



**DEGREE CHECKLIST
2019-2020**

**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"/>		
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	COURSES		CREDITS EARNED	GRADE
Third Year Courses				
	<input type="checkbox"/>	LE/EECS 3505 3.00	Electrical Systems for Mechanical Engineers	
	<input type="checkbox"/>	ES/ENVS 2150 3.00 or LE/ESSE 2210 3.00	Environment, Technology and Sustainable Society I OR Engineering and the Environment	
	<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 & Mass 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 4201 3.00	Transport Phenomena	
	<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	
	<input type="checkbox"/>	LE/MECH 4510 3.00 or LE/MECH 4511 3.00 or LE/MECH 4512 3.00	Advanced Mechanical Technology or Advanced Technologies (International Experience) or Principles of Bioengineering	
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)				
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).				
Participation in the Co-Op Program is highly recommended for all engineering students, but is not a degree requirement.				
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