

## *Geographic 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:** 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: 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	3

### **Semester 2**

**15 Units**

✓	COURSE	TITLE	UNIT
<input type="checkbox"/>	GEOG-115	Introduction to Geographic Information Science	3
<input type="checkbox"/>	CSIS-116E or CSIS-114A	Python Programming - Level 1 or SQL Programming - Level 1	3
<input type="checkbox"/>	MATH-140	Introduction to Statistics	3
<input type="checkbox"/>	CSIS-126E or CSIS-124A	Python Programming - Level 2 <sup>1</sup> or SQL Programming - Level 2	3
<input type="checkbox"/>	GEOG-584	Water Management with GIS	3

<sup>1</sup>Take 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](http://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.

**Semester 3****15 Units**

✓	COURSE	TITLE	UNIT
<input type="checkbox"/>	GEOG-520	Intermediate Geographic Information Science	3
<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****14 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"/>	GEOG-586	GIS for Web Applications	3
<input type="checkbox"/>	GEOG-108	World Regional Geography	3
<input type="checkbox"/>	GEOG-103	Field Studies in Geography	2

**Work Experience**

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