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

The student chooses an area of concentration offered by an engineering department and completes 30 credit hours 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.

Students complete five core courses and five electives. Two available focus areas include Computer Engineering (1) and Communication and Signal Processing (2).

Please note, the curriculum below is for students admitted in Spring 2019 or later.

## Computer Engineering

### Course | Title | Credits
--- | --- | ---
ENPM808 | Advanced Topics in Engineering (ENPM808T) or ENEE645 Compilers and Optimization | 15
ENPM607 | Computer System Design and Architecture |
ENPM609 | Microprocessor-Based Design |
ENPM610 | Digital VLSI Design |
ENPM615 | Embedded Systems |
ENPM675 | Operating System Design |
ENPM676 | VLSI Testing and Design for Testability |
ENPM674 | Design and Synthesis of Digital Systems |

Select at least one of the following breadth electives:

### Course | Title | Credits
--- | --- | ---
ENPM611 | Software Engineering | 3
ENPM612 | System and Software Requirements |
ENPM613 | Software Design & Implementation |
ENPM614 | Software Testing & Maintenance |
ENPM696 | Reverse Software Engineering |
ENPM808 | Advanced Topics in Engineering (ENPM808E) |
ENPM808 | Advanced Topics in Engineering (ENPM808T) |
ENPM607 | Computer System Design and Architecture |
ENPM609 | Microprocessor-Based Design |
ENPM610 | Digital VLSI Design |
ENPM615 | Embedded Systems |
ENPM675 | Operating System Design |

Other pre-approved electives:

### Course | Title | Credits
--- | --- | ---
ENPM631 | TCP/IP Networking | 12
ENPM632 | Advanced TCP/IP Networking |
ENPM693 | Network Security |

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## Communication and Signal Processing

### Course | Title | Credits
--- | --- | ---
ENPM600 | Probability and Stochastic Processes for Engineers | 15
ENPM601 | Analog and Digital Communication Systems |
ENPM602 | Data Networks |
ENPM603 | Theory and Applications of Digital Signal Processing |
ENPM616 | Wireless Communications: Concepts and Technologies |
ENPM677 | Wireless Sensor Networks |

Select at least one of the following breadth electives:

### Course | Title | Credits
--- | --- | ---
ENPM600 | Probability and Stochastic Processes for Engineers | 3
ENPM601 | Analog and Digital Communication Systems |
ENPM602 | Data Networks |
ENPM603 | Theory and Applications of Digital Signal Processing |
ENPM616 | Wireless Communications: Concepts and Technologies |

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Other pre-approved electives:

### Course | Title | Credits
--- | --- | ---
ENPM691 | Hacking of C programs and Unix Binaries | 12
ENPM694 | Networks and Protocols |
ENPM808 | Advanced Topics in Engineering (ENPM808X, ENPM808F, ENPM808B, ENPM808D) |