

# Electrical & Computer Engineering

## Computer Engineering

### Master of Engineering: 30 Credits / 10 Courses

Students must take five computer engineering core courses and 1 core course from either the communications and signal processing specialization or the software engineering program.

Four additional technical electives must be approved by the academic advisor prior to registration.

Students are encouraged to take a minimum of two ENPM-CE specific electives within this four.

Computer Engineering Core Courses (choose five):	
ENPM617 Compilers (formerly ENPM808T)	(every fall)
ENPM607 Computer System Design and Architecture	(every 1.5 years)
ENPM609 Microprocessor-Based Design	(every 1.5 years)
ENPM610 Digital VLSI Design	(every 1.5 years)
ENPM615 Embedded Systems	(every spring)
ENPM674 Design and Synthesis of Digital Systems	(every 1.5 years)
ENPM675 Operating System Design	(every other summer)
ENPM676 VLSI Testing and Design for Testability	(every other summer)

Additional Core Courses (choose one):	
ENPM600 Probability and Stochastic Processes for Engineers	(every fall)
ENPM601 Analog and Digital Communication Systems [ENPM600]	(every spring)
ENPM602 Data Networks	(every spring)
ENPM603 Theory and Applications of Digital Signal Processing	(every other fall)
ENPM 616 Wireless Communications: Concepts and Technologies	(every 1.5 years)
ENPM611 Software Engineering*	(every fall and spring)
ENPM612 System & Software Requirements* [ENPM611]	(every spring)
ENPM613 Software Design and Implementation* [ENPM611]	(every fall)
ENPM614 Software Testing and Maintenance* [ENPM611]	(every spring)
ENPM677 Wireless Sensor Networks	(every fall)
ENPM696 Reverse Software Engineering* [ENPM691]	(every fall)
ENPM808E Managing Software Engineering Projects*	(every spring)

Computer Engineering Pre-approved Technical electives (choose four):	
ENPM691 Hacking of C programs and Unix Binaries*	(every fall and spring)
ENPM694 Networks and Protocols*	(every fall)
ENPM808B Advanced Mobile Broadband Communications Systems and Standards	(every other fall)
ENPM808D Network Systems Design	(every other fall)
ENPM690 Robot Learning	(every spring)
ENPM808X Software Development for Robotics*	(every fall)
ENPM809P FPGA-based Digital System Design	
ENPM809X Data and Algorithms	(every other spring)

NOTE: Any courses not listed above must be approved by the Senior Academic Advisor **PRIOR** to registration.

KEY	
Online Option *	(offering information)
[Prerequisite course]	