

COMPUTER ENGINEERING: ELECTIVES

****Note - Information on this page may be out of date**

**Please view the current 2022-2023 Academic Calendar here: <https://calendar.engineering.queensu.ca/index.php> (<https://calendar.engineering.queensu.ca/>)

Electives List A

Code	Title	Units
ELEC 224	Continuous-Time Signals and Systems	3.75
ELEC 324	Discrete-Time Signals and Systems	4.00
ELEC 344	Sensors and Actuators	3.75
ELEC 353	Electronics II	4.25
ELEC 372	Numerical Methods and Optimization	3.50
ELEC 408	Biomedical Signal and Image Processing	3.00
ELEC 409	Bioinformatic Analytics	3.00
ELEC 421	Digital Signal Processing: Filters and System Design (Not offered 2020-2021)	4.00
ELEC 422	Digital Signal Processing: Random Models and Applications	3.50
ELEC 425	Machine Learning and Deep Learning	3.50
ELEC 431	Power Electronics	3.25
ELEC 443	Linear Control Systems	4.25
ELEC 444		3.25
ELEC 448	Introduction To Robotics or MECH 456 Introduction To Robotics	3.50
ELEC 451	Digital Integrated Circuit Engineering	3.25
ELEC 461	Digital Communications	3.50
ELEC 464	Wireless Communications (Not offered 2020-2021)	3.00
ELEC 470	Computer System Architecture	3.50
ELEC 472	Artificial Intelligence and Interactive Systems	3.50
ELEC 473	Cryptography and Network Security	3.00
ELEC 474	Machine Vision	3.50
ELEC 497	Research Project	3.50
SOFT 423	Software Requirements	3.00
SOFT 437	Performance Analysis	3.00

Electives List B

Code	Title	Units
CMPE 204	Logic For Computing Science	3.00
CMPE 251	Data Analytics	3.00
CMPE 320	Fndmnts Software Development	4.00

CMPE 322	Software Architecture	4.00
CMPE 325	Human-Computer Interaction	3.00
CMPE 327	Software Quality Assurance	3.00
CMPE 332	Database Management Systems	3.00
CMPE 351	Advanced Data Analytics	3.00
CMPE 422	Formal Methods In Software Eng	3.00
CMPE 425	Advanced User Interface Design	3.00
CMPE 432	Advanced Database Systems	3.00
CMPE 434	Distributed Systems (Not offered this year)	3.00
CMPE 452	Neural Networks and Genetic Algorithms	3.00
CMPE 454	Computer Graphics	3.00
CMPE 457	Image Processing & Computer	3.00
CMPE 458	Programming Language Processor	4.00
APSC 250	Biology Through an Engineering Lens	3.50
ENPH 336	Solid State Devices	3.25

Electives List C

Code	Title	Units
APSC 303	Professional Internship	3.50
APSC 400	Technology, Engineering & Management (TEAM)	7.00
APSC 401	Interdisciplinary Projects	4.50