

# B.Sc. Earth Sciences with Concentration in Geophysics

Catalogue Year: 2022-2023

## 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 **ERTH 4908** Honours Thesis OR  
0.5 credit **ERTH 4909** Project  
With 0.5 credit in **ERTH 4000** level course

**MATH 1004**  
Calculus for Engineering or Physics

**MATH 1104**  
Linear Algebra for Engineering or Science

**ERTH 2105**  
Geodynamics

**ERTH 2406**  
Geology & Map Interpretation

**ERTH 3405**  
Geophysical Methods

**ERTH 3205**  
Physical Hydrogeology

0.5 credit Free Elective

**ERTH 4707**  
Engineering Seismology

**CHEM 1001**  
General Chemistry I  
OR  
**CHEM 1005**  
Elementary Chemistry I

**CHEM 1002**  
General Chemistry II  
OR  
**CHEM 1006**  
Elementary Chemistry II

**ERTH 2314**  
Sedimentation and Stratigraphy

**ERTH 2802\***  
Field Geology I

**ERTH 3203\***  
Sedimentology  
  
OR  
**ERTH 3206**  
Sedimentary Depositional Systems

**ERTH 3806**  
Structural Geology

3.0 credits from **ERTH**, **MATH** or **PHYS** (see section 13 of non-major in Undergrad calendar)

**PHYS 1001**  
Foundations in Physics 1  
OR  
**PHYS 1003**  
Introductory Mechanics & Thermodynamics  
OR  
**PHYS 1007**  
Elementary University Physics I

**PHYS 1002**  
Foundations in Physics 1  
OR  
**PHYS 1004**  
Introductory Mechanics & Thermodynamics  
OR  
**PHYS 1008**  
Elementary University Physics I

**ERTH 2004**  
Maps, Stats & Geospatial Revolution

**MATH 1005**  
Differential Equations & Infinite Series for Engineering or Physics

0.5 credit Free Elective

1.5 credits from **ERTH**, **MATH** or **PHYS** (see section 13 of non-major in Undergrad calendar)

**NSCI 1000**  
or Approved course outside the Faculty of Science/Engineering

0.5 credit Free Elective

**COMP 1005**  
Introduction to Computer Science 1  
  
OR  
**COMP 1006**  
Introduction to Computer Science II

**STAT 2507**  
Introduction to Statistical Modeling 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   
 ■ Biology  
■ Earth Sciences   
 ■ Geomatics   
 ■ Computer Science   
■ Electives