Electrical and Computer Engineering integrated path courses

Course code	Course name	**Undergraduate program** Student must be registered in one of these undergraduate programs		**Graduate program** Courses will count toward one of these graduate programs			
		Computer Engineering (BEng)	Electrical Engineering (BEng)	Electrical & Computer Engineering (MEng)	Electrical & Computer Engineering (MASc)	Cybersecurity Engineering (MEng)	AI for Systems Engineering (MEng)
COEN 6313	Programming on the Cloud	✓	✓	✓	✓	✓	✓
COEN 6341	Embedded Systems Design	✓	✓	✓	✓	✓	✓
COEN 6511	VLSI Circuit Design	✓	✓	✓	✓		
COEN 6541	Functional Hardware Verification	✓	✓	✓	✓		
COEN 6561	Foundations of Cyber-Physical Systems	✓	✓	✓	✓	✓	✓
COEN 6741	Computer Architecture and Design	✓	✓	✓	✓		
COEN 6761	Software Testing and Validation	✓	✓	✓	✓		
COEN 6841	Internet of Things	✓	✓	✓	✓	✓	✓
COEN 6851	Software-Defined Networking	✓	✓	✓	✓	✓	✓
ELEC 691	Mixed-Signal Integrated Circuits for Clocking and Synchronization	✓	✓	✓	✓		
ELEC 6061	Real-time Computer Control Systems	✓	✓	✓	✓		
ELEC 6071	Mixed-Signal VLSI for Communication System	✓	✓	✓	✓		
ELEC 6081	Modern Analog Filter Design	✓	✓	✓	✓		
ELEC 6141	Wireless Communications	✓	✓	✓	✓	✓	✓
ELEC 6221	Solid State Devices	✓	✓	✓	✓		
ELEC 6231	Design of Integrated Circuit Components	✓	✓	✓	✓		
ELEC 6241	VLSI Process Technology	✓	✓	✓	✓		
ELEC 6341	Antennas	✓	✓	✓	✓		
ELEC 6391	Microwave Engineering	✓	✓	✓	✓		
ELEC 6411	Power Electronics I	✓	✓	✓	✓		
ELEC 6421	Renewable Energy Systems	✓	✓	✓	✓		✓
ELEC 6461	Power Electronics II	✓	✓	✓	✓		
ELEC 6651	Advanced Signal Processing	✓	✓	✓	✓		
ELEC 6661	Medical Image Processing	✓	✓	✓	✓		
ELEC 6671	Biological Signal Processing	✓	✓	✓	✓		
ELEC 6821	Fundamentals Network Security & Mngement	✓	✓	✓	✓		
ENCS 6161	Probability and Stochastic Processes	✓	✓	✓	✓	✓	✓
ENGR 6131	Linear Systems	✓	✓	✓	✓		