**MERCY UNIVERSITY**

# Academic Program Sequence Map

**Program Degree Type and Name:** BS/MS 4+1 in Cybersecurity      **Catalog Year:** 2022-2023

**Program Level: Undergrad/Graduate**      **Academic Term Type: Semester**

*\* Denote core course with an asterisk and (cc) next to the course number*

### Year and Term: Year 1 Fall term — Credits Per Classification

| Course Number & Title | CR | GE | Maj | OE | SM | Co / Prerequisite(s) |
|---|---|---|---|---|---|---|
| ENGL111: Written Engl and Lit Studies I | 3 | x | | | | |
| CINQ 101 Critical Inquiry | 3 | x | | | | |
| MATH116: College Algebra | 3 | x | | | | |
| CISC120: Intro Computers & App Software | 3 | x | | | | |
| Gen Edu or ENGL 110 | 3 | x | | | | |
| **Term Credit Total:** | 15 | 15 | | | | |

### Year and Term: Year 1 Spring term — Credits Per Classification

| Course Number & Title | CR | GE | Maj | OE | SM | Co / Prerequisite(s) |
|---|---|---|---|---|---|---|
| ENGL112: Written Engl and Lit Studies II | 3 | x | | | | ENGL 111 |
| MATH201: Precalculus | 3 | x | | | | MATH 116 |
| CISC131: Foundations of Computing I | 3 | x | | | B or higher | |
| COMM 110 Oral Communication | 3 | x | | | | |
| Gen Ed | 3 | x | | | | |
| **Term Credit Total:** | 15 | 15 | | | | |

### Year and Term: Year 2 Fall term — Credits Per Classification

| Course Number & Title | CR | GE | Maj | OE | SM | Co / Prerequisite(s) |
|---|---|---|---|---|---|---|
| MATH244: Discrete Structures | 3 | | x | | | MATH 201 |
| CISC231: Foundations of Computing II | 3 | x | | | | CISC/MATH 131 |
| IASP230: Intro to Cybersecurity | 3 | | x | | B or higher | CISC131 |
| Gen Ed | 3 | x | | | | |
| Gen Ed | 3 | x | | | | |
| **Term Credit Total:** | 15 | 9 | 6 | | | |

### Year and Term: Year 2 Spring term — Credits Per Classification

| Course Number & Title | CR | GE | Maj | OE | SM | Co / Prerequisite(s) |
|---|---|---|---|---|---|---|
| MATH122: Statistics | 3 | x | | | | MATH 116 |
| IASP 321: Linux Administration | 3 | | x | | B or higher | CISC 131 |
| IASP330: Dis. Recovery & Bus. Continuity | 3 | | x | | | IASP 230 |
| Gen Ed | 3 | x | | | | |
| Gen Ed | 3 | x | | | | |
| **Term Credit Total:** | 15 | 9 | 6 | | | |

### Year and Term: Year 3 Fall term — Credits Per Classification

| Course Number & Title | CR | GE | Maj | OE | SM | Co / Prerequisite(s) |
|---|---|---|---|---|---|---|
| JRSM301 : Junior Seminar | 3 | x | | | | ENGL112, SPCM110, MATH116 |
| CISC337: Database Management System | 3 | | x | | | CISC 231 |
| IASP355: Pen. Testing & Ethical Hacking | 3 | | x | | | IASP 221 |
| Gen Ed | 3 | x | | | | |
| Gen Ed | 3 | x | | | | |
| **Term credit total:** | 15 | 9 | 6 | | | |

### Year and Term: Year 3 Spring term — Credits Per Classification

| Course Number & Title | CR | GE | Maj | OE | SM | Co / Prerequisite(s) |
|---|---|---|---|---|---|---|
| CISC385: Cryptography | 3 | | x | | | MATH 244 |
| CISC335: Computer Network | 3 | | x | | | CISC 231 |
| IASP340 Security Policy and Procedures | 3 | | x | | | |
| Gen Ed | 3 | x | | | | |
| Major Elective | | | x | | | |
| **Term Credit Total:** | 15 | 3 | 12 | | | |

### Year and Term: Year 4 Fall term — Credits Per Classification

| Course Number & Title | CR | GE | Maj | OE | SM | Co / Prerequisite(s) |
|---|---|---|---|---|---|---|
| IASP420: Network Security | 3 | | x | | | CISC335 |
| IASP455: Sec. & Intel. Programming | 3 | | x | | | CISC 231 & CISC339 |
| Major Elective | 3 | | x | | | |
| IASP 500 Topics in Info. Security | 3 | | | x | B+ or higher | |
| IASP 505 Found. of Cybersec. Sci. | 3 | | | X | B+ or higher | |
| **Term Credit Total:** | 15 | | 9 | 6 | | |

### Year and Term: Year 4 Spring term — Credits Per Classification

| Course Number & Title | CR | GE | Maj | OE | SM | Co / Prerequisite(s) |
|---|---|---|---|---|---|---|
| IASP470 : Capstone (System Sec.) | 3 | | x | | | Six 300 upper level courses |
| IASP430: Digital Forensics | 3 | | x | | | CISC 337 & IASP221 |
| Major Elective | 3 | | x | | | |
| Graduate Legal/Mgmt Elective | 3 | | | x | | |
| Graduate Application or Network Elective | 3 | | | x | | |
| **Term Credit Total:** | 15 | | 9 | 6 | | |

### Year and Term: Year 5 Fall Term — Credits Per Classification

| Course Number & Title | CR | GE | Maj | OE | SM | Co / Prerequisite(s) |
|---|---|---|---|---|---|---|
| Graduate Application or Network Elective | 3 | x | | | | |
| Graduate Special Category Elective | 3 | x | | | | |
| Graduate Major Category Elective | 3 | x | | | | |
| **Term Credit Total:** | 9 | 9 | | | | |

### Year and Term: Year 5 Spring Term — Credits Per Classification

| Course Number & Title | CR | GE | Maj | OE | SM | Co / Prerequisite(s) |
|---|---|---|---|---|---|---|
| IASP 600: Master's Project (Capstone) | 3 | x | | | | See Note2 below |
| Graduate Major Category Elective | 3 | x | | | | |
| Graduate Major Category Elective | 3 | x | | | | |
| **Term Credit Total:** | 9 | 9 | | | | |

| Program Totals | Credits: 138 | General Education: 60 | Major & Major Elective: 66 | Open Elective: 12 |
|---|---|---|---|---|

**Legend:**   **CR**: Credits   **GE:** General Education   **Maj**: Major / Major Elective   **OE:** Open Elective   **SM**: Success Marker   **Co/Prerequisite(s)**: List of co/ prerequites for noted course

Note 2: IASP500, IASP505, and at least one from each {Application, Network and Legal/Management Categories}