



## 2023 - 2024 Minor in Geographic Information Science

### 21 - 22 Units

Use this checklist in combination with your official Academic Requirements Report (ARR). This checklist is not intended to replace advising. Consult the advisor for appropriate course sequencing. *Curriculum changes in progress. Requirements subject to change.*

Courses	Prerequisites
<b>Statistics - Complete ONE of the following courses (3 - 4 units total):</b>	
GEOG 200: Introduction to Research Methods for Geographers (3)	
BIOL 260: Biostatistics (3)	BIOL 201 or 207 or 211 or MICR 200; MATH 111 or 113 or 119A or 122; All with Grades of "C" or Better
HDEV 190/PSY 110/SOC 170: Elementary Statistics in Social and Behavioral Sciences (4)	Eligible for GE Math; or Corequisite: STAT 90
<b>Complete ALL of the following courses (6 units total):</b>	
GEOG 280: Introduction to Geospatial Techniques (3)	
GEOG 380: Introduction to Digital Cartography and Analysis (3)	

<b>GISci 400-Level Courses - Complete 12 UNITS from the following courses (12 units total):</b>		
GEOG 471: Geographic Information Science (GISci) for Justice (3)	Upper Division Standing	
GEOG 473: Introduction to Earth Observation (4)		
GEOG 475: Geographical Applications in Remote Sensing (4)		
GEOG 481: Geographic Information Science for Natural Sciences (4)	Upper Division Standing; GEOG 140 or BIOL 153 or EARTH 102; or Consent of Instructor	
GEOG 482: Advanced Digital Cartography and GIS (4)	GEOG 200 or Equivalent; GEOG 380; or Consent	
GEOG 484: Enterprise GIS Development (4)	GEOG 280 or 371 or 471 or 481 or 485; or Consent	
GEOG 485: Principles of Geographic Information Science (4)	GEOG 280 or 371 or 481; or Consent of Instructor	
GEOG 487A: Environmental GIS (4)	Corequisite: GEOG 481 or 485; or Consent of Instructor	
GEOG 487B: Urban GIS (4)	Corequisite: GEOG 485; or Consent of Instructor	
GEOG 488: Geographic Information Science (GIS) Programming (4)	Corequisite: GEOG 485; Consent of Instructor	

**In order to graduate from CSULB, students must complete General Education/GWAR/Major requirements and have a minimum of 120 units (40 must be upper division) with at least a 2.0 in all GPAs (Overall, CSULB, Major).**

#### Additional Information

- See online Catalog for additional course information, limitations, and requirements.
- Some courses may also fulfill GE requirements. Visit the GE website for course selection: [csulb.edu/general-education](http://csulb.edu/general-education).
- A course can only be used to satisfy one minor requirement. Double counting is not allowed within the minor.
- The Minor in Geographic Information Science is open to all non-Geography majors.

Department of Geography	LA1-125	(562) 985-8432	<a href="http://cla.csulb.edu/departments/geography">cla.csulb.edu/departments/geography</a>
College of Liberal Arts Advising Center (ATLAS)	LA1-LO0102	(562) 985-7804	<a href="http://csulb.edu/atlas">csulb.edu/atlas</a>

Checklists are available on the [ATLAS website](http://atlas.csulb.edu)