

# Bachelor of Science – Environmental Science 2016/2017

Name: \_\_\_\_\_

Student #: \_\_\_\_\_ Admission Year: \_\_\_\_\_

YEAR ONE – FALL		
ENVS 1111 <sup>F</sup>	Professional Development: Health and Safety of the Environment Industry	
CHEM 1202 <sup>FW</sup>	General Chemistry – Intro to Quantitative Chemistry ( FNS)	
MATH 1200 <sup>FW</sup>	Calculus with Applications OR Calculus for Scientists I (M/Stats)	
Foundation GNED Cluster 1 <sup>FW</sup>		
Foundation GNED Cluster 2 or 3 <sup>FW</sup>		
YEAR ONE - WINTER		
ECOL 1111 <sup>W</sup>	Terrestrial Ecology ( IAC)	
ENVS 1105 <sup>W</sup>	Data processing and Statistics (M/Stats)	
GEOL 1101 <sup>FW</sup>	Physical Geology ( FNS)	
Foundation GNED Cluster 2 or 3 <sup>FW</sup>		
Foundation GNED Cluster 4 <sup>FW</sup>		
YEAR TWO - FALL		
ECOL 2219 <sup>F</sup>	Aquatic Ecology (IAC)	
ENVS 2221 <sup>F</sup>	Water Pollution and Surface Water Analysis (IAC)	
ENVS 2203 <sup>F</sup> (formerly GEOG 2109)	Introduction to Soil Science (IAC)	
GNED Tier 2 Cluster 1 <sup>FW</sup>		
GNED Tier 2 Cluster 2 or 3 <sup>FW</sup>		
YEAR TWO - WINTER		
CHEM 2157 <sup>W</sup>	Industrial Organic Chemistry ( FNS)	
ENVS 2215 <sup>W</sup>	Applied Instrumentation ( FNS)	
MATH 1203 <sup>FW</sup>	Linear Algebra for Scientists and Engineers (M/Stats)	
GNED Tier 2 Cluster 3 <sup>FW</sup>	ECON 1101: Principles of Microeconomics ( ECON)	
GNED Tier 2 Cluster 4 <sup>FW</sup>		
YEAR TWO – SPRING/ SUMMER		
ENVS 2020	Work Experience I	
YEAR THREE - FALL		
ECOL 2201 <sup>F</sup>	Plant Survey and Classification (IAC)	
ENVS 3305 <sup>F</sup>	Soil Hydrology (SAC)	
ENVS 3307 <sup>F</sup>	Air Pollution Monitoring ( SAC)	
ENVS 3333 <sup>F</sup>	Ground Water Contamination (SAC)	
MGMT 3269 <sup>F</sup>	Project Management (SAC)	
YEAR THREE - WINTER		
Senior Elective		
ENVS 3323 <sup>W</sup>	Watershed Management (SAC)	
ENVS 3335 <sup>W</sup>	Issues in Environmental Assessment (SAC)	
GNED Tier 3 Cluster 1	GEOG 2553: Geographic Information Systems (IAC/SAC?)	
GNED Tier 3 <sup>FW</sup>		
YEAR THREE SPRING / SUMMER		
ENVS 3020	Work Experience II	
YEAR FOUR - FALL		
ENVS 4406 <sup>F</sup>	Soil Genesis and Land Use (SAC)	
ENVS 4431 <sup>F</sup>	Management of Residuals (SAC)	
ENVS 4441 <sup>F</sup>	Site System Remediation and Design (SAC)	
GNED Tier 3 <sup>FW</sup>		
GNED Tier 3 <sup>FW</sup>		
YEAR FOUR - WINTER		
ENVS 4405 <sup>W</sup>	Air Quality (SAC)	
ENVS 4419 <sup>W</sup>	Regulatory Management (SAC)	
ENVS 4201 <sup>W</sup>	Environmental Research Methods (SAC*)	
Senior Elective		
Senior Elective		

**NOTE:** This program planning guide has been designed with the P.Ag. designation in mind. The suggested courses in the guide are recommended so that you are able to meet the requirements to register for the P.Ag.- in- training designation upon graduation.

**General Education:** Requirements in your program designed to give you a well-rounded knowledge base and are organized into 4 thematic clusters. Each Cluster has three tiers; foundation, tier 2 and tier 3. Students must take a foundation level and tier 2 courses from each of the four clusters and four tier 3 GNEDs from at least two Clusters.

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

Visit [mtroyal.ca/gened/courses](http://mtroyal.ca/gened/courses) for more information and a list of GNED courses.

### Professional Agrolgist:

The following list of GNED courses and senior electives have been approved by the AIA in order to be considered for the P.Ag. designation.

GNED 1102 - Foundation Cluster 1 (FNS)  
GNED 1203 - Foundation Cluster 2 (E/Comm)  
PSYC 1105 - Tier 2 Cluster 2 (E/Comm – pending)  
SPCH 2001 - Tier 2 Cluster 4 (E/Comm)  
MGMT 4407 - Tier 3 Cluster 3 (SAC)  
NTSC 3301 - Tier 3 Cluster 1 (SAC)

### Senior Electives:

ENVS 3303 - Life Cycle Assessment <sup>W</sup> (SAC)  
ENVS 4407 - Pollution Prevention <sup>W</sup> (SAC)  
ENVS 4421 - Environment Resource Management <sup>W</sup> (SAC)

### AIA approved courses:

IAC-Introductory Agrology Courses (IAC+SAC=60 credits)  
SAC-Senior Agrology Courses (min. 24 credits)  
FNS-Foundational Natural Sciences (15 credits)  
M/Stats-Mathematics or Statistics Courses (3 credits)  
E/Comm-English or Communications Courses (3 credits)  
ECON-Economics Courses (3 credits)

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

**Prerequisites & Course descriptions:** can be found in the Academic Calendar or by visiting: [mtroyal.ca/ProgramsCourses/CourseListings](http://mtroyal.ca/ProgramsCourses/CourseListings)

**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.

To be considered full time a student must be enrolled in a minimum of three 3 credit courses.

<sup>F</sup> Indicates that the course runs in Fall semester only.

<sup>W</sup> Indicates that the course runs in Winter semester only.

<sup>FW</sup> Indicates that the course is offered in both Fall and Winter semester.