Environmental Engineering at the University of Guelph draws on the traditional disciplines of chemical, civil and mechanical engineering to deliver a truly unique program. This comprehensive program equips students to understand and solve practical problems that encompass air, water, soil and waste. Students develop technical skills in terms of design and project management and strengthen their ability to effectively communicate to stakeholders at all levels.

In addition to core engineering analysis and design courses student study air pollution control, groundwater quality, solid and hazardous waste management, sustainable energy solutions, site remediation and environmental engineering systems and water/wastewater treatment.

University of Guelph Advantage

- Each year, students undertake a design-intensive multidisciplinary course that focuses on collaboration and project management in a group setting.

- Students complete five work terms commencing after their second year of studies and culminating in a final eight-month work term from May – December.

- Our co-op program functions on an ongoing basis with job postings accepted throughout the semester. Employers can begin posting in May for a September start date; in September for a January start date; and January for a May start date.

Student Strengths

- Fundamental knowledge of engineering concepts, as well as physical, mathematical and biological sciences
- Effective project management, problem solving, communication and teamwork skills acquired from hands on design courses
- Strong research skills developed through the design process, management and financial feasibility
- Experience writing formal reports including proposals, engineering design reports and technical laboratory reports
- Solid understanding of a variety of modeling and design software
- Exposure to a variety of field, laboratory and office work in various employment sectors including consulting, industry, research, and municipal, provincial and federal governments

recruit@uoguelph.ca
www.recruitguelph.ca
(519) 824-4120 ext. 52323
Environmental Engineering Course Sequencing:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>FALL (SEPTEMBER - DECEMBER)</th>
<th>WINTER (JANUARY - APRIL)</th>
<th>SUMMER (MAY - AUGUST)</th>
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<tbody>
<tr>
<td>ONE</td>
<td>• GENERAL CHEMISTRY I &lt;br&gt;• INTRODUCTION TO PROGRAMMING &lt;br&gt;• ENGINEERING AND DESIGN I &lt;br&gt;• ONE OF: SCIENCE AND TECHNOLOGY IN A GLOBAL CONTEXT OR ENGINEERING MECHANICS I &lt;br&gt;• CALCULUS I</td>
<td>• GENERAL CHEMISTRY II &lt;br&gt;• ENGINEERING ANALYSIS &lt;br&gt;• CALCULUS II &lt;br&gt;• PHYSICS WITH APPLICATIONS &lt;br&gt;• ONE OF: SCIENCE AND TECHNOLOGY IN A GLOBAL CONTEXT OR ENGINEERING MECHANICS I</td>
<td>OFF</td>
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<tr>
<td>TWO</td>
<td>• ONE OF: MATERIAL SCIENCE OR FLUID MECHANICS &lt;br&gt;• ENGINEERING SYSTEMS ANALYSIS &lt;br&gt;• APPLIED DIFFERENTIAL EQUATIONS &lt;br&gt;• INTRODUCTION TO CO-OPERATIVE EDUCATION &lt;br&gt;• ONE OF: INTRODUCTION TO MOLECULAR AND CELLULAR BIOLOGY OR INTRODUCTION TO MICROBIOLOGY &lt;br&gt;• ONE OF: ENGINEERING AND DESIGN II OR PROBABILITY AND STATISTICS FOR ENGINEERS &lt;br&gt;• 1 RESTRICTED ELECTIVE</td>
<td>• ONE OF: FLUID MECHANICS OR MATERIAL SCIENCE &lt;br&gt;• ELECTRIC CIRCUITS &lt;br&gt;• ENVIRONMENTAL ENGINEERING SYSTEMS &lt;br&gt;• NUMERICAL METHODS &lt;br&gt;• 1 RESTRICTED ELECTIVE &lt;br&gt;• ONE OF: ENGINEERING AND DESIGN II OR PROBABILITY AND STATISTICS FOR ENGINEERS</td>
<td>WORK TERM ONE</td>
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<td>THREE</td>
<td>• AIR QUALITY &lt;br&gt;• ENGINEERING ECONOMICS &lt;br&gt;• THERMODYNAMICS &lt;br&gt;• WATER QUALITY &lt;br&gt;• HYDROLOGY &lt;br&gt;• SOIL MECHANICS</td>
<td>WORK TERM TWO</td>
<td>WORK TERM THREE</td>
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<td>FOUR</td>
<td>• SOLID AND HAZARDOUS WASTE MANAGEMENT &lt;br&gt;• URBAN WATER SYSTEMS DESIGN &lt;br&gt;• 3 RESTRICTED ELECTIVES</td>
<td>• GROUNDWATER ENGINEERING &lt;br&gt;• ENGINEERING AND DESIGN III &lt;br&gt;• SYSTEMS AND CONTROL THEORY &lt;br&gt;• HEAT AND MASS TRANSFER &lt;br&gt;• MASS TRANSFER OPERATIONS &lt;br&gt;• 1 RESTRICTED ELECTIVE</td>
<td>WORK TERM FOUR</td>
</tr>
<tr>
<td>FIVE</td>
<td>WORK TERM FIVE</td>
<td>• ENVIRONMENTAL ENGINEERING DESIGN IV &lt;br&gt;• 4 RESTRICTED ELECTIVES</td>
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BASED ON THE 2016/17 UNDERGRADUATE CALENDAR.

PLEASE SEE THE CURRENT UNDERGRADUATE CALENDAR FOR MORE INFORMATION