

Geospatial Information Science: Associate in Science – Non-Transfer

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: A local degree requires a minimum of 60 degree-applicable units with a minimum 2.0 GPA overall. [Contact a Counselor](#) to create an education plan customized to meet your needs.

Transfer Majors/Award Focus

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


GE Pattern/Units

- GE Pattern: Option A
- Total Units: 60

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

16 Units

	COURSE	TITLE	UNIT
<input type="checkbox"/>	GEOG-105	Map Interpretation and Spatial Analysis	3
<input type="checkbox"/>	ENGL-101	College Composition	4
<input type="checkbox"/>	PS-101	Introduction to American Government and Politics	3
<input type="checkbox"/>	LEAD-500 or CSCR-116	Leadership Development or Integrative Career/Life Planning	3
<input type="checkbox"/>	GEOG-582	Programming for GIS – Python Applications	3

Semester 2

16 Units

	COURSE	TITLE	UNIT
<input type="checkbox"/>	GEOG-115	Introduction to Geographic Information Science	2
<input type="checkbox"/>	GIS-580	Geospatial Information Systems Practicum I	2
<input type="checkbox"/>	CSIS-116E or CSIS-514A	Python Programming - Level 1 or SQL Programming - Level 1	3
<input type="checkbox"/>	MATH-140	Introduction to Statistics ¹	3
<input type="checkbox"/>	CSIS-126E or CSIS-124A	Python Programming - Level 2 ¹ or SQL Programming - Level 2	3
<input type="checkbox"/>	GIS-584	Water Management with GIS	3

¹Take second 8 weeks

Career Options


Geographic Information Systems Technicians (B, M)
Geospatial Information Scientists and Technologists (B, M)
Geodetic Surveyors (C, 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.

Notes: ¹ AREA G (Math Competency) can be demonstrated by a high school math course at or above the level of Algebra 2 with a grade of C or better.

Semester 3**16 Units**

 COURSE	TITLE	UNIT
<input type="checkbox"/> GEOG-520	Intermediate Geographic Information Science	4
<input type="checkbox"/> COMM-103	Interpersonal Communication	3
<input type="checkbox"/> GEOG-585	GIS for Catastrophes	3
<input type="checkbox"/> GEOG-111	Geography of California	3
<input type="checkbox"/> GEOG-583	Spatial Database Design and Management	3

Semester 4**12 Units**

 COURSE	TITLE	UNIT
<input type="checkbox"/> GEOG-525	Advanced Geographic Information Science	3
<input type="checkbox"/> ART-104	World Art	3
<input type="checkbox"/> GIS-586	GIS for Web Applications	3
<input type="checkbox"/> GEOG-108	World Regional Geography	3

Work Experience

Sign up for a special project or internship opportunity. Gain [work experience](#) and earn credits.