## **ELECTRICAL & COMPUTER ENGINEERING**

## **Requirements**

Master of Electrical and Computer Engineering (MECE) Degree Requirements

- 48 credit hours of course work as approved by the student's academic advisor.
- At least 32 credit hours must be upper-level ECE courses (ECE4xx or ECE5xx).
- No more than 12 credit hours of 400-level classes can count toward the MECE degree.

Note: The BSEE or BSCPE degrees do not allow Area Elective credits to double-count towards the MECE degree.

## **ECE Graduate Course Offerings**

Code	Title	Hours	
Communications			
ECE 412	Software Defined Radio	4	
ECE 414	Wireless Systems	4	
ECE 510	Error Correcting Codes	4	
ECE 511	Data Communications	4	
ECE 512	Probability, Random Processes, and Estimation	4	
Computer Architecture and Microcomputers			
ECE 433	Advanced Digital System Design with Verilog	4	
ECE 434	Embedded Linux	4	
ECE 530	Advanced Microcomputers	4	
ECE 534	Advanced Signal & Power Integrity	4	
ECE 531	Digital Test & Product Engineering	4	
ECE 532	Advanced Topics in Computer Architecture	4	
ECE 497	Special Topics in Electrical Engineering	1-10	
ECE 597	Special Topics in Electrical Engineering	1-6	
<b>Control Systems</b>	and Robotics		
ECE 420	Discrete-Time Control Systems	4	
ECE 425	Introduction to Mobile Robotics	4	
Electromagnetics			
ECE 540	Antenna Engineering	4	
ECE 541	Microwave/Millimeter-Wave Engineering	4	
ECE 542	Advanced Eletromagnetics	4	
ECE 597	Special Topics in Electrical Engineering	1-6	
Electronics and M	IEMS		
ECE 452	Power Electronics	4	
ECE 454	System Level Analog Electronics	4	
ECE 516	Introduction to MEMS: Fabrication & Application	s 4	
ECE 551	Digital Integrated Circuit Design	4	
ECE 552	Analog Integrated Circuit Design	4	
ECE 553	Radio-Frequency Integrated Circuit Design	4	
ECE 556	Power Electronics: DC Power Supplies	4	
ECE 557	Analog Test & Product Engineering	4	
ECE 558	Mixed-Signal Test & Product Engineering	4	

Power Systems		
ECE 452	Power Electronics	4
ECE 470	Power Systems Analysis I	4
ECE 471	Power Systems Analysis II	4
ECE 472	Power Systems II	4
ECE 473	Control of Power Systems	4
Signal and Image Processing		
ECE 480	Introduction to Image Processing	4
ECE 481	Electronic Music Synthesis	4
ECE 483	DSP System Design	4
ECE 580	Digital Signal Processing	4
ECE 582	Advanced Image Processing	4
ECE 584	Medical Imaging Systems	4