

Geographic Information Science Certificate

Focus: Water Industry

Have you ever wondered how Starbucks decides where to put its next “coffee shop” or where Amazon decides to try out its drone package delivery systems? Who designs all the layers on the latest version of MineCraft or Fortnite? They use people who have developed skills in collecting and analyzing geospatial information. The study of geospatial information is referred to as Geographic Information Science, GIS. It is a rapidly growing area of study that can lead to rewarding careers in many different disciplines.

Please see a Pathways Counselor: Create an education plan customized to meet your needs. [Contact a Counselor](#)

Transfer Majors/Award Focus

- Geographic Information Science, A.S.
- Geographic Information Science, Certificate, Focus: General, Fire & Safety, Water Industry

GE Pattern/Units

- GE Pattern: n/a
- Total Units: 18



Program maps indicate the major coursework and recommended general education courses to fulfill your degree in 2 years (approximately 15 units/semester or 30 units/year). If you are a part-time student, start Semester 1 courses and follow the course sequence. Some of the courses listed may be substituted by another course. Please view these options in the official course [catalog](#).

Semester 1

6 Units

✓	COURSE	TITLE	UNIT
<input type="checkbox"/>	GEOG-105	Map Interpretation and Spatial Analysis	3
<input type="checkbox"/>	GEOG-115	Introduction to Geographic Information Science	3

Semester 2

6 Units

✓	COURSE	TITLE	UNIT
<input type="checkbox"/>	GEOG-520	Intermediate Geographic Information Science	3
<input type="checkbox"/>	GEOG-582	Programming for GIS	3

Semester 3

6 Units

✓	COURSE	TITLE	UNIT
<input type="checkbox"/>	GEOG-525	Advanced Geographic Information Science	3
<input type="checkbox"/>	GEOG-584	Water Management with GIS	3

Career Options

Geophysical Data Technicians (B, M)
Geographers (B, M, D)
Geographic Information Systems Technician (B, M)
Find more careers: msjc.emsicc.com
Required Education: SM: some college; C: Certificate; A: Associate,
B: Bachelor's, M: Master's; D: Doctorate



Financial Aid

Financial aid is determined by the number of credit hours you take in a semester. Maximize your financial aid by taking 12-15 units per semester.