

Minor in Geography [# 374 - Major Required] (18 hours)

Foundation Courses (6 hours):

GEOG/L 103 Our Dynamic Earth	3 hours*
GEOG 110 World Regional Geography	3 hours*

Electives (Select any 12 hours of Upper Division courses):

Examples include -

GEOG 300 Writing in the Geosciences	3 hours*
GISC 316 Fundamentals of GIS	4 hours
GISC 317 GIS	4 hours
GEOG 330 Foundations of Cultural Geography	3 hours
GEOG 391 Spatial Data Analysis	4 hours
GISC 417 GIS Analysis	3 hours
GISC 419 GIS Programming	3 hours
GEOG 430 Topics in Cultural Geography	3 hours

Select appropriate geography courses in consultation with your geography advisor

* Colonnade Course

Minor in Geology [# 377 - Major Required] (21 hours)

GEOL 111 The Earth	3 hours*
GEOL 113 The Earth Laboratory	1 hour*
GEOL 112 Earth History	3 hours*
GEOL 114 Earth History Laboratory	1 hour*

Two courses selected from (6-8 hours):

GEOL 330 Mineralogy	4 hours
GEOL 350 Petrology	4 hours
GEOL 360 Sedimentology and Strat	3 hours
GEOL 380 Field Techniques	3 hours
GEOL 405 Paleontology	4 hours
GEOL 408 Structural Geology	4 hours

Elective courses 5-7 hours

Select appropriate geology courses in consultation with your geology program advisor.

* Colonnade Course

**Minor in Earth Science [# 353 – Science Major Required]
(21 hours)**

GEOL 111 The Earth	3 hours*
GEOL 113 The Earth Laboratory	1 hour*
GEOL 112 Earth History	3 hours*
GEOL 114 Earth History Laboratory	1 hour*
METR 121 Intro to Meteorology	3 hours*
ASTR 214 General Astronomy	3 hours

Elective courses	(7 hours):
GEOL 330 Mineralogy	4 hours
GEOL 360 Sedimentology and Strat	3 hours
GEOL 405 Paleontology	4 hours
GEOL 408 Structural Geology	4 hours
GEOL or GEOG 420 Geomorphology	4 hours
GEOG 328 Biogeography	3 hours

* Colonnade Course

**Minor in GIS [# 366 - Major Required]
(23 hours)**

GEOG/GEOL 103 or GEOL 111 Earth Science	3 hours*
GEOG 110 World Regional Geography	3 hours*
GISC 316 Fundamentals of GIS	4 hours
GISC 317 GIS	4 hours
GISC 417 GIS Analysis	3 hours
GISC 419 GIS Programming	3 hours
GISC 477 Special Topics in GIS	3 hours
or GISC 414 Remote Sensing Fundamental	4 hours

* Colonnade Course

SOCL 470 Environmental Sociology 3 hours

Or other advisor-approved electives.

* Colonnade Course

**Minor in Water Resources [# 491 – Major Required]
(22 hours)**

Required Courses	(16 hours):
GEOL 111 The Earth	3 hours*
GEOL 113 The Earth Laboratory	1 hour*
METR 121 Intro to Meteorology	3 hours*
GEOL or GEOG 310 Global Hydrology	3 hours
GEOG 427 Water Resource Management	3 hours
GEOG 474 Environmental Planning Apps	3 hours

Elective courses	(6 hours):
GEOL 415 Environment Geology	3 hours
GEOL 440 Hydrogeology	3 hours
GEOL 445 Aqueous Geochemistry	3 hours
METR 422 Climatology	4 hours
METR 426 Applied Meteorology	3 hours
GEOG 428 Applied Groundwater	3 hours
GEOG 487 Environmental Management & Law	3 hours

* Colonnade Course

**Effective for students beginning the minor program in Fall 2018.
Last updated: November 6, 2018**