

CIT - Network Support & Security

Associate of Applied Science Degree

Program Director: Cheryl Simpson

Program Faculty: Steven Robinett

NOTE: This program is currently under review and will not be accepting new students.

The Computer Information Technology (CIT) Program prepares individuals to assume a role in computer support with skills and responsibilities in user support, hardware and software troubleshooting, basic system maintenance, and cybersecurity.

The Network Support & Security Degree prepares students for a career in supporting Local Area Networks (LAN) and Wide Area Networks (WAN) with a focus on the skills required to understand and manage the operation of a small and large computer network. The students will learn valuable technical skills to identify the security needs of an organization as well as be able to implement the appropriate protection and security of the system.

Upon completion of the Network Support & Security Degree, students will be able to successfully design, implement, manage and maintain effective network infrastructures; analyze data to determine security threats; and identify and prevent data threats and privacy invasion for both home and corporate clients as an entry level network technician/system administrator/system analyst/security analyst.

Outcomes

Graduates are prepared to:

- Utilize TCP/IP applications to prove their understanding of networking protocols used to control modern networking infrastructures.
- Develop an in-depth understanding of network security principles as well as the tools and configurations available within a network.
- Master the concepts of the theoretical OSI networking model.
- Secure network assets by exploring the mechanisms of ethical hacking and network defense.
- Create, secure, maintain, and troubleshoot both wired and wireless network infrastructures and infrastructure devices.
- Employ and master the skills needed to create, secure and maintain server based networks using both Microsoft Windows and open source Linux server systems.
- Develop and implement a logical troubleshooting, security, and maintenance system for Personal Computing systems.
- Prepare for networking support industry standard certifications such as: CCNA, CCNP, MCSA CompTIA Network+, CompTIA PenTest+, and CCNA Security

Estimated Cost

Estimated Resident Program Cost*

Tuition and Fees	\$7,064
Lab Fees	\$650
Books/Supplies	\$1,443
Total	\$9,187

*

Fall 2023 MUS Student Health Insurance Premiums may be changing. Please check the Health Insurance website (<http://students.gfcmu.edu/insurance.html>) and/or Student Central for confirmed premium rates. Students will be charged an additional fee of \$21 per credit for online/hybrid courses for only Summer 2023 classes.

Program Requirements

Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedules.

Course	Title	Credits	Grade/Sem
First Year			
Fall			
CSCI 105	Computer Fluency +	3	_____
ITS 125	Fundamentals of Voice and Data Cabling +	3	_____
M 105	Contemporary Mathematics **,+	3	_____
NTS 104	CCNA1: Introduction to Networks *,+	3	_____
NTS 105	CCNA2: Routing and Switching *,+	3	_____
Credits		15	
Spring			
ITS 210	Network Operating System - Desktop *,+	3	_____
NTS 206	CCNA 3: Enterprise Networking Security and Automation *,+	3	_____
ITS 280	Computer Repair and Maintenance *,+	4	_____
COMX 115	Introduction to Interpersonal Communication +	3	_____
Technical Elective		3	_____
Credits		16	
Second Year			
Fall			
ITS 215	Network Operating Systems - Directory /Infrastructure *,+	4	_____
NTS 210	CCNP Enterprise: Core Networking 1 *,+	4	_____
NTS 211	CCNP Enterprise: Core Networking 2 *,+	4	_____
Select one of the following:			
WRIT 101	College Writing I **,+	3	_____
WRIT 121	Intro to Technical Writing **,+	3	_____
Credits		15	
Spring			
ITS 224	Introduction To Linux *,+	4	_____

ITS 274	Ethical Hacking and Network Defense *+.	3	_____
NTS 212	CCNP: Enterprise Advanced Services and Routing 1 *+.	4	_____
NTS 213	CCNP: Enterprise Advanced Services and Routing 2 *+.	4	_____
Select one of the following:			
ITS 298	Internship *+.	3	_____
ITS 299	Capstone *+.	3	_____
Credits		18	
Total Credits		64	

+
A grade of C- or above is required for graduation.

*
Indicates prerequisites needed.

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Placement in course(s) is determined by placement assessment.