## Michigan Technological University Minor in Cybersecurity

Program Code TCYM, Academic Year 2021-22

College of Computing

**Total Credits Required: 18** 

## **Required Courses: 6 credits**

| Course  | Credits |
|---|---------|
| CS 1111* Introduction to Programming in C/C++ Prereqs: none   |         |
| or CS 1142 Programming at the Hardware Software Interface Prereqs: CS1122 or CS1131                       | 3       |
| or MIS 2100 Introduction to Business Programming Prereqs: none  |         |
| SAT 3812** Cybersecurity   Prereqs: SAT1200 or CS1111 or CS1121 or CS1131 or CS1142 or MIS2100 or EET2241 | 3       |

## Required Courses: Select two or more courses for 6 to 12 credits

| Course  | Credits |
|---|---------|
| CS 4471 Computer Security Preregs: CS3411 or CS4411               | 3       |
| EE 4723 Network Security Preregs: EE4272 or CS4461 or SAT4812     | 3       |
| MA 3203 Intro to Cryptography Preregs: MA2320 or MA2321 or MA2330 | 3       |
| SAT 4812 Cybersecurity II Prereqs: SAT3812                        | 3       |

## Elective Courses: Select 0 to 6 credits not already taken

| Course  | Credits |
|---|---------|
| CS 3425 Introduction to Database Systems Preregs: CS2311 or MA3210) and CS2321  |         |
| or MIS 3100 Business Database Management Prereqs: MIS2000   | 3       |
| or SAT 3210 Database Management Preregs: SAT1200 or CS1111 or CS1121 or CS1131 or CS1142 or MIS2100                             |         |
| CS 3712 Software Quality Assurance Preregs: CS3141  | 3       |
| CS 4411 Operating Systems Prereqs: CS3331 and CS3421  | 3       |
| CS 4431 Computer Architecture Prereqs: CS3421   | 3       |
| CS 4461/EE 4272 Computer Networks Preregs: CS3411   | 3       |
| CS 4471 Computer Security Preregs: CS3411 or CS4411   | 3       |
| CS 4710 Model-Driven Software Development Prergs: CS3311 and CS3141   | 3       |
| EE 4173 Computer System Engineering and Performance Preregs: CS3421 and EE3173  | 3       |
| EE 4723 Network Security Prereqs: EE4272 or CS4461 or SAT4812   | 3       |
| EE 5365 In-Vehicle Communication Networks Preregs: EE3250 or EE4250   | 3       |
| MA 3203 Intro to Cryptography Preregs: MA2320 or MA2321 or MA2330   | 3       |
| MIS 4200 Management of Cyber Security Prereqs: MIS2000 or CS1111 or CS1121 or CS1131  | 3       |
| SAT 2711 Linux Administration   Preregs: SAT1200 or CS1111 or CS1121 or CS1131 or CS1142 or MIS2100                             | 4       |
| SAT 3310 Scripting for Administration and Automation <i>Prereqs: SAT1200 or CS1111 or CS1121 or CS1131 or CS1142 or MIS2100</i> | 4       |
| SAT 3820 Wireless System Administration Preregs: SAT1200 or CS1111 or CS1121 or CS1131 or CS1142 or MIS2100                     | 4       |
| SAT 4816 Digital Forensics (3) Prereqs: SAT3812   | 3       |

<sup>\*</sup>Must be enrolled in one of the following Major(s): Computer Network & System Administration, Electrical Engineering, Audio Production & Technology; Must be enrolled in one of the following Class(es): Freshman, Sophomore

<sup>\*\*</sup>Must be enrolled in one of the following Class(es): Junior, Senior