



JOINT PROGRAM

## APPLIED ENVIRONMENTAL SCIENCE

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**Applied Environmental Science, offered jointly by The University of Winnipeg and RRC Polytech, is specifically designed to provide you with both theoretical and applied knowledge in environmental analysis and problem-solving careers in both industry and government. This is a 5-year program.**

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Students attend The University of Winnipeg in years one, two, and five, and RRC Polytech for years three and four. The program includes a full co-op work term, consisting of a minimum of 16 weeks of full-time, paid work experience. Students who successfully complete the entire program will receive a joint **4-Year BSc degree** parchment from The University of Winnipeg and an **Environmental Engineering Technology Diploma** from RRC Polytech. Graduates are eligible for certification by the Certified Technicians and Technologists Association of Manitoba.

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### SAMPLE CAREERS

This program is specifically designed to serve the needs of the many thriving health and science-based employers in Manitoba, such as: Apotex, Biovail, McCains, Laidlaw, Agrifoods International, Enviro-Test Laboratories, Can Arnesta Foods, National Research Council, the Federal Disease Control/Virology Laboratory, Canadian Agra Corporation, Louisiana Pacific, Cabot Performance Materials, BFI Waste Systems, and Prairie Harvest Canada Ltd.

### SAMPLE COURSES

**Human-Environmental Interactions** is a first-year course that illustrates the complexity and diversity of environmental issues. The central theme is “understanding natural processes in the environment” as a means of measuring human impact.

**Environmental Chemistry** is a third-year Chemistry course that provides students with an understanding of the behaviour of chemicals in the environment and includes a discussion of environmental contaminants.

**Environmental Impact Assessment** is a compulsory course for all science majors. Students explore the methodology of environmental impact assessment (EIA). Each student learns how to complete their own EIA, working both internally and externally, often alongside individuals with professional expertise in the students' chosen topic.

### SAMPLE FIRST YEAR

**ENV-1600(3) Human-Environmental Interactions**

**RHET-1106(3) Academic Writing** (The Department recommends that students take RHET-1106 in their first year of studies as most courses in DESS programs include multiple writing assignments.)

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BIOL-1115(3) Cells and Cellular Processes  
BIOL-1116(3) Evolution, Ecology, and Biodiversity  
CHEM-1111(3) Introduction to the Chemical Properties of Matter  
CHEM-1112(3) Basic Principles of Chemical Reactivity  
ECON-1104(3) Introduction to Economic Theory  
GEOG-1201(3) Introductory Atmospheric Science  
GEOG-1202(3) Introductory Earth Science

**3 credit hours Humanities** (Note: PHIL-2233(3) Environmental Ethics counts both as a Humanities course and as a core course in Environmental Science.)

***NOTE:** This sample first year is representative of the courses you may take. For many of our programs, you may choose another set of courses and still be well on your way to a degree. Also, for most programs you do not have to take 30 credit hours (five full courses) in your first year.*

## STUDY PATTERN

Students complete a degree at The University of Winnipeg and a diploma at RRC Polytech, as follows:

Year 1-2 – The University of Winnipeg

Year 3-4 – RRC Polytech

Year 5 – The University of Winnipeg

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***“The Applied Environmental Science program provided me with a well-rounded education where I was prepared for the realities of employer demand.”***

- Bryan Kehler (BSc)

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## REQUIRED HIGH SCHOOL COURSES

In addition to meeting The University of Winnipeg's general admission requirements, you must have **Chemistry 40S** and either **Pre-Calculus Mathematics 40S** or **Applied Mathematics 40S**.

## HOW TO APPLY

Students must apply to The University of Winnipeg to complete 60 credit hours, and then apply to Red River College for their third year. No application is necessary when the student returns to UWinnipeg in their fourth or fifth year.

### Step 1

Apply to The University of Winnipeg:  
<http://www.uwinnipeg.ca/apply>

### Step 2

After completing 60 credit hours at UWinnipeg, apply to RRC Polytech by **March 1**:  
<http://www.rrc.mb.ca>

Note: Students are required to pay an application fee at both institutions.

For more information visit [www.uwinnipeg.ca](http://www.uwinnipeg.ca) or contact a student recruitment officer at [welcome@uwinnipeg.ca](mailto:welcome@uwinnipeg.ca) or 204.786.9844. In any case where The University of Winnipeg Academic Calendar and this fact sheet differ, the current Calendar takes precedence.

## CONTACT US

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**OR** contact the Program Coordinator at RRC Polytech at [advisor@rrc.ca](mailto:advisor@rrc.ca).