***Geospatial 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](https://www.msjc.edu/hub/)

Transfer Majors/Award Focus

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

GE Pattern/Units

* GE Pattern: n/a
* Total Units: 20

**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](https://catalog.msjc.edu/instructional-programs/).

***Semester 1 7 Units***

|  |  |  |  |
| --- | --- | --- | --- |
| a | COURSE | TITLE | UNIT |
| c | GEOG-105 | Map Interpretation and Spatial Analysis | 3 |
| c | GEOG-115 | Digital Earth - Intro to Geographic Information Science | 2 |
| c | GIS-580 | Geospatial Information Systems Practicum I | 2 |

***Semester 2 7 Units***

|  |  |  |  |
| --- | --- | --- | --- |
| a | COURSE | TITLE | UNIT |
| c | GEOG-520 | Intermediate Geographic Information Science | 4 |
| c | GEOG-582 | Programming for GIS - Python Applications | 3 |

***Semester 3 6 Units***

|  |  |  |  |
| --- | --- | --- | --- |
| a | COURSE | TITLE | UNIT |
| c | GEOG-525 | Advanced Geographic Information Science | 3 |
| c | GIS-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](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.