

Electrical Engineering: Smart Grid Specialization 2018-2019

| Year | Course | Course | Course | Course | Course | Course |
|------|---|--|--|--|--|--|
| 1-1 | COMM 1050U Technical Communications | ENGR 1015U Introduction to Engineering | MATH 1010U Calculus I | MATH 1850U Linear Algebra for Engineers (Coreq: MATH 1010U) | PHY 1010U Physics I | |
| 1-2 | CHEM 1800U Chemistry for Engineers | ENGR 1025U Engineering Design (ENGR 1015U) | ENGR 1200U Introduction to Programming for Engineers | MATH 1020U Calculus II (MATH 1010U) | PHY 1020U Physics II (PHY 1010U) | SSCI 1470U Impact of Science and Technology on Society |
| 2-1 | ELEE 2110U Discrete Mathematics for Engineers (MATH 1020U, MATH 1850U) | ELEE 2200U Electrical Engineering Fundamentals (MATH 1020U, MATH 1850U, PHY 1020U) | MATH 2860U Differential Equations for Engineers (MATH 1020U, Coreq: MATH 1850U) | MECE 2640U Thermodynamics and Heat Transfer (MATH 1020U, PHY 1010U) | SOFE 2710U Object Oriented Programming and Design (ENGR 1200U) | |
| 2-2 | ELEE 2210U Circuit analysis (ELEE 2200U, MATH 2860U) | ELEE 2250U Introductory Electronics (ELEE 2200U) | ELEE 2450U Digital Systems (ELEE 2110U) | ELEE 2530U Complex Analysis for Engineers (MATH 2860U) | ELEE 2520U Fundamentals of Electromagnetics (ELEE 2200U, MATH 2860U) | ENGR 2100U Computational Engineering Applications (ENGR 1200U, MATH 1850U, MATH 2860U) |
| 3-1 | ELEE 3110U Signals and Systems (ENGR 2100U, ELEE 2530U, ELEE 2210U) | ELEE 3230U Electronic Circuit Design (ELEE 2250U) | ELEE 3240U Applications for Electromagnetics (ELEE 2520U, ELEE 2530U) | ELEE 3250U Electric Machines (ENGR 2100U, Coreq: ELEE 3240U) | ELEE 3450U Microprocessors and Computer Architecture (ELEE 2450U) | Liberal Studies Elective ** |
| 3-2 | ELEE 3070U Probability and Random Signals (ELEE 3110U) | ELEE 3100U Introduction to Control Systems (ELEE 3110U) | ELEE 3130U Communication Systems (ELEE 3110U) | ELEE 3180U Design Principles & Project Management in Electrical Engineering (ELEE 2250U, ELEE 2450U, ELEE 2520U, SOFE 2710U) | ELEE 3260U Power Systems (ELEE 3250U) | ENGR 3360U Engineering Economics |
| 4-1 | ELEE 4115U Fundamentals of Smart Grid (ELEE 3260U) | ELEE 4150U Advanced Control Systems (ELEE 3100U) | ELEE 4420U Digital Signal Processing (ELEE 3110U) | ENGR 4940U Capstone Systems Design for Electrical, Computer and Software Engineering I (Successful completion of all non-elective courses in year three) | Liberal Studies Elective ** | |
| 4-2 | ELEE 4120U Introduction to Power Electronics (ELEE 3100U, ELEE 3230U, ELEE 3250U) | ELEE 4125U Smart Grid Networking and Security (ELEE 4115U) | ELEE 4140U Power System Protection Relaying (ELEE 3100U, ELEE 3230U, ELEE 3250U, ELEE 3260U) | ENGR 4760U Ethics, Law and Professionalism for Engineers | ENGR 4941U Capstone Systems Design for Electrical, Computer and Software Engineering II (ENGR 4940U) | |

**A list of approved Liberal Studies Electives can be found on engineering.ontariotechu.ca

Updated on June 2019