



**DEGREE CHECKLIST  
2017-2018**

**BACHELOR OF ENGINEERING (BEng)  
CIVIL 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 Courses</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 2000 3.00 Civil Engineering Design Project		
	<input type="checkbox"/>	LE/CIVL 2120 3.00 Civil Engineering Materials		
	<input type="checkbox"/>	LE/CIVL 2150 3.00 Civil Engineering Graphics		
	<input type="checkbox"/>	LE/CIVL 2210 4.00 Fluid Mechanics		
	<input type="checkbox"/>	LE/CIVL 2220 4.00 Mechanics of Materials		
	<input type="checkbox"/>	LE/CIVL 2240 3.00 Introduction to Environmental 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 2620 3.00 Fundamentals of Surveying		
	<input type="checkbox"/>	LE/ESSE 2630 3.00 Field Surveys		
	<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		
<b>BEng, Civil Engineering</b>			<b>Page 1 of 3</b>	

	<b>COURSES</b>		<b>CREDITS EARNED</b>	<b>GRADE</b>
<b>Third Year Courses</b>				
	<input type="checkbox"/>	LE/CIVL 3110 3.00 Soil Mechanics		
	<input type="checkbox"/>	LE/CIVL 3120 4.00 Hydraulics		
	<input type="checkbox"/>	LE/CIVL 3130 3.00 Structural Analysis		
	<input type="checkbox"/>	LE/CIVL 3140 3.00 Civil Engineering Computational Methods		
	<input type="checkbox"/>	LE/CIVL 3210 3.00 Geotechnical Engineering		
	<input type="checkbox"/>	LE/CIVL 3220 3.00 Hydrology		
	<input type="checkbox"/>	LE/CIVL 3230 3.00 Introduction to Structural Design		
	<input type="checkbox"/>	LE/CIVL 3240 3.00 Sanitary and Environmental Engineering		
	<input type="checkbox"/>	LE/CIVL 3250 3.00 Transportation Engineering		
	<input type="checkbox"/>	LE/ENG 3000 3.00 Professional Engineering Practice		
	<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/CIVL 4110 3.00 Civil Engineering Project Management		
	<input type="checkbox"/>	LE/CIVL 4210 3.00 Civil Engineering for a Sustainable Future		
	<input type="checkbox"/>	LE/CIVL 4000 6.00 Civil Engineering Capstone Design Project		
<b>Complementary Studies (9 credits)</b>	<input type="checkbox"/>			
	<input type="checkbox"/>			
	<input type="checkbox"/>			
<b>Technical Electives</b>				
Four Technical Electives from Group A to E, with a maximum of 2 from the same group; and One Technical Elective from Group F (for a total of 5):				
<b>Group A - Structures</b>	<input type="checkbox"/>	LE/CIVL 4001 3.00 Advanced Structural Analysis		
	<input type="checkbox"/>	LE/CIVL 4002 3.00 Reinforced Concrete Design		
	<input type="checkbox"/>	LE/CIVL 4003 3.00 Structural Steel Design		
	<input type="checkbox"/>	LE/CIVL 4004 3.00 Structural Dynamics and Earthquake Engineering		
<b>Group B - Geotechnical</b>	<input type="checkbox"/>	LE/CIVL 4011 3.00 Geotechnical Modelling		
	<input type="checkbox"/>	LE/CIVL 4012 3.00 Mechanics of Unsaturated Soils		
	<input type="checkbox"/>	LE/CIVL 4013 3.00 Hydrogeology		
	<input type="checkbox"/>	LE/CIVL 4014 3.00 Rock Mechanics		

	<b>COURSES</b>	<b>CREDITS EARNED</b>	<b>GRADE</b>
<b>Group C - Hydrotechnical</b>	<input type="checkbox"/> LE/CIVL 4021 3.00 Hydraulic Structures		
	<input type="checkbox"/> LE/CIVL 4022 3.00 Water Resources Engineering		
<b>Group D - Transportation</b>	<input type="checkbox"/> LE/CIVL 4031 3.00 Pavement Materials and Design		
	<input type="checkbox"/> LE/CIVL 4032 3.00 Urban Transportation Planning and Evaluation		
	<input type="checkbox"/> LE/CIVL 4033 3.00 Municipal Planning		
<b>Group E - Environmental</b>	<input type="checkbox"/> LE/CIVL 4041 3.00 Landfill Design		
	<input type="checkbox"/> LE/CIVL 4042 3.00 Environmental Impact Assessment and Sustainability		
	<input type="checkbox"/> LE/CIVL 4043 3.00 Advanced Sanitary and Environmental Engineering		
<b>Group F - Other Engineering Disciplines: Any 3rd or 4th year engineering course from outside Civil Engineering to be approved by the Civil Engineering UPD</b>	<input type="checkbox"/>		
	<input type="checkbox"/>		
	<input type="checkbox"/>		
	<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.

**Notes**