

Bachelor of Science – Environmental Science 2019/20

Name: _____

Student #: _____ Admission Year: _____

YEAR ONE – FALL		
CHEM 1202 ^{FW} or 1207 ^F	General Chemistry – Intro to Quantitative Chemistry (FNS)	
MATH 1185 ^F (preferred) or 1200 ^{FW}	Calculus with Applications (preferred) OR Calculus for Scientists I (M/Stats)	
GEOL 1101 ^{FW}	Physical Geology (FNS)	
GNEED Foundation Cluster 1 ^{FW}	GNEED 1101 or GNEED 1103	
GNEED Foundation Cluster 4 ^{FW}	GNEED 1401 or GNEED 1404	
YEAR ONE - WINTER		
ECOL 1111 ^W	Terrestrial Ecology (IAC)	
ENVS 1105 ^W	Data processing and Statistics (M/Stats)	
ENVS 2100 ^W	Introduction to Environmental Science	
GNEED Foundation Cluster 3 ^{FW}		
GNEED Foundation Cluster 2 ^{FW}	GNEED 1203 recommended (E/Comm)	
YEAR TWO - FALL		
ECOL 2219 ^F	Aquatic Ecology (IAC)	
ENVS 1111 ^F	Professional Development: Health and Safety of the Environment Industry	
ENVS 2221 ^F	Water Pollution and Surface Water Analysis (IAC)	
ENVS 2203 ^F	Introduction to Soil Science (IAC)	
GNEED Tier 2 Cluster 2 ^{FW}		
YEAR TWO - WINTER		
CHEM 2157 ^W	Industrial Organic Chemistry (FNS)	
ENVS 2215 ^W	Applied Instrumentation (FNS)	
MATH 1203 ^{FW}	Linear Algebra for Scientists and Engineers (M/Stats)	
GNEED Tier 2 Cluster 3 ^{FW}	ECON 1101 recommended (ECON)	
GNEED Tier 2 Cluster 4 ^{FW}	SPCH 2001 recommended (E/Comm)	
YEAR TWO – SPRING/ SUMMER		
ENVS 2020	Work Experience I	
YEAR THREE - FALL		
ECOL 2201 ^F	Plant Survey and Classification (IAC)	
ENVS 3305 ^F	Soil Hydrology (SAC)	
ENVS 3307 ^F	Air Pollution Monitoring (SAC)	
ENVS 3333 ^F	Ground Water Contamination (SAC)	
MGMT 3269 ^F	Project Management (FNS)	
YEAR THREE - WINTER		
ENVS 3323 ^W	Watershed Management (SAC)	
ENVS 3335 ^W	Issues in Environmental Assessment (SAC)	
GNEED Tier 3 ^{FW}	GEOG 2553 recommended (cluster 1)	
GNEED Tier 3 ^{FW} Recommend one of:	MGMT 4407 OR *ENVS 3336 (pursuing AIA recognition)	
Senior Elective	ENVS 3303 recommended	
YEAR THREE SPRING / SUMMER		
ENVS 3020	Work Experience II	
YEAR FOUR - FALL		
ENVS 4406 ^F	Soil Genesis and Land Use (SAC)	
ENVS 4431 ^F	Management of Residuals (SAC)	
ENVS 4441 ^F	Site System Remediation and Design (SAC)	
GNEED Tier 3 ^{FW}	NTSC 3301 recommended (cluster 1)	
Senior Elective	MGMT 4407 OR *ENVS 3336 (pursuing AIA recognition)	
YEAR FOUR - WINTER		
ENVS 4405 ^W	Air Quality (SAC)	
ENVS 4419 ^W	Regulatory Management (SAC)	
ENVS 4201 ^W	Environmental Research Methods (SAC*)	
Senior Elective	ENVS 4421 recommended	
Senior Elective	ENVS 4407 recommended	

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 with the Alberta Institute of Agrology.

PLEASE READ:

General Education: General Education approved courses, otherwise known as “GNEED 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

Visit mtroyal.ca/gened/courses for more information and a list of GNEED courses.

Professional Agrologist:

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

- GNEED 1203 - Foundation Cluster 2 (E/Comm)
- ECON 1101 – Tier 2 Cluster 3(ECON)
- SPCH 2001 - Tier 2 Cluster 4 (E/Comm)
- MGMT 4407 - Tier 3 Cluster 3 (FNS)
- NTSC 3301 - Tier 3 Cluster 1 (SAC)
- GEOG 2553 – Tier 3 Cluster 1
- *ENVS 3336 – Tier 3 Cluster 3
- *recommended as one of the three T3 courses, currently pursuing recognition with the AIA

Senior Electives:

- ENVS 3303 - Life Cycle Assessment ^W (SAC)
- ENVS 4407 - Pollution Prevention ^W (SAC)
- ENVS 4421 - Environment Resource Management ^W (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

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.
^F Indicates that the course runs in Fall semester only.
^W Indicates that the course runs in Winter semester only.

^{FW} Indicates that the course is offered in both Fall and Winter semester.