

Cybersecurity CTS

Overview

Certificate of Technical Studies

Program Director: Chris Mee

Program Application (http://www.gfcmsu.edu/webs/cybersecurity/documents/Cybersecurity_CTS_Application_Packet.pdf)

The Cybersecurity Certificate Degree will prepare students with additional, career tools to continue on the path to a technician/system analyst with a focus on the skills required to understand and conceptualize, design, procure, and/or build secure information technology (IT) systems.

Upon completion of the Cybersecurity Certificate Degree, students will be able to successfully provide the support, administration, and maintenance necessary to ensure effective and efficient information technology (IT) system performance and security as an entry level or higher systems technician/system analyst.

Outcomes

Graduates are prepared to:

- Conceptualize, design, procure, and/or builds secure information technology (IT) systems, with responsibility for aspects of system and/or network development.
- Provides the support, administration, and maintenance necessary to ensure effective and efficient information technology (IT) system performance and security.
- Provides leadership, management, direction, or development and advocacy so an organization may effectively conduct cybersecurity work.
- Identifies, analyzes, and mitigate threats to internal information technology (IT) systems and/or networks.
- Performs highly-specialized review and evaluation of incoming cybersecurity information to determine its usefulness for intelligence.
- Provides specialized denial and deception operations and collection of cybersecurity information that may be used to develop intelligence.
- Investigates cybersecurity events or crimes related to information technology (IT) systems, networks, and digital evidence.
- **Outcomes are based on the National Institute for Cybersecurity Education (NICE) Outcomes

Estimated Cost

Estimated Resident Program Cost*

| | |
|------------------|--------|
| Tuition and Fees | \$2844 |
| Application Fee | \$30 |
| Books/ Supplies | \$1000 |
| Total | \$2874 |

* Fall 2019 MUS Student Health Insurance Premiums will be changing. Please check the Health Insurance website 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

PREREQUISITES:

- All applicants must have already applied to and been accepted as students at GFC MSU **THEN**
- A completed Application Packet must be included by all students entering the program **AND**
- Fit **one** of the bulleted intake criteria listed below:

Cybersecurity CTS Intake Criteria

- One of the following degrees within the last 8 years: associates or bachelor's degree in Network Support and Security, Programming, Microcomputer Support or similarly related degree in Information Technology/Information Systems. Provide Transcript(s).
- Currently enrolled in a two- or four- year degree at least sophomore level in Network Support and Security, Programming, Microcomputer Support or similarly related degree in Information Technology/Information Systems. Provide most recent transcript.
- Related work experience with consent of the program director. Provide proof of relevant work experience in the form of resume and a reference questionnaire from at least two work-related individuals, one being a direct supervisor. Industry certifications such as A+, Microsoft Servers, Net+, Security+, or others can be used in place of a degree when combined with relevant work experience.
- For individuals without these qualifications, the list of pre-requisite courses are:

| Course | Title | Credits | Grade/Sem |
|----------|--------------------------------|---------|-----------|
| CSCI 105 | Computer Fluency | 3 | _____ |
| ITS 210 | Network OS - Desktop | 3 | _____ |
| ITS 215 | Network OS -Dir /Infrastructre | 4 | _____ |
| ITS 224 | Introduction To Linux | 4 | _____ |
| ITS 280 | Computer Repair & Maintenance | 4 | _____ |

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.

GFC MSU Additional Graduation Requirement

| Course | Title | Credits | Grade/Sem |
|-------------------|---|---------|-----------|
| First Year | | | |
| Fall | | | |
| ITS 164 | Networking Fundamentals + | 3 | _____ |
| ITS 245 | Exploring Computer Forensics + | 3 | _____ |
| ITS 271 | Securing Desktop/Mobile Device ^,+ | 4 | _____ |
| | Credits | 10 | |
| Spring | | | |
| ITS 218 | Network Security ^,+ | 3 | _____ |
| ITS 222 | Enterprise Security + | 3 | _____ |
| ITS 274 | Ethical Hacking and Network Defense ^,+ | 3 | _____ |
| ITS 289 | Professional Certification + | 1 | _____ |
| | Credits | 10 | |
| | Total Credits | 20 | |

- * Indicates prerequisites needed.
- ** Placement in course(s) is determined by placement assessment.
- + A grade of C- or above is required for graduation.