

ECEGR #	Course Name	Pre & Co-Requisites OR Notes					
		Summer 19	Fall 19	Winter 20	Spring 20	Summer 21	Fall 21
1200	Digital Operations & Computation	X			X		Open to all university students
2000	Physical Computing with Python	X			X		PREQ: C- or better in MATH 1321 or equivalent
2010	Computer Tools	X	X		X	X	COREQ: ECEGR 2100
2100	Electrical Circuits I			X		X	PREQ: PHYS 1220; COREQ: MATH 2320
2210	Programmable Devices		X			X	PREQ: ECEGR 1200
2020	C++ Programming		X			X	PREQ: ECEGR 2000
2220	Microprocessor Design			X		X	PREQ: ECEGR 2210 and CPSC 1230
3000	Intro to Matlab		X	X		X	PREQ: MATH 1334 or MATH 1332. Transfers with 1 quarter of programming only.
3110	Electrical Circuits II	X			X		PREQ: ECEGR 2100; COREQ: MATH 2340
3111	Laboratory I: Circuits	X			X		COREQ: ECEGR 3110
3120	Semiconductor Devices and Circuits		X			X	PREQ: junior candidacy; COREQ: ECEGR 3110
3121	Laboratory II: Electronics		X			X	PREQ: ECEGR 2010 and ECEGR 3111; COREQ: ECEGR 3120
3210	Embedded Systems		X		X		PREQ: ECEGR 2220
3300	Fields and Waves			X		X	PREQ: PHYS 1230, MATH 2340, ECEGR 1000 OR ECEGR 3000, ECEGR 3110
3500	Electrical Energy Systems		X			X	PREQ: ECEGR 3110
3710	Signals and Systems			X		X	PREQ: ECEGR 1000 or 3000, ECEGR 3110, MATH 2340, MATH 2310
3711	Laboratory III: Signals and Systems			X		X	PREQ: ECEGR 3121; COREQ: ECEGR 3710
4110	Analog Electronic Circuits	X					PREQ: ECEGR 3120
4111	Advanced Electronics Laboratory						PREQ: permission of instructor
4120	Special Topics in Electronics						PREQ: ECEGR 4110
4130	Analog CMOS Integrated Circuits						PREQ: ECEGR 3120
4140	Introduction to VLSI Circuit Design					X	PREQ: ECEGR 1200 and ECEGR 3120
4150	Power Electronics					X	PREQ: ECEGR 3710 and ECEGR 3120
4160	Active Networks and Filters				X		PREQ: ECEGR 3710
4210	VHDL for Digital Design					X	PREQ: ECEGR 2210
4220	Advanced Digital Design				X		PREQ: ECEGR 2220
4410	Control Systems		X				PREQ: ECEGR 3710
4420	Robotic Manipulation	X					PREQ: MATH 2320; ECEGR 3000 or MEGR 2810
4510	Electromechanical Energy Conversion				X		PREQ: ECEGR 3500
4511	Electromech. Energy Conversion Lab		X				COREQ: ECEGR 4510
4520	Power Systems					X	PREQ: ECEGR 3500
4530	Renewable Energy Systems			X			PREQ: ECEGR 2100 or instructor permission
4610	Communication Systems					X	PREQ: ECEGR 3710 and MATH 2310
4611	Communications Laboratory					X	PREQ: ECEGR 4610
4620	Data Communications Networks			X			PREQ: ECEGR 1200; ECEGR 4910 - Computer Networks or CPSC 3500
4630	Wireless Communications Systems						PREQ: ECEGR 3710 and PHYS 1230
4640	Internet of Things		X				PREQ: ECEGR 2020
4701	Data Acquisition Laboratory						PREQ: ECEGR 1000 or ECEGR 3000, ECEGR 1200 & ECEGR 2010, or instr. perm.
4710	Digital Signal Processing				X		PREQ: ECEGR 3710
4711	Digital Signals Processing Laboratory					X	PREQ: ECEGR 3710; COREQ Course/s: ECEGR 4710
4720	Intro to Digital Image Processing					X	ECEGR 1200 and ECEGR 3000 or ECEGR 1000 or perm. of the instr.
4750	Machine Learning I	X			X		PREQ: MATH 2320; COREQ: MATH 2310
4760	Machine Learning II					X	PREQ: ECEGR 4750
4870	Engineering Design I	X			X		PREQ: advanced junior or senior standing in engineering
4880	Engineering Design II		X			X	PREQ: advanced junior or senior standing in engineering
4890	Engineering Design III			X		X	PREQ: advanced junior or senior standing in engineering
4910	Spec. Top. - Control System Lab			X			PREQ or COREQ: ECEGR 4410
4910	Spec. Top. - Electr Syst in Develop Contr					X	
4910	Spec. Top. - Computer Networks		X				
SCENG #							
1000	Intro to Engineering	X			X		None