BEng. in Electrical Engineering Program (based on Calendar of 2022-23)

The Electrical Engineering Program consists of total of 120 credits including the Engineering Core (30.50 Credits) the Electrical Engineering Core (70.00 Credits), and Elective Courses chosen from Electrical Engineering Electives (minmum of 19.5 credits). Moreover, students should be member of C-Edge Program or Coop program and should complete one or three workterms, respectively.

term/year taken	30.50 Credits	Course	Engineering Core	Prerequisite Prerequisite	Co-requisite
	3.50	ELEC 273	Basic Circuit Analysis	PHYS 205	ENGR 213
	3.00	ENCS 282	Technical Writing and Communication	Engineering Writing Test (EWT), or ENCS 272 (Grade of C- or better)	
	1.50	ENGR 201	Professional Practice and Responsibility		
	1.50	ENGR 202	Sustainable Development and Environmental Stewardship		
	3.00	ENGR 213	Applied Ordinary Differential Equations	MATH 205	MATH 204
	3.00	ENGR 233	Applied Advanced Calculus	MATH 204, 205	
	3.00	ENGR 301	Engineering Management Principles and Economics		
	3.00	ENGR 371	Probability and Statistics in Engineering	ENGR 213, 233	
	3.00	ENGR 391	Numerical Methods in Engineering	ENGR 213, 233; COEN 243	
	3.00	ENGR 392	Impact of Technology on Society	ENCS 282; ENGR 201, 202	
	3.00			General Education Elective from section 71.110 of the Undergraduate Calendar	
term/year taken	70.00 Credits	Course	Electrical Core	Prerequisite	Co-requisite
	3.50	COEN 212	Digital Systems Design I	MATH 204	
	3.00	COEN 231	Introduction to Discrete Mathematics	MATH 204	
	3.50	COEN 243	Programming Methodology I	MATH 204	
	3.00		Programming Methodology II	COEN 243	
	3.50		Computer Organization and Software	COEN 212, 243	
	3.50		Digital Systems Design II	COEN 212, 231	
	3.00		Data Structures and Algorithms	COEN 231, 244	
	3.00		Continuous-Time Signals and Systems	ELEC 273; ENGR 213	
	3.00		Fundamentals of Applied Electromagnetics	ELEC 273	ENGR 233
	3.50		Electronics I	ELEC 273	
	3.50		Electronics II	ELEC 311; ELEC 242	
	3.50	ELEC 321	Introduction to Semiconductor Materials and Devices	CHEM 205; ENGR 213	
	3.50		Fundamentals of Electrical Power Engineering	ELEC 251, 273	
	3.50		Discrete-Time Signals and Systems	ELEC 242	
	3.00		Electromagnetic Waves and Guiding Structures	ELEC 251, 242, ENGR 233	
	3.50	ELEC 366	Telecommunciation Networks	COEN 352, ELEC 342; ENGR 371	
	3.50		Introduction to Digital Communications	ELEC 342; ENGR 371	
	3.50		Fundamentals of Control Systems	ELEC 342, ENGR 371	
	3.00		Introductory Engineering Team Design Project	ENCS 282; ENGR 213, 233	
	3.00		Electrical Engineering Product Design Project	Minimum of 45 credits in BEng (Electrical); COEN 244; ELEC 311; ENGR 290	
	4.00		Capstone Electrical Engineering Design Project	ENGR 301, 371; COEN 311; ELEC 342; ELEC 390; Minimum of 75 credits in BEng in Electrical	
	4.00		Capstone Liectrical Engineering Design Project	Engineering; C.Edge work term or one co-op work term. If pre-requisites are not satisfied,	
		Or ENICR400			
		ENGR490		permission of the Department is required.	
term/year taken	19.50 Credit	Course	Electrical Engineering Electives	Consult section 71.30.1 of the Undergraduate Calendar	Co-requisite