

CYBERSECURITY ENGINEERING, MASTER OF ENGINEERING (M.ENG.)

Non-thesis only: 30 credits

All Professional Master of Engineering Programs consist of 10 courses/30 credits. All students are expected to complete a preliminary course plan for their intended degree program. Degree planning worksheets can be found here: <https://advancedengineering.umd.edu/degree-planning-sheets> (<https://advancedengineering.umd.edu/degree-planning-sheets/>)

The student must complete 30 credits of approved coursework with an average grade of B. The coursework, which allows up to 12 credits at the 400-level, must be approved by the program's departmental faculty advisor.

| Course | Title | Credits |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------|
| Required course: | | 3 |
| ENPM691 | Hacking of C programs and Unix Binaries (Programming in C for Cybersecurity Applications) | |
| Choose three of the following core courses: | | 9 |
| ENPM685 | Security Tools for Information Security | |
| ENPM686 | Information Assurance | |
| ENPM693 | Network Security | |
| ENPM694 | Networks and Protocols | |
| ENPM695 | Secure Operating Systems | |
| Choose at least two of the following electives: | | 6 |
| ENPM687 | Digital Forensics and Incidence Responses | |
| ENPM697 | Secure Software Testing and Construction | |
| ENPM809 | Special Topics in Engineering (ENPM809A - Applied Cryptography) | |
| ENPM809 | Special Topics in Engineering (ENPM809I - Embedded Systems Hacking and Security) | |
| ENPM809 | Special Topics in Engineering (ENPM809J - Cloud Security) | |
| ENPM809 | Special Topics in Engineering (ENPM809K - Fundamentals for Artificial Intelligence and Deep Learning Framework) | |
| ENPM809 | Special Topics in Engineering (ENPM809V - Bitcoin and Cryptocurrency Technologies) | |
| ENPM808 | Advanced Topics in Engineering (ENPM808O - Intrusion Detection: From Theory to Practice) | |
| Remainder of electives chosen with advisor | | 12 |
| Total Credits | | 30 |