

# IT-CYBERSECURITY SPECIALIST

## Overview

IT-Cybersecurity Specialist Associate of Applied Science Degree

Program Code: 10-151-2

For more information: [wctc.edu/cyber-spec](http://wctc.edu/cyber-spec) (<http://www.wctc.edu/cyber-spec/>)

Cybersecurity specialists implement, maintain and audit the security of an organization's computer networks and systems. Learn to protect data confidentiality, integrity and availability by implementing current real-world technology, processes and procedures. Emphasis is placed on vigilant security awareness, identifying security threats and implementing appropriate incident responses.

The minimum required course grades and program grade point average (GPA) for students under this catalog are:

Core Courses = C

General Studies Courses = C

Program GPA = 2.0

Related Certificates that can be earned along the way.

- Enterprise Support Technician Technical Certificate (<https://catalog.wctc.edu/programs/enterprise-support-technician/>)
- IT Network Support Specialist Technical Certificate (<https://catalog.wctc.edu/programs/network-support-specialist/>)
- Storage and Virtualization Administrator Technical Certificate (<https://catalog.wctc.edu/programs/storage-virtualization-administrator/>)
- IT Security Administrator Technical Certificate (<https://catalog.wctc.edu/programs/security-administrator/>)
- Cisco CCNA Technical Certificate (<https://catalog.wctc.edu/programs/cisco-ccna/>)
- CAE2Y Cybersecurity Technical Certificate (<https://catalog.wctc.edu/programs/cae2y-cybersecurity/>)
- IT Security Manager Technical Certificate (<https://catalog.wctc.edu/programs/it-security-manager/>)

## Learning Outcomes

### Program Outcomes

- Identify security strategies.
- Implement secure infrastructures.
- Conduct security testing.
- Analyze security data.
- Mitigate risk.
- Develop security documentation.

## Critical Life Skills

To help our students prepare for success in a workplace and society that is **increasingly global, multi-cultural, and collaborative**, all students are given opportunities to develop and demonstrate Critical Life Skills, both

in and out of the classroom. The following Critical Life Skills are learning outcomes for WCTC students.

- Communication:** Demonstrate appropriate communication.
- Critical Thinking/Problem Solving:** Demonstrate critical thinking skills to analyze situations and solve problems.
- Relationships:** Demonstrate effective interpersonal skills.
- Self-management:** Demonstrate responsible and respectful behavior.

## Required Courses

Listed below are the required courses for the program. To view the recommended sequence for taking courses click on the plan of study tab(s) above. Work with your Academic Advisor to design a program plan!

View your **Program Matrix** to find out when each course will be offered (term and time of day).

Code	Title	Credits
<b>Core Courses</b>		
107-103	IT Business Strategies	3
107-137	IT Internship	1
150-117	Introduction to Cisco Networks <sup>Cisco 1, take 1st</sup>	3
Approved Substitute: 150-175		
150-118	Switching Routing & Wireless <sup>Cisco 2, take 2nd</sup>	3
Approved Substitute: 150-176		
150-137	MS Server	3
150-157	Security II	3
Approved Substitute: 150-156		
150-161	Ethical Hacking	3
150-164	Intro to Bash Shell Scripting	1
Approved Substitute: 150-154		
150-169	Business Continuity Planning	3
150-188	Linux Essentials	3
151-102	Log and Threat Analysis	3
151-103	Firewall Security	3
151-104	Intrusion Detection	3
151-105	Digital Forensics	3
151-106	Security I	3
Approved Substitute: 151-101		
151-107	Web Application Security	3
151-108	IT Cybersecurity Capstone	2
Approved Substitute: 107-184		
152-101	Python Programming	1
Approved Substitute: 150-154		
890-108	Employment Success	1
Approved Substitute: 107-117		
<b>General Studies</b>		
801-136	English Composition 1	3
801-198	Speech	3
Approved Substitute: 801-196		
804-133	Math & Logic	3
Approved Substitutes: 804-118 OR 804-116 OR 804-195 OR 804-198		

809-195	Economics	3
Approved Substitute: 809-143		
809-199	Psychology of Human Relations	3
Approved Substitute: 809-198		
Total Credits		63

Full-time Plan

First Year		
Fall Term 1		Credits
151-106	Security I	3
804-133	Math & Logic	3
Credits		6
Fall Term 2		
150-117	Introduction to Cisco Networks	3
150-188	Linux Essentials	3
Credits		6
Winter Interim		
150-164	Intro to Bash Shell Scripting	1
Credits		1
Spring Term 1		
150-157	Security II	3
150-137	MS Server	3
Credits		6
Spring Term 2		
150-118	Switching Routing & Wireless	3
801-136	English Composition 1	3
Credits		6
Second Year		
Summer Interim		
152-101	Python Programming	1
Credits		1
Summer Term		
107-103	IT Business Strategies	3
801-198	Speech	3
Credits		6
Fall Term 1		
151-103	Firewall Security	3
151-104	Intrusion Detection	3
Credits		6
Fall Term 2		
151-102	Log and Threat Analysis	3
150-169	Business Continuity Planning	3
Credits		6
Winter Interim		
890-108	Employment Success	1
Credits		1
Spring Term 1		
151-107	Web Application Security	3
151-105	Digital Forensics	3
Credits		6

Spring Term 2		
150-161	Ethical Hacking	3
151-108	IT Cybersecurity Capstone	2
809-195	Economics	3
Credits		8
Third Year		
Summer Term		
107-137	IT Internship	1
809-199	Psychology of Human Relations	3
Credits		4
Total Credits		63