



**DEGREE CHECKLIST  
2019-2020**

**BACHELOR OF ENGINEERING (BEng)  
GEOMATICS ENGINEERING**

**NAME**

**STUDENT #**

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

	<b>COURSES</b>	<b>CREDITS EARNED</b>	<b>GRADE</b>
<b>First Year</b>			
<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		
<b>Second Year Courses</b>			
<input type="checkbox"/>	LE/CIVL 2150 3.00 Civil Engineering Graphics		
<input type="checkbox"/>	LE/ESSE 2220 3.00 Algorithmic and Computational methods for Geomatics and Space Engineering		
<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"/>	LE/ESSE 2615 3.00 Fundamentals of Geomatics Engineering		
<input type="checkbox"/>	LE/ESSE 2620 3.00 Fundamentals of Surveying		
<input type="checkbox"/>	LE/ESSE 2630 3.00 Field Surveys		
<input type="checkbox"/>	LE/ESSE 2640 3.00 Adjustment Calculus		
<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"/>	SC/PHYS 2020 3.00 Electricity and Magnetism		
<b>Complementary Studies (3 credits)</b>		<input type="checkbox"/>	

	COURSES		CREDITS EARNED	GRADE
<b>Third Year Courses</b>				
	<input type="checkbox"/>	LE/ENG 3000 3.00 Professional Engineering Practice		
	<input type="checkbox"/>	LE/ESSE 3020 3.00 Global Geophysics and Geodesy		
	<input type="checkbox"/>	LE/ESSE 3600 3.00 Geographical Information Systems (GIS) and Spatial Analysis		
	<input type="checkbox"/>	LE/ESSE 3610 3.00 Geodetic Concepts		
	<input type="checkbox"/>	LE/ESSE 3630 3.00 Analysis of Overdetermined Systems		
	<input type="checkbox"/>	LE/ESSE 3640 3.00 Geodetic Surveys		
	<input type="checkbox"/>	LE/ESSE 3650 3.00 Photogrammetry		
	<input type="checkbox"/>	LE/ESSE 3660 3.00 Advanced Field Surveys		
	<input type="checkbox"/>	LE/ESSE 3670 3.00 Global Navigation Satellite Systems		
	<input type="checkbox"/>	LE/ESSE 4020 3.00 Time Series and Spectral Analysis		
	<input type="checkbox"/>	LE/ESSE 4220 3.00 Remote Sensing of the Earth's Surface		
	<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		
<b>Complementary Studies (3 credits)</b>	<input type="checkbox"/>			
<b>Fourth Year Courses</b>				
	<input type="checkbox"/>	LE/ENG 4000 6.00 Engineering Project		
	<input type="checkbox"/>	LE/ESSE 4600 3.00 Geographical Information Systems (GIS) & Data Integration		
	<input type="checkbox"/>	LE/ESSE 4620 3.00 Physical and Space Geodesy		
	<input type="checkbox"/>	LE/ESSE 4630 3.00 Image Processing for Remote Sensing and Photogrammetry		
	<input type="checkbox"/>	LE/ESSE 4640 3.00 Digital Terrain Modeling		
<b>Complementary Studies (6 credits)</b>	<input type="checkbox"/>			
	<input type="checkbox"/>			
<b>Two of:</b> LE/ESSE 4660 3.00, LE/ESSE 4680 3.00 or LE/ESSE 4690 3.00	<input type="checkbox"/>			
	<input type="checkbox"/>			
<b>Two of:</b> LE/ESSE 4615 3.00, LE/ESSE 4650 3.00, LE/ESSE 4670 3.00 or LE/ESSE 4695 3.00	<input type="checkbox"/>			
	<input type="checkbox"/>			
<b>TOTAL CREDITS &amp; CGPA (minimum overall GPA of 5.00 required to graduate in the BEng program)</b>				
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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