



**DEGREE CHECKLIST  
2019-2020**

**BACHELOR OF SCIENCE (BSc Spec Hons)  
EARTH & ATMOSPHERIC SCIENCE  
Specialized Honours (Geomatics Science Stream)**

**NAME**

**STUDENT #**

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

PREREQUISITES/COREQUISITES	COURSES		CREDITS EARNED	GRADE
<b>First Year Courses</b>				
	<input type="checkbox"/>	LE/EECS 1012 3.00 Net-Centric Introduction to Computing		
	<input type="checkbox"/>	LE/EECS 1541 3.00 Introduction to Computing for the Physical Sciences		
	<input type="checkbox"/>	LE/ESSE 1010 3.00 The Dynamic Earth and Space Geodesy		
	<input type="checkbox"/>	LE/ESSE 1011 3.00 Introduction to Atmospheric Science		
	<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 1010 6.00 Physics		
<b>3 credits of Non-Science (or Electives)</b>	<input type="checkbox"/>			
<b>Second Year Courses</b>				
	<input type="checkbox"/>	LE/ESSE 2030 3.00 Geophysics and Space Science		
	<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 & Vector Calculus		
	<input type="checkbox"/>	SC/MATH 2271 3.00 Differential Equations for Scientists and Engineers		
	<input type="checkbox"/>	SC/MATH 2930 3.00 Introductory Probability and Statistics		
	<input type="checkbox"/>	SC/PHYS 2020 3.00 Electricity and Magnetism		
<b>3 credits of Non-Science (or Electives)</b>	<input type="checkbox"/>			

**NOTES**

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	COURSES		CREDITS EARNED	GRADE
<b>Third Year Courses</b>				
	<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 3650 3.00	Photogrammetry	
	<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	
<b>6 credits of Non-Science (or Electives)</b>	<input type="checkbox"/>			
	<input type="checkbox"/>			
<b>6 Credits from the list below (toward a total of 24 credits from the list):</b> LE/ESSE 3630 3.00, LE/ESSE 3640 3.00, LE/ESSE 3660 3.00, LE/ESSE 4000 3.00, LE/ESSE 4000 6.00, LE/ESSE 4615 3.00, LE/ESSE 4620 3.00, LE/ESSE 4630 3.00, LE/ESSE 4640 3.00, LE/ESSE 4650 3.00, LE/ESSE 4660 3.00, LE/ESSE 4670 3.00, LE/ESSE 4680 3.00, LE/ESSE 4690 3.00, LE/ESSE 4695 3.00	<input type="checkbox"/>			
	<input type="checkbox"/>			
<b>Fourth Year Courses</b>				
	<input type="checkbox"/>	LE/ESSE 4600 3.00	Geographical Information Systems (GIS) and Data Integration	
<b>18 Additional Credits from the list below (for a total of 24 credits from the list):</b> LE/ESSE 3630 3.00, LE/ESSE 3640 3.00, LE/ESSE 3660 3.00, LE/ESSE 4000 3.00, LE/ESSE 4000 6.00, LE/ESSE 4615 3.00, LE/ESSE 4620 3.00, LE/ESSE 4630 3.00, LE/ESSE 4640 3.00, LE/ESSE 4650 3.00, LE/ESSE 4660 3.00, LE/ESSE 4670 3.00, LE/ESSE 4680 3.00, LE/ESSE 4690 3.00, LE/ESSE 4695 3.00	<input type="checkbox"/>			
	<input type="checkbox"/>			
	<input type="checkbox"/>			
	<input type="checkbox"/>			
	<input type="checkbox"/>			
	<input type="checkbox"/>			
<b>9 Elective credits (or Non-Science)</b>	<input type="checkbox"/>			
	<input type="checkbox"/>			
	<input type="checkbox"/>			
<p><b>A. General Education Requirement:</b>  <i>non-science requirement: 12 credits;</i>  <i>mathematics: SC/MATH 1013 3.00; SC/MATH 1014 3.00;</i>  <i>computer science: LE/EECS 1541 3.00;</i>  <i>foundational science: SC/PHYS 1010 6.00.</i></p> <p><b>B. Major Requirements:</b> (as stated on the checklist above)</p> <p><b>C. Science breadth:</b>            Science breadth: satisfied by above requirements.</p> <p><b>D. Upper level requirement:</b>            A minimum of 42 credits at the 3000 level or above.</p> <p><b>E. Additional 9 elective credits, as required, for an overall total of 120 credits.</b></p>				
All Honours BSc degree candidates are encouraged to participate in the Coop Program or complete a non-credit industrial internship (normally salaried). This provides experience in a four-month to 12-month placement, normally after the third year of study.				
<b>TOTAL CREDITS &amp; CGPA (minimum overall GPA of 5.00 required to graduate in a BSc Honours program)</b>				
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