

# Bachelor of Science - Environmental Science 2022-23

## PLEASE READ:

Prerequisites and course descriptions can be found in the Academic Calendar under the 'courses' link by visiting: <https://catalog.mtroyal.ca/>

### Professional Agrologist designation:

Mount Royal's B.Sc. in Environmental Science is eligible for approval for registration with the Agrology profession in Alberta. The program meets the National Educational Entrance Standard for the Agrology profession across Canada.

This program planning guide has been designed with the Professional Agrologist (P.Ag.) designation in mind.

For more information about applying for registration as an Agrologist in Training, please contact the Alberta Institute of Agrologists (AIA) at [info@aia.ab.ca](mailto:info@aia.ab.ca) or by phone at 1-855-435-0606 (toll free)

**General Education:** General Education approved courses, otherwise known as "GNED requirements" are designed to give you a well-rounded knowledge base and are organized into 4 thematic clusters. Each Cluster has 3 levels; tier 1 (foundation), tier 2 and tier 3.

Cluster 1: Numeracy & Scientific Literacy  
Cluster 2: Values, beliefs & Identity  
Cluster 3: Community & Society  
Cluster 4: Communication

**Junior courses** are courses at the 1000 level. Students are allowed a maximum of 16 junior courses.

**Advising Plan:** Students are strongly advised to follow the progression of classes and course load as indicated. Deviation from the recommended course pattern may result in scheduling conflicts or a delay in graduation.

### Recommended Senior electives:

ENVS 3303 - Life Cycle Assessment  
ENVS 4407 - Pollution Prevention  
ENVS 4421 - Environment Resource Management  
ENVS 3336 - Indigenous & Stakeholder Consultation

| ✓ | YEAR ONE - Fall   | ✓ | YEAR ONE - Winter   |
|---|---|---|---|
|   | CHEM 1202 - General Chemistry – Introduction to Quantitative Chemistry      |   | ECOL 1111 - Terrestrial Ecology   |
|   | GEOL 1101 - The Dynamic Earth   |   | ENVS 1105 - Data Processing and Statistics                                    |
|   | MATH 1185 or 1200 - Calculus with Applications OR Calculus for Scientists I |   | ENVS 2100 - Introduction to Environmental Science (pre-req GNED 1101 or 1103) |
|   | GNED Foundation Cluster 1: one of GNED 1101 or 1103                         |   | GNED Foundation Cluster 2: one of GNED 1201, 1202, or 1203                    |
|   | GNED Foundation Cluster 4: one of GNED 1401, 1403 or 1404                   |   | GNED Foundation Cluster 3: one of GNED 1301, 1303, or 1304                    |

Many courses are prerequisites for upper year courses. Check prerequisites at <http://catalog.mtroyal.ca/>

| ✓ | YEAR TWO - complete the following courses*   |
|---|--|
|   | ECOL 2219 - Aquatic Ecology - Fall   |
|   | ENVS 1111 - Professional Development: Health and Safety of the Environment Industry - Fall |
|   | ENVS 2221 - Water Pollution and Surface Water Analysis - Fall                              |
|   | ENVS 2203 - Introduction to Soil Science - Fall  |
|   | ENVS 2215 - Applied Instrumentation - Winter   |
|   | CHEM 2157 - Industrial Organic Chemistry - Winter  |
|   | MATH 1203 - Linear Algebra for Scientists and Engineers                                    |
|   | GNED Tier 2 Cluster 2:   |
|   | GNED Tier 2 Cluster 3: Recommend ECON 1101   |
|   | GNED Tier 2 Cluster 4: Recommend SPCH 2001   |
| ✓ | YEAR TWO - Spring/Summer   |
|   | ENVS 2020 - Work Experience I  |

\*The Fall/Winter notations indicate when you should be planning to take core courses. Certain core courses may have prerequisites that need to be completed in a particular sequence to avoid delays in graduation. In addition, some courses are only offered in one semester. If there is no notation, this course should be completed in year two but may be offered in either semester. It is your responsibility to plan your schedule and make sure that you are meeting necessary requirements. Consider consulting your advisor if you are uncertain or require clarification.

| YEAR THREE - complete the following courses |   |   |                                    |
|---|---|---|------------------------------------|
| ✓   | CORE Requirements:                          | ✓ | General Education and Electives:   |
|   | ECOL 2201 - Plant Survey and Classification |   | GNED Tier 3: Recommended GEOG 2553 |
|   | ENVS 3305 - Soil Hydrology                  |   | Senior Elective:                   |
|   | ENVS 3307 - Air Pollution Monitoring        |   | Senior Elective:                   |
|   | ENVS 3333 - Ground Water Contamination      |   |                                    |
|   | ENVS 3323 - Watershed Management            |   |                                    |
|   | ENVS 3335 - Issues in Environmental Assess. |   |                                    |
|   | MGMT 3269 - Project Management              |   |                                    |
| ✓   | YEAR THREE - Spring/Summer                  |   |                                    |
|   | ENVS 3020 - Work Experience II              |   |                                    |

| YEAR FOUR - complete the following courses |  |   |                                      |
|--|--|---|--------------------------------------|
| ✓  | CORE Requirements:                         | ✓ | General Education and Electives:     |
|  | ENVS 4406 - Soil Genesis and Land Use      |   | GNED Tier 3 (Recommended: MGMT 4407) |
|  | ENVS 4431 - Management of Residuals        |   | GNED Tier 3 (Recommended: NTSC 3301) |
|  | ENVS 4441 - Site System Remediation        |   | Senior Elective:                     |
|  | ENVS 4405 - Air Quality                    |   | Senior Elective:                     |
|  | ENVS 4419 - Regulatory Management          |   |                                      |
|  | ENVS 4201 - Environmental Research Methods |   |                                      |

This document is only intended to be a guide for students and should be used together with the Mount Royal University Academic Calendar which states academic policies and degree requirements. Be sure to consult with your Academic Advisor to confirm graduation requirements or if you have any questions.