective course		3
<b>Major Requirements</b>		
CNST 122	Windows Client and PC Support	4
CNST 123	Network Fundamentals	4
CNST 125	Basic Routing and Switching	4
CNST 132	Intermediate Routing and Switching	4
CNST 134	WAN Technologies	4
CNST 136	Hardware and Servers	4
CNST 230	Linux Essentials	4
CNST 231	Network Security	4
CNST 233	Wireless Technology	4
CNST 235	Introduction to VoIP	4
CNST 237	Storage Area Networks	4
CNST 240	Virtualization Technologies	4
Minimum Credit Hours Required		63

## Plan of Study Guide

*Below is the required sequence of courses that you need to take in order to complete your program requirements. Please register for each semester as shown below using the Student Planning tool in myCWI. Consult your Student Success Advisor for any questions regarding this course sequence plan.*

### First Year

Fall		Credit Hours
CNST 122	Windows Client and PC Support	4
CNST 123	Network Fundamentals	4
CNST 125	Basic Routing and Switching	4
GEM 1 - Written Communication course		3
Total Semester Credit Hours		15

**Spring**

CNST 132	Intermediate Routing and Switching	4
CNST 134	WAN Technologies	4
CNST 136	Hardware and Servers	4
GEM 6 - Social & Behavioral Ways of Knowing course		3
Total Semester Credit Hours		15

**Second Year****Fall**

CNST 230	Linux Essentials	4
CNST 231	Network Security	4
CNST 233	Wireless Technology	4
GEM 3 - Mathematical Ways of Knowing course		3
Total Semester Credit Hours		15

**Spring**

CNST 235	Introduction to VoIP	4
CNST 237	Storage Area Networks	4
CNST 240	Virtualization Technologies	4
GEM 2 - Oral Communication course		3
GE Elective course		3
Total Semester Credit Hours		18
Minimum Credit Hours Required		63

## Program Outcomes

The following are student learning outcomes for the Associate of Applied Science in Cisco Networking and Security Technologies at CWI:

1. Use network protocol models to explain the layers of communication in data networks.
2. Use Cisco CLI commands to perform basic router and switch configuration and verification.
3. Configure and verify router interfaces.
4. Use advanced configuration commands with routers implementing EIGRP.
5. Troubleshoot common network problems at Layers 1, 2, 3, and 7 using a layered model approach.
6. Configure, verify, and troubleshoot VLANs, interVLAN routing, VTP, trunking on Cisco switches, and RSTP operation.
7. Configure, verify, and troubleshoot DHCP and DNS operation on a router.
8. Configure and verify a PPP connection between Cisco routers and Frame Relay on Cisco routers.
9. Configure, verify, and troubleshoot storage area networks.
10. Configure, verify, and troubleshoot enterprise virtualization.
11. Exhibit competencies of Written Communication (GEM 1), Oral Communication (GEM 2), Mathematical Ways of Knowing (GEM 3), Social & Behavioral Ways of Knowing (GEM 6), and other approved three-credit general education course.