EE Technical Elective List

SYM	NUM	TITLE	Communication	Computing & Software	Controls & Robotics	Digital Design	Electromagnetics	Image & Info Processing	Materials	Microelectronics & Electronic Systems	Power & High Voltage
			CM	CS	CR	DD	EM	IP	MT	ME	PW
ECE	4193	Automotive Engineering								X	
ECE	4243	Physical Electronics							X	X	
ECE	4263	Principles of VLSI Design *(ECE 3724 & 3424)*				X				X	
ECE	4273	Microelectronics Device Design							X	X	
ECE	4283	Microelectronics Process Design							X	X	
ECE	4293	Nano-electronics							X	X	
ECE	4313	Antennas *(ECE 3323)*	X				X				
ECE	4323	Electromagnetic Compatibility					X				
ECE	4333	RF and Microwave Theory *(ECE 3323)*	X				X				
ECE	4413	Digital Signal Processing *(ECE 3443t)*	X	X				X			
ECE	4423	Introduction to Remote Sensing *(senior standing)*					X	X			
ECE	4433	Introduction to Radar *(ECE 3443)*		X			X	X		X	
ECE	4613	Power Transmission Systems *(ECE 3614)*					X				X
ECE	4633	Power Distribution Systems *(ECE 3614)*									X
ECE	4643	Power Systems Relaying & Control			X						X
ECE	4653	Introduction to Power Electronics *(ECE 3614 & 3424)*			X					X	X
ECE	4663	Insulation Coordination in Electric Power Systems *(credit or co-req ECE 4613)*							X		X
ECE	4673	Fundamentals of High Voltage Engineering *(ECE 3614)*							X		X
ECE	4713	Computer Architecture *(ECE 3724)*		X		X					
ECE	4723	Embedded Systems *(ECE 3724 and ECE 3424 or CSE 4153)*		X				X			
ECE	4743	Digital Systems Design *(ECE 3724)*		X		X					
ECE	4763	Information & Computer Security *(CSE 4733)*	X	X							
ECE	4813	Communications Theory *(ECE 3443)*	X								
ECE	4823	Digital Communications	X	X				X			
ECE	4833	Data Communications & Computer Networks *(CSE 1384 & ECE 3724)*	X	X							
ECE	4913	Feedback Control Systems I *(ECE 3443)*			X						
ECE	4923	Feedback Control Systems II *(ECE 3443)*		X	X			X			
ECE	4933	State Space Design & Instrumentation *(ECE 3443)*			X			X			
ECE	4943	Automation, Data Acquisition and PLCs *(ECE 3443)*		X	X						
ECE	4990	Robotics: Dynamics, Planning and Control *(ECE 3443)*			X						
ECE	4990	Sensor Processing for Autonomous Vehicles *(ECE 3443)*		X	X		X	X		X	
ECE	4990	Math Foundations of Machine Learning *(MA 3113)*		X				X			
ECE	4990	Intro to Quantum Computing									
ECE	4990	Microwave Remote Sensing	X				X	X			
ECE	4990	Bio-Nano-electronics *(ECE 3213)*							X	X	

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