# CYBERSECURITY (MS), COMBINED BACHELOR'S + MASTER'S DEGREE

The combined Bachelor's + Master's degree programs allow students to complete 12 graduate credit hours while still undergraduates. These 12 graduate credit hours will count toward both the undergraduate and graduate degree programs.

## DePaul Undergraduate Degree + Cybersecurity (MS)

The Cybersecurity (MS) combined degree program is open to all undergraduate majors across the university.

For information on admission criteria and combined degree program structure, see the CDM Graduate Academics Page (https://catalog.depaul.edu/colleges-schools/computing-digital-media/#graduateacademicstext).

*Graduate courses for the combined degree program*

The combined degree students take at most three graduate courses during their undergraduate degree selected from the following list of graduate courses. Students are encouraged to work with their undergraduate advisor in their home college and the CDM advisor to choose the three courses that best fit the student's background and undergraduate degree.

Artificial Intelligence Engineering Concentration:

| Course | Title | Quarter Hours |
|---|---|---|
| Take three (3) graduate courses from this list | | 12 |
| CSC 480 | ARTIFICIAL INTELLIGENCE I | |
| CSC 421 | APPLIED ALGORITHMS AND STRUCTURES | |
| CSEC 440 | INFORMATION SECURITY MANAGEMENT | |
| CSEC 445 | HUMAN-CENTERED CYBERSECURITY | |

Computer Security Concentration:

| Course | Title | Quarter Hours |
|---|---|---|
| Take three (3) graduate courses from this list | | 12 |
| CSC 435 | DISTRIBUTED SYSTEMS I | |
| CSEC 440 | INFORMATION SECURITY MANAGEMENT | |
| CSEC 450 | DIGITAL FORENSIC TECHNIQUES | |
| SE 450 | OBJECT-ORIENTED SOFTWARE DEVELOPMENT | |

Governance, Risk Management and Compliance Concentration:

| Course | Title | Quarter Hours |
|---|---|---|
| Take three (3) graduate courses from this list | | 12 |
| CSEC 440 | INFORMATION SECURITY MANAGEMENT | |
| CSEC 445 | HUMAN-CENTERED CYBERSECURITY | |
| IS 444 | IT AUDITING | |
| NET 463 | COMPUTER NETWORKS AND DATA SYSTEMS | |

Networking and Infrastructure Concentration:

| Course | Title | Quarter Hours |
|---|---|---|
| Take three (3) graduate courses from this list | | 12 |
| CSEC 440 | INFORMATION SECURITY MANAGEMENT | |
| CSEC 445 | HUMAN-CENTERED CYBERSECURITY | |
| CSEC 450 | DIGITAL FORENSIC TECHNIQUES | |
| NET 463 | COMPUTER NETWORKS AND DATA SYSTEMS | |
| NET 477 | NETWORK SECURITY | |

Students who want to substitute different graduate courses for courses in the recommended list must discuss the request with their undergraduate advisor in their home college and the CDM advisor. Requests must be approved by the CDM advisor.

In addition to the three graduate courses, students complete the MS in Cybersecurity by taking an additional 36 credit hours (9 graduate courses) and any additional introductory courses that were not satisfied during their bachelor's degree. Students will follow the master's degree program requirements for the term they are admitted to the master's degree program.

*Prerequisite undergraduate courses:*

Students are encouraged to work with their undergraduate advisor in their home college and the CDM advisor to complete appropriate coursework during their undergraduate degree to satisfy the introductory courses of the Master's degree.

The suggested set of undergraduate courses that satisfy the Introductory courses for the MS in Cybersecurity degree are listed here:

Artificial Intelligence Engineering Concentration:

- CSC 400 Discrete Structures for Computer Science: MAT 140
- CSC 401 Introduction to Programming: (CSC 241 and CSC 242) or CSC 243
- CSC 402 Data Structures I: CSC 300
- CSC 403 Data Structures II: CSC 301
- CSC 412 Tools and Techniques for Computational Analysis: MAT 220 (has additional prerequisites)
- IT 403 Statistics and Data Analysis: IT 223

Computer Security Concentration:

- CSC 400 Discrete Structures for Computer Science: MAT 140
- CSC 401 Introduction to Programming: (CSC 241 and CSC 242) or CSC 243
- CSC 402 Data Structures I: CSC 300
- CSC 403 Data Structures II: CSC 301
- CSC 406 Systems I: CSC 373
- CSC 407 Systems II: CSC 374

Governance, Risk Management and Compliance Concentration:

- CSC 418 Introduction to Host Security: CSEC 378
- NET 405 Network Fundamentals: IT 263

- NET 411 Introduction to Computer and Network Systems: NET 311
- NET 413 Introduction to LAN Technologies: NET 363

Networking and Infrastructure Concentration:

- CSC 418 Introduction to Host Security: CSEC 378
- NET 405 Network Fundamentals: IT 263
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- NET 413 Introduction to LAN Technologies: NET 363