Mechatronics Engineering 2020-2021

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	PHY 1010U Physics I	
1-2	CHEM 1800U Chemistry for Engineers (Credit restrictions: CHEM 1010U/CHEM 1020U/CHEM 1110U)	ENGR 1025U Engineering Design (ENGR 1015U)	ENGR 1200U Introduction to Programming for Engineers (Credit Restriction: INFR 1100U)	MATH 1020U Calculus II (MATH 1010U)	PHY 1020U Physics II (PHY 1010U)	SSCI 1470U Impact of Science and Technology on Society
2-1	ELEE 2200U Electrical Engineering Fundamentals (MATH 1020U, PHY 1020U, MATH 1850U)	MATH 2860U Differential Equations for Engineers (MATH 1020U, Coreq: MATH 1850U)	MECE 2230U Statics (MATH 1020U, PHY 1010U)	MECE 2310U Concurrent Engineering and Design (ENGR 3200U or ENGR1025U)	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)	MATH 2070U Numerical Methods (MATH 1020U, MATH 1850U or MATH 2050U)	MECE 2420U Solid Mechanics I (MECE 2230U)	MECE 2430U Dynamics (MATH 1850U, MECE 2230U)	STAT 2800U Statistics and Probability for Engineers (MATH 1020U)
3-1	ELEE 3230U Electronic Circuit Design (ELEE 2250U)	MANE 2220U Structure and Properties of Materials (CHEM 1800U)	MECE 2640U Thermodynamics and Heat Transfer (MATH 1020U, PHY 1010U)	MECE 3030U Computer-Aided Design (MECE 2310U, MECE 2420U)	MECE 3270U Kinematics and Dynamics of Machines (MECE 2430U or ENGR 2020U)	MECE 3350U Control Systems (ELEE 2790U or ELEE 2210U, MATH 2860U)
3-2	ENGR 3360U Engineering Economics	MECE 2860U Fluid Mechanics (PHY 1010U, MATH 1020U)	MECE 3220U Machine Design (MECE 3270U, MECE 2310U, MECE 2420U)	METE 3100U Actuators and Power Electronics (MECE 3350U, ELEE 2250U)	METE 3200U Sensors and Instrumentation (ELEE 3230U)	METE 3350U Microprocessors and Digital Systems (SOFE 2710U)
4-1	ENGR 4950U Capstone Systems Design for Mechanical, Automotive, Mechatronics and Manufacturing Engineering I (Successful completion of all non-elective courses in year three)	MANE 4280U Robotics & Automation (MECE 3350U)	METE 4100U Mechatronics Design (METE 3100U, METE 3200U, METE 3350U)	METE 4400U Introduction to Real-Time Embedded Systems (METE 3350U)	Engineering Elective	Liberal Studies Elective **
4-2	ENGR 4760U Ethics, Law and Professionalism for Engineers	ENGR 4951U Capstone Systems Design for Mechanical, Automotive, Mechatronics and Manufacturing Engineering II (ENGR 4950U)	METE 4200U Industrial Automation (MANE 4280U)	Engineering Elective	Liberal Studies Elective **	

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

Updated April 2020