

# Electrical & Computer Engineering

## Communications and Signal Processing

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

Students must take a minimum of five core courses from this area and one core course from the computer engineering specialization or the software engineering program. Four additional technical electives must be approved by the academic advisor prior to registration.

Communication and Signal Processing Core Courses (choose five):		
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)
ENPM677	Wireless Sensor Networks	(every fall)

Additional Core Courses (choose one):		
ENPM 607	Computer System Design and Architecture	(every 1.5 years)
ENPM 609	Microprocessor-Based Design	(every 1.5 years)
ENPM 610	Digital VLSI Design	(every 1.5 years)
ENPM615	Embedded Systems	(every spring)
ENPM674	Design and Synthesis of Digital Systems	(every 1.5 years)
ENPM 675	Operating System Design	(every other summer)
ENPM676	VLSI Testing and Design for Testability	(every other summer)
ENPM617	Compilers	(every fall)
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)
ENPM696	Reverse Software Engineering* [ENPM691]	(every fall)
ENPM808E	Managing Software Engineering Projects	(every spring)

Communication and Signal Processing Pre-Approved Technical electives (choose four):		
ENPM631	TCIP/IP Networking [ENPM602]	(every other fall)
ENPM632	Advanced TCIP/IP Networks [ENPM631]	(every other spring)
ENPM693	Network Security*	(every spring)
ENPM808B	Advanced Mobile Broadband Communications Systems and Standards	(every other fall)
ENPM808L	Analytics for Decision Support	(every spring)
ENPM808W	Data Science	(every fall)
ENPM808Y	Neural Networks	
ENPM808Z	Satellite Communications	(every other summer)
ENPM809F	Internet of Things	(every fall)
ENPM809G	Network Data Science	
ENPM809L	Sampling Theory and Analog to Digital Conversion	
ENPM809R	Software Defined Networking	

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

KEY	
Online Option *	(offering information)

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[Prerequisite course]