



**DEGREE CHECKLIST
2022-2023**

**BACHELOR OF ENGINEERING (BEng)
MECHANICAL ENGINEERING**

NAME

STUDENT #

Students are strongly advised to refer to online Academic Calendars before enrolling into courses: <http://calendars.registrar.yorku.ca/>

		COURSES		CREDITS EARNED	GRADE
First Year Courses					
	<input type="checkbox"/>	SC/CHEM 1100 4.00	Chemistry and Materials Science for Engineers		
	<input type="checkbox"/>	LE/EECS 1011 3.00	Computational Thinking Through Mechatronics		
	<input type="checkbox"/>	LE/EECS 1021 3.00	Object Oriented Programming from Sensors to Actuators		
	<input type="checkbox"/>	LE/ENG 1101 4.00	Renaissance Engineer 1: Ethics, Communication and Problem Solving		
	<input type="checkbox"/>	LE/ENG 1102 4.00	Renaissance Engineer 2: Engineering Design Principles		
	<input type="checkbox"/>	LE/ESSE 1012 3.00	The Earth Environment		
	<input type="checkbox"/>	SC/MATH 1013 3.00	Applied Calculus I		
	<input type="checkbox"/>	SC/MATH 1014 3.00	Applied Calculus II		
	<input type="checkbox"/>	SC/MATH 1025 3.00	Applied Linear Algebra		
	<input type="checkbox"/>	SC/PHYS 1800 3.00	Engineering Mechanics		
	<input type="checkbox"/>	SC/PHYS 1801 3.00	Electricity, Magnetism and Optics for Engineers		
Second Year Courses					
	<input type="checkbox"/>	LE/ENG 2001 3.00	Engineering Projects: Management, Economics & Safety		
	<input type="checkbox"/>	LE/ENG 2003 3.00	Effective Engineering Communication		
	<input type="checkbox"/>	SC/MATH 2015 3.00	Applied Multivariate and Vector Calculus		
	<input type="checkbox"/>	SC/MATH 2271 3.00	Differential Equations for Scientists and Engineers		
	<input type="checkbox"/>	SC/MATH 2930 3.00	Introduction to Probability and Statistics		
	<input type="checkbox"/>	LE/MECH 2201 3.00	Thermodynamics		
	<input type="checkbox"/>	LE/MECH 2202 3.00	Heat and Flow Engineering Principles		
	<input type="checkbox"/>	LE/MECH 2301 3.00	Mechanics of Materials 1		
	<input type="checkbox"/>	LE/MECH 2302 3.00	Dynamics		
	<input type="checkbox"/>	LE/MECH 2401 3.00	Engineering Graphics & CAD Modelling		
	<input type="checkbox"/>	LE/MECH 2412 3.00	Mini Design Project 1		
	<input type="checkbox"/>	LE/MECH 2502 3.00	Instrumentation and Measurement Techniques		
Complementary Studies (3 credits)	<input type="checkbox"/>				
BEng, Mechanical Engineering				Page 1 of 2	

				COURSES		CREDITS EARNED	GRADE
Third Year Courses							
	<input type="checkbox"/>	LE/EECS 3505 3.00	Electrical Systems for Mechanical Engineers				
	<input type="checkbox"/>	LE/ESSE 2210 3.00 or ES/ENVS 2150 3.00	Engineering and the Environment or Environment, Technology and Sustainable Society I				
	<input type="checkbox"/>	LE/MECH 2112 3.00	Mechanical Engineering: Professionalism and Society				
	<input type="checkbox"/>	LE/MECH 3201 3.00	Engineering Thermodynamics				
	<input type="checkbox"/>	LE/MECH 3202 3.00	Fluid Dynamics				
	<input type="checkbox"/>	LE/MECH 3203 3.00	Heat Transfer				
	<input type="checkbox"/>	LE/MECH 3302 3.00	Mechanisms for Mechanical Systems				
	<input type="checkbox"/>	LE/MECH 3401 3.00	Mini Design Project 2				
	<input type="checkbox"/>	LE/MECH 3409 3.00	Machine Elements Design				
	<input type="checkbox"/>	LE/MECH 3502 3.00	Solid Mechanics and Materials Laboratory				
	<input type="checkbox"/>	LE/MECH 3503 3.00	Macro- and Micro-Manufacturing Methods				
	<input type="checkbox"/>	LE/MECH 3504 3.00	Thermofluid Laboratory				
Complementary Studies (3 credits)	<input type="checkbox"/>						
Fourth Year Courses							
	<input type="checkbox"/>	LE/ENG 3000 3.00	Professional Engineering Practice				
	<input type="checkbox"/>	LE/ENG 4000 6.00	Engineering Project				
	<input type="checkbox"/>	LE/ENG 4550 3.00	Introduction to Control Systems				
	<input type="checkbox"/>	LE/MECH 4401 3.00	System Level Engineering				
	<input type="checkbox"/>	LE/MECH 4402 4.00	Simulation Tools for Design & Analysis				
	<input type="checkbox"/>	LE/MECH 4502 3.00	Vibrations and Actuators				
	<input type="checkbox"/>	LE/MECH 4504 3.00	Life Cycle Analysis and Sustainability				
6 credits from: LE/MECH 4201 3.00, LE/MECH 4202 3.00, LE/MECH 4203 3.00, LE/MECH 4301 3.00, LE/MECH 4510 3.00, LE/MECH 4511 3.00, LE/MECH 4512 3.00, LE/ENG 4650 3.00	<input type="checkbox"/>						
	<input type="checkbox"/>						
Complementary Studies (6 credits)	<input type="checkbox"/>						
	<input type="checkbox"/>						
TOTAL CREDITS & CGPA (minimum overall GPA of 5.00 required to graduate in the BEng program)							
<p>General Prerequisite: Most 2000-, 3000-, and 4000-level EECS courses require the following general (that is, common) prerequisites, in addition to other course-specific prerequisites: a cumulative grade point average of 4.50 or better over all completed major EECS courses. Note: "Major" courses are all EECS courses with second digit other than 5 and include LE/EECS 1028 3.00 (cross-listed to: SC/MATH 1028 3.00) and LE/EECS 1019 3.00 (cross-listed to: SC/MATH 1019 3.00).</p>							
<p>Participation in the Co-Op Program is highly recommended for all engineering students, but is not a degree requirement.</p>							
Notes							
BEng, Mechanical Engineering						Page 2 of 2	