

# B.Sc. Earth Sciences and Chemistry

## FIRST YEAR

## SECOND YEAR

## THIRD YEAR

## FOURTH YEAR

FALL

WINTER

FALL

WINTER

FALL

WINTER

FALL

WINTER

**ERTH 1006**  
Exploring Planet Earth

**ERTH 1009**  
The Earth System Through Time

**ERTH 2102**  
Mineralogy to Petrology

**ERTH 2104**  
Igneous Systems, Geochemistry & Processes

**ERTH 3003**  
Geochemistry & Geochronology

**ERTH 3204**  
Mineral Deposits

**1.0 credit EARTH 4908 Honours Thesis**  
or  
**0.5 credit EARTH 4909 Project**  
With 0.5 credit in EARTH 4000 level course

OR

**1.0 credit CHEM 4907 Honours Essay & Research Proposal**  
or  
**1.0 credit CHEM 4908 Research Project & Seminar**

**CHEM 1001**  
General Chemistry I

**CHEM 1002**  
General Chemistry II

**ERTH 2105**  
Geodynamics

**ERTH 2406**  
Geology & Map Interpretation

**ERTH 3207**  
Metamorphic Petrology & Processes

**ERTH 3806**  
Structural Geology

**1.0 credit in EARTH courses at the 4000 level**

**MATH 1004**  
Calculus for Engineering or Physics

**MATH 1107**  
Linear Algebra I

**ERTH 2314**  
Sedimentation and Stratigraphy

**ERTH 2802\***  
Field Geology I

**ERTH 3203\***  
Sedimentology

OR

**STAT 2507**  
Introduction to Statistical Modeling I

**1.0 credit in CHEM courses at the 4000 level**

**PHYS 1003**  
Introductory Mechanics & Thermodynamics  
OR  
**PHYS 1007**  
Elementary University Physics I

**PHYS 1004**  
Introductory Mechanics & Thermodynamics  
OR  
**PHYS 1008**  
Elementary University Physics II

**CHEM 2302**  
Analytical Chemistry I

**CHEM 2303**  
Analytical Chemistry II

**ERTH 3206**  
Sedimentary Depositional Systems

**BIOL 1104**  
Foundations of Biology II

**1.5 credits in approved courses outside Faculty of Science/Engineering (may include NSCI 1000)**

**\*GEOM 1004**  
Maps, Stats & Geospatial Rev (in place of GEOM 2007)

**MATH 1005**  
Differential Equations  
OR  
**MATH 2007**  
Elementary Calculus II

**CHEM 2103**  
Physical Chemistry I

**CHEM 2501**  
Introduction to Inorganic & Bioinorganic Chemistry

**CHEM 3100**  
Physical Chemistry II

**0.5 credits in approved course outside Faculty of Science/Engineering**

**0.5 credits in Science Continuation Course (not EARTH or CHEM)**

**CHEM 3503**  
Inorganic Chemistry I

**Note:**

- Field Courses marked with an \* are held outside of the regular term dates.
- This is a snapshot of the Undergraduate calendar but information can change. Always consult your audit and seek advising if you are off track.
- It is your responsibility to make sure you have the necessary pre-requisite courses before registering. This information can be found in the Undergraduate calendar at: [calendar.carleton.ca/undergrad/](http://calendar.carleton.ca/undergrad/)

■ Chemistry   
 ■ NSCI   
 ■ Physics   
 ■ Math & Stats  
■ Earth Sciences   
 ■ Geomatics   
 ■ Computer Science   
 ■ Electives   
 ■ Biology