# Michigan Technological University Bachelor of Science Degree Audit

# Major Program: Cybersecurity, Concentration: System and Network Security

Program Code: CCY2, Academic Year 2021-22 Total credits required for the degree: 121

# Core Requirements: 32 to 33 Credits

| Course              | Credits |
|---------------------|---------|
| CS 1121 and CS 1122 |         |
| or CS 1131          | 5/6     |
| CS 2311             | 3       |
| CS 4000             | 3       |
| CS 4723 or EE 4723  | 3       |
| SAT 1700            | 3       |
| SAT 2711            | 4       |
| SAT 3812            | 3       |
| SAT 4510            | 3       |
| SAT 4816            | 3       |
| MA 2320             | 2       |

### Math Requirements: 8 to 9 Credits

| Course             | Credits |
|--------------------|---------|
| MA 1160 or MA 1161 | 4/5     |
| MA 2720            | 4       |

# Lab Science Requirements: 7 Credits

Students must complete two science courses in two different disciplines, from the Science Course List; at least one of these must include or be taken with the accompanying laboratory.

| Course | Credits |
|--------|---------|
|        |         |
|        |         |
|        |         |

# **Technical Elective Courses: 3 Credits**

HU3120, SS3640, MIS4200, OSM4300, ENT3950 and ENT3960, CS3000 - CS5999, EE3000 - EE5999, SAT3000 - SAT5999

| Course | Credits |
|--------|---------|
|        | 3       |

### **Concentration Requirements: 36 Credits**

| Course   | Credits |
|----------|---------|
| SAT 2343 | 4       |
| SAT 3210 | 3       |
| SAT 3343 | 4       |
| SAT 3611 | 3       |
| SAT 3820 | 4       |
| SAT 4310 | 3       |
| SAT 4411 | 3       |
| SAT 4520 | 3       |
| SAT 4812 | 3       |
| SAT 4817 | 3       |
| OSM 4300 | 3       |

# **Culminating Experience: 4 Credits**

Choose one from any of the following three options. All activities need preapproval from the department advisor and include a significant cybersecurity experience.

| Course                                     | Credits |
|--------------------------------------------|---------|
| Senior Design I & II                       |         |
| CS/SAT 4793                                | 2       |
| CS/SAT 4794                                | 2       |
| Undergraduate Cooperative Education I & II |         |
| UN 3002                                    | 2       |
| UN 3003                                    | 2       |
| Enterprise Project Work                    |         |
| ENT 4950                                   | 2       |
| ENT 4960                                   | 2       |

# Free Electives: 5 to 7 Credits

Any coursework is allowable, excluding co-curricular and coursework below the 1000-level.

| Course | Credits |
|--------|---------|
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## **General Education Core and HASS**

Courses used to complete Core and HASS requirements may not be used to complete other degree requirements. Students must complete 12 credits of Core coursework and 12 credits of Humanities, Fine Arts, and Social Science (HASS) coursework. Repeatable courses may not be repeated for general education credit. Core and HASS courses can be found on the <u>General Education</u> page.

#### Core: 12 credits

| Course                                      | Credits |
|---------------------------------------------|---------|
| UN 1015                                     | 3       |
| UN 1025 or an upper level modern language   | 3       |
| Critical and Creative Thinking              | 3       |
| Social Responsibility and Ethical Reasoning | 3       |

### HASS: 12 credits

Six of the 12 HASS credits must be at the 3000 or 4000 level (an upper division language course in place of UN1025 does not meet this requirement). No more than three credits may come from the HASS Restricted course list.

| Course                                                             | Credits   |
|--------------------------------------------------------------------|-----------|
| Communication/ Composition                                         | Minimum 3 |
| Humanities and Fine Arts                                           | Minimum 3 |
| Social and Behavioral Sciences                                     | Minimum 3 |
| Course from any list above or from the Restricted HASS course list | 0 to 3    |

# **Co-curricular Activities: 3 credits**

Required for graduation, but not included in the GPA calculation or in the overall credits required for the degree. Only courses on the co-curricular course list are eligible. Half credit (0.5) courses may be repeated to a maximum of one time for co-curricular credit. Find eligible courses on the <u>General Education</u> page.

| Course | Credits |
|--------|---------|
|        |         |
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