

Geographic Information Science Programs

B.S. in G.I.S. Professional Program [Extended Major #576] (53 hours) Effective Fall 2018

Foundation Requirements (10 hours):

GEOG/L 103 Dynamic Earth or GEOL 111 The Earth	3 hours*
GEOG 110 World Regional Geography	3 hours*
CS 170 Problem Solving & Programming	3 hours
GEOG 499 Professional Development	1 hour

Technique Requirements (15 hours):

GEOG 300 Writing in the Geosciences	3 hours*
GISC 316 Foundations of GIS	4 hours
GISC 317 GIS	4 hours
GEOG 391 Spatial Data Analysis	4 hours

Professional Requirements (28 hours):

GISC 414 Remote Sensing	4 hours
GISC 417 GIS Analysis	3 hours
GISC 418 Internet GIS	3 hours
GISC 419 GIS Programming	3 hours
GISC 443 GIS Databases	3 hours
GISC 477 GIS Special Topics	3 hours
or GISC 423 Urban GIS	3 hours
GEOG 492 Advance Spatial Analysis	3 hours
OR GEOG 350 OR GEOG 480	
GEOG 475 or 495 Practicum and/or Internship	6 hours

Additional Program Requirements (not included in the 53-hour program) (16 hours):

- **MATH 116 Algebra** 3 hours*
- **MATH 117 Trigonometry** 3 hours*
- **MATH 183 Introduction to Statistics** 3 hours*
- **CE160 and 161 Surveying** 4 hours
- **CS 180 Java OR CS 270 OR AMS 163** 3 hours

* Colonnade Courses

UNDERGRADUATE CERTIFICATE IN GIS (Program #174)

Course Requirements	(14 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

GRADUATE CERTIFICATE IN GIS (Program #203)

Course Requirements	(9 Hours):
Select three courses from:	
GEOS 575 GIS Analysis	3 hours
GEOS 576 GIS Programming	3 hours
GEOS 515 Remote Sensing	3 hours
GEOS 517 Spatial Databases	3 hours
GEOS 520 Data Modeling	3 hours
GEOS 523 Urban GIS Applications	3 hours
GEOS 577 Special GIS Topics	3 hours
GEOS 590 Experimental Design	3 hours
GEOS 595 Practicum in GIS	3 hours

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

Foundation Courses (6 hours):	
GEOG/L 103 Dynamic Earth or GEOL 111 The Earth	3 hours*
GEOG 110 World Regional Geography	3 hours*

Technique Courses (14 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

Elective Courses (3 hours) – Choose one:	
GISC 414 Remote Sensing	4 hours
GISC 418 Internet GIS	3 hours
GISC 423 Transport, Location, GIS	3 hours
GISC 443 GIS Databases	3 hours
GISC 477 GIS Special Topics	3 hours
GEOG 492 Advanced Spatial Analysis	3 hours

* Colonnade Courses

**Effective for GIS students beginning the program in Fall 2018.
Last updated: October 1, 2018.**