

Changes may occur due to unforeseen circumstances. Please consult the department to confirm specific courses.
Always consult SUOnline under "Search for Classes" for final course offerings.

ECEGR #	Course Name							PREQs & COREQs OR Notes
		Fall 20	Winter 21	Spring 21	Fall 21	Winter 22	Spring 22	
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			PREQ or COREQ: ECEGR 2100
2100	Electrical Circuits I		X			X		PREQ: PHYS 1220; PREQ or 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		PREQ: MATH 1334 or MATH 1332. Transfers with 1 quarter of programming only.
3110	Electrical Circuits II	X			X			PREQ: ECEGR 2100; PREQ or 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 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		X					PREQ: permission of instructor
4120	Special Topics in Electronics							PREQ: ECEGR 4110
4130	Analog CMOS Integrated Circuits							PREQ: ECEGR 4110
4140	Introduction to VLSI Circuit Design	X						PREQ: ECEGR 1200 and ECEGR 3120
4150	Power Electronics							PREQ: ECEGR 3710 and ECEGR 3120
4160	Active Networks and Filters							PREQ: ECEGR 3710
4220	Advanced Digital Design							PREQ: ECEGR 2220
4410	Control Systems				X			PREQ: ECEGR 3710
4411	Control System Lab					X		PREQ or COREQ: ECEGR 4410
4420	Robotic Manipulators			X				PREQ: MATH 2320; ECEGR 3000 or MEGR 2810
4510	Electromechanical Energy Conversion							PREQ: ECEGR 3500
4511	Electromech. Energy Conversion Lab							PREQ: ECEGR 3500
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			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							PREQ: ECEGR 2020
4701	Data Acquisition Laboratory							PREQ: ECEGR 1000 or ECEGR 3000, ECEGR 1200 & ECEGR 2010, or instr. perm.
4710	Digital Signal Processing							PREQ: ECEGR 3710
4711	Digital Signals Processing Laboratory							PREQ: ECEGR 3710; COREQ Course/s: ECEGR 4710
4720	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. - Electr Syst in Develop Contr						X	
4910	Spec. Top. - Computer Networks		X					
4910	Spec. Top. - Mobile Robotics	X						
4910	Spec. Top. - Controls Laboratory							
4910	Spec. top. - Electrical System Operation							
SCENG #								
1000	Intro to Engineering	X			X			None