### DEGREE CHECKLIST
#### 2018-2019

**BACHELOR OF SCIENCE (BSc)**

**EARTH & ATMOSPHERIC SCIENCE**

<table>
<thead>
<tr>
<th>NAME</th>
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<td>STUDENT #</td>
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Students are strongly advised to refer to online Academic Calendars before enrolling into courses: [http://calendars.registrar.yorku.ca/](http://calendars.registrar.yorku.ca/)

#### PREREQUISITES/COREQUISITES

<table>
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<tr>
<th>COURSES</th>
<th>CREDITS EARNED</th>
<th>GRADE</th>
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#### First Year Courses

- **SC/CHEM 1000 3.00** or **SC/CHEM 1001 3.00**
- **Chemical Structure** or **Chemical Dynamics**

- **LE/EECS 1541 3.00** or **LE/EECS 1011 3.00**
- **Introduction to Computing for the Physical Sciences** or **Computational Thinking through Mechatronics**

- **LE/ESSE 1010 3.00** or **LE/ESSE 1012 3.00**
- **The Dynamic Earth and Space Geodesy** or **The Earth Environment**

- **LE/ESSE 1011 3.00**
- **Introduction To Atmospheric Science**

- **SC/MATH 1013 3.00**
- **Applied Calculus I**

- **SC/MATH 1014 3.00**
- **Applied Calculus II**

- **SC/MATH 1025 3.00**
- **Applied Linear Algebra**

- **SC/PHYS 1010 6.00** or both **SC/PHYS 1800 3.00** & **SC/PHYS 1801 3.00**
- **Physics** or both **Engineering Mechanics & Electricity, Magnetism & Optics for Engineers**

#### 3 Non-Science Credits (or Electives)

#### Second Year Courses

- **LE/EECS 2501 1.00**
- **Fortran and Scientific Computing**

- **LE/ESSE 2011 3.00**
- **Introduction to Physical Meteorology**

- **LE/ESSE 2012 3.00**
- **Introduction to Dynamic Meteorology**

- **LE/ESSE 2030 3.00**
- **Geophysics and Space Science**

- **LE/ESSE 2470 3.00** or **LE/CIVL 2210 3.00**
- **Introduction to Continuum Mechanics** or **Fluid Mechanics**

- **SC/MATH 2015 3.00**
- **Applied Multivariate & Vector Calculus**

- **SC/MATH 2271 3.00**
- **Differential Equations for Scientists and Engineers**
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<tr>
<td></td>
<td>SC/MATH 2565 3.00 or SC/GEO 2420 3.00 or SC/MATH 2930 3.00</td>
<td>Introduction to Applied Statistics or Introductory Statistical Analysis in Geography or Introductory Probability and Statistics</td>
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<td>SC/PHYS 2020 3.00</td>
<td>Electricity and Magnetism</td>
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<tr>
<td>6 credits of Non-Science (or Electives)</td>
<td>LE/ESSE 3600 3.00</td>
<td>Geographical Information Systems (GIS) and Spatial Analysis</td>
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<td>LE/ESSE 3020 3.00, LE/ESSE 3030 3.00, LE/ESSE 3040 3.00, LE/ESSE 3180 3.00, SC/MATH 3241 3.00</td>
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<tr>
<td>9 additional credits from ESSE courses at 3000 level or higher</td>
<td>LE/ESSE 3020 3.00, LE/ESSE 3030 3.00, LE/ESSE 3040 3.00, LE/ESSE 3180 3.00, SC/MATH 3241 3.00</td>
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<tr>
<td>3 credits of Non-Science (or Electives)</td>
<td>LE/ESSE 3600 3.00</td>
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<tr>
<td>Elective Credits</td>
<td>LE/ESSE 3600 3.00</td>
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A. General Education Requirement:  
- non-science requirement: 12 credits;  
- mathematics: SC/MATH 1013 3.00; SC/MATH 1014 3.00;  
- computer science: LE/EECS 1011 3.00 or LE/EECS 1541 3.00;  
- foundational science: SC/PHYS 1010 6.00 or both of SC/PHYS 1800 3.00 and SC/PHYS 1801 3.00.  

B. Major Requirements  
The EATS program core, as specified above (19 credits);  

C. Science breadth:  
Science breadth: satisfied by above requirements.  

D. Upper level requirement:  
A minimum of 18 credits at the 3000 level or higher.  

E. Additional elective credits, as required, for an overall total of 90 credits.  

TOTAL CREDITS & CGPA (minimum overall GPA of 4.00 required to graduate with a BSc)

NOTES