

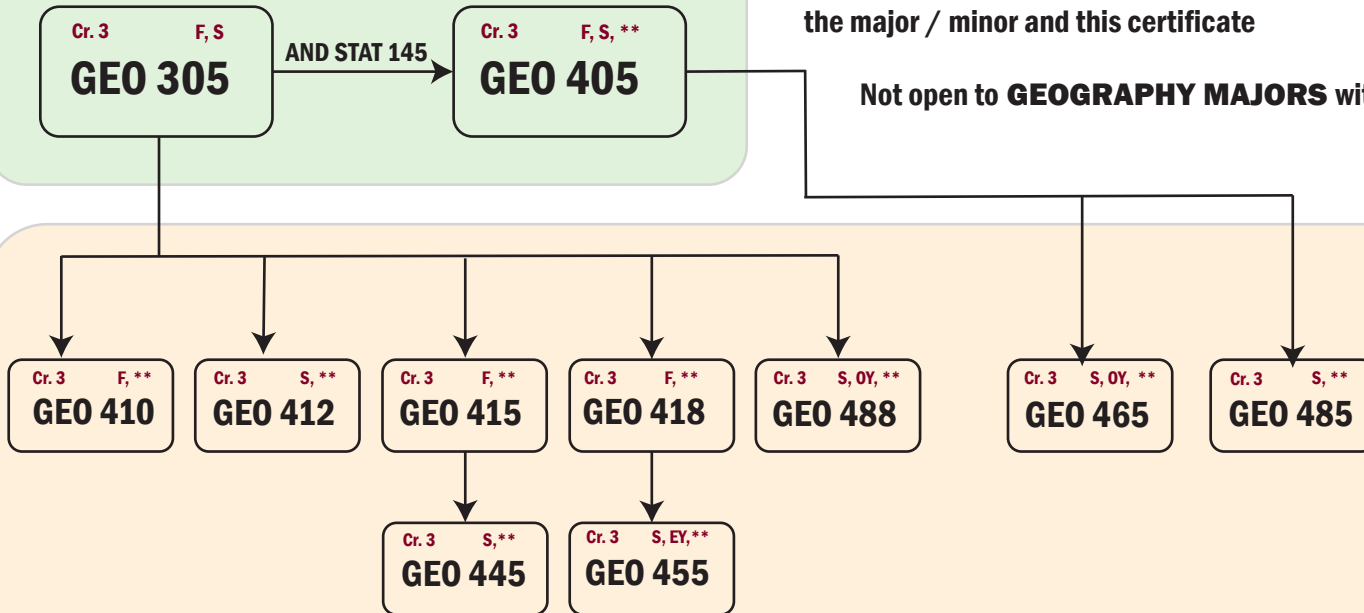
GEOGRAPHY CERTIFICATE: GEOGRAPHIC INFORMATION SCIENCE CONCENTRATION

CORE REQUIREMENTS (2 Courses)

Open only to **degree-seeking UWL students**

GEOGRAPHY, ENVIRONMENTAL SCIENCE, EARTH SCIENCE, and GEOARCHAEOLOGY MAJORS / MINORS may only duplicate 6 GEO credits between the major / minor and this certificate

Not open to **GEOGRAPHY MAJORS** with a **GIS Concentration** or **GIS minors**



**GEOSPATIAL
TECHNIQUES
ELECTIVES
(6 Credits)**

PREREQUISITES:

LEGEND:



F = FALL
S = SPRING
SU = SUMMER
** = JR/SR STANDING
O = OCCASIONALLY
OY = ODD NUMBERED YEARS
EY = EVEN NUMBERED YEARS

Geography Certificate: Geographic Information Science Concentration**12 CREDITS****Open only to degree seeking UWL students****Geography GIS Concentration Majors or Minors** are not able to obtain this certificate**Geography, Environmental Science, Earth Science and Geoarchaeology Majors** may only duplicate 6 GEO credits between the major / minor and this certificate

Upon completion of this program, students must have a minimum cumulative GPA of 2.5 and submit a professional portfolio to the program advisor.

Core Requirements:

Name	Credits	Description	Prerequisite	Offered
GEO 305	3	Geographic Information Systems and Science I	-	F, S
GEO 405	3	Geographic Information System and Science II	GEO 305; STAT 145	F, S

Geospatial Techniques Electives (Choose 6 Credits)

Name	Credits	Description	Prerequisite	Offered
GEO 410	3	Geospatial Field Methods	GEO 305	F
GEO 412	3	Geospatial Applications of Unmanned Aerial Systems	GEO 305	S
GEO 415	3	Remote Sensing of the Environment I	GEO 305	F
GEO 418	3	Map Design and Geovisualization	GEO 305	F
GEO 445	3	Remote Sensing of the Environment II	GEO 415	S
GEO 455	3	Web Mapping	GEO 418	S-Even
GEO 465	3	Geospatial Automation	GEO 405	S-Odd
GEO 485	3	Geographic Information System and Science III	GEO 405	S
GEO 488	3	Quantitative Methods in Geography	Geo 305; STAT 145	S-Odd

* Students in this certificate are required to take STAT 145.

* Offered Codes: F = Fall; W = Winter; S = Spring; Su = Summer; O = Occasionally; F-Odd = Fall, Odd Years; F-Even = Fall, Even Years; S-Odd = Spring, Odd Years; S-Even = Spring, Even Years