



**DEGREE CHECKLIST
2018-2019**

**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/>

	COURSES	CREDITS EARNED	GRADE
First Year			
<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/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	
<input type="checkbox"/>			
Complementary Studies (3 credits)			

	COURSES		CREDITS EARNED	GRADE
Third Year Courses				
	<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		
Complementary Studies (3 credits)	<input type="checkbox"/>			
Fourth Year Courses				
	<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		
Complementary Studies (6 credits)	<input type="checkbox"/>			
	<input type="checkbox"/>			
Two of: LE/ESSE 4660 3.00, LE/ESSE 4680 3.00 or LE/ESSE 4690 3.00	<input type="checkbox"/>			
	<input type="checkbox"/>			
Two of: 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"/>			
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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