

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Course Sequence A: Applies to the Students enrolled in Fall 2023

YEARWISE COURSE LIST FOR COMPLETION OF GRADUATION REQUIREMENTS

1st Year		
Fall Term	Winter Term	Summer term
GENG-1101: Engineering I	CHEM-1103: Topics in General Chemistry	
GENG-1102: Engineering Graphics	GENG-1110: Engineering Mechanics I	
MATH-1270: Linear Algebra	GENG-1201: Cornerstone Design	
MATH-1720: Differential Calculus	GENG-1202: Introductory Electrical and Computer Engineering	
PHYS-1400: Introductory Physics I	MATH-1730: Integral Calculus	
Second Year		
Fall Term	Winter Term	Summer Term
GENG-2101: Engineering II	ELEC-2170: Digital Logic Design	GENG-2980: Work Term I (Co-Op Students Only)
PHYS-2100: Topics in Physics	ELEC-2200: Circuit Analysis II	
ELEC-2141: Circuit Analysis I	ELEC-2260: Electronics I	
ELEC-2240: Signals and Systems	ELEC-2280: Electromagnetic Fields	
MATH-2780: Vector Calculus	ELEC-2320: Software Fundamentals	
MATH-2790: Differential Equations	GENG-2220: Engineering Probability & Statistics	
3rd Year		
Fall Term	Winter Term	Summer Term
ELEC-3000: Engineering Design	GENG-3980: Work Term II (Co-Op Students Only)	ELEC-3010: Computer Aided Analysis
ELEC-3130: Electromechanical Systems		ELEC-3030: Physical Electronics
ELEC-3160: Electronics II		ELEC-3040: Embedded System Design
ELEC-3270: Microprocessors		ELEC-3240: Control Systems I
GENG-3130: Engineering Economics		ELEC-3290: Analog Communications
*One complementary studies course from the Faculty of Engineering's approved list		
4th year		
Fall Term	Winter Term	Summer Term
GENG-4980: Work Term III (Co-Op Students Only)	ELEC-4000A: Capstone Design Project	ELEC-4000B: Capstone Design Project
	ELEC-4310: Control Systems II	ELEC-4320: EM Waves and Radiating Systems
	ELEC-4570: Fundamentals of Digital Signal Processing	**two (2) or three (3) courses from the elective course list above
	*One complementary studies course from the Faculty of Engineering's approved list (New)	
	**one (1) or two (2) courses from the elective course list below:	

4th year electives course list

ELEC-4190: Digital Communications
ELEC-4330: Digital Integrated Circuit Design
ELEC-4340: Automotive Electronics
ELEC-4350: Microelectromechanical Systems
ELEC-4360: Computer Communications
ELEC-4370: Intelligent Computing
ELEC-4380: Coding and Information Theory
ELEC-4390: Multimedia Systems
ELEC-4400: Wireless Communications
ELEC-4440: Analog Integrated Circuit Design
ELEC-4450: Power Electronics
ELEC-4470: Computer Networks Security
ELEC-4480: Digital Computer Architecture
ELEC-4490: Sensor and Vision Systems
ELEC-4500: Power Systems I
ELEC-4600: Power Systems II