CIT - Network Support and Security

Associate of Applied Science Degree

Program Director: Steven Robinett
Program Faculty: Cheryl Simpson

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/security analyst.

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/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*

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<table>
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<tbody>
<tr>
<td>Tuition and Fees</td>
<td>$6,900</td>
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<tr>
<td>Application Fee</td>
<td>$30</td>
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<tr>
<td>Lab Fees</td>
<td>$490</td>
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<td>Books/Supplies</td>
<td>$1,148</td>
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<td>Total</td>
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* Fall 2021 MUS Student Health Insurance Premiums will be changing. Please check the Health Insurance website (http://students.gfcmsu.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.

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
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**Fall**                     **First Year**                            **Credits**  **Grade/Sem**
ITS 125                     Fund of Voice & Data Cabling  "+"           3         
M 105                       Contemporary Mathematics  "+"             3         
NTS 104                     CCNA 1: Intro to Networks  "+"            3         
NTS 105                     CCNA 2: Switching, Routing, and Wireless Essentials  "+"  3         

Credits                      15         

Spring                      **Second Year**                            **Credits**  **Grade/Sem**
ITS 210                     Network OS - Desktop  "+"                     3         
NTS 206                     CCNA 3: Enterprise Networking Security and Automation  "+"  3         
ITS 280                     Computer Repair & Maintenance  "+"           4         
COMX 115                    Intro to Interpersonal Communicat  "+"         3         
Technical Elective  
                          3         

Credits                      16         

Fall                       **Spring**                                **Credits**  **Grade/Sem**
ITS 215                     Network OS -Dir /Infrastructre  "+"    4         
ITS 256                     CCNA Security  "+"                               3         
ITS 265                     CCNP Enterprise: Core Networking 1  "+"           4         
ITS 267                     CCNP Enterprise: Core Networking 2  "+"           4         

Credits                      15         

Spring                      **Technical Elective**                      **Credits**  **Grade/Sem**
ITS 224                     Introduction To Linux  "+"                             4         
ITS 274                     Ethical Hacking and Network Defense  "+"            3         
Technical Elective  
                          3         
Select one of the following:
ITS 298                     Internship  "+"                                3         
ITS 299                     Capstone  "+"                                  3         
Select one of the following:
WRIT 101                    College Writing I  "+"                             3         
WRIT 121                    Intro to Technical Writing  "+"                      3         

Credits                      16         

Total Credits                62         

* Indicates prerequisites needed.
**
Placement in course(s) is determined by placement assessment.

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Technical electives must be approved by program director.

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