

GEOSPATIAL INFORMATION SCIENCE

Program Description

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. GIS involves the preparation, analysis, and scientific research necessary for identifying patterns, trends, and relationships that are represented in space and time. GIS integrates many types of data. It collects, organizes, and analyses layers of information never before possible. With these unique capabilities, GIS reveals deeper insights into data, such as patterns, relationships, and real-time situations.

Recent advancements make it possible to collect, analyze, interact and produce visualizations of data using the latest digital, photographic, data collection, and storage technologies, such as 3D animation maps, video photography, drones, and cloud storage. Students enrolled in our GIS courses have the advantage of learning advanced communication and mapmaking skills that prepare them for careers in many fields where geospatial information is needed to make smarter, informed, decisions.

The Geographic Information Science (GIS) non-transfer Certificate and AS degree prepares students for GIS-related careers which are enhanced by the completion of a bachelor or graduate program. For students currently working within these fields, there may be potential for salary and/or career advancement.

Geography (<https://msjc.edu/geography/>) & Geographic Information Science (<https://msjc.edu/gis/>) Department Pages

Transfer Preparation

MSJC offers a wide range of course work that prepares students for the workforce or for transfer to four-year colleges and universities. All four-year institutions prescribe their own standards for course evaluation and admissions. Courses that fulfill major requirements for an associate degree in a program at MSJC might not be the same as those required for transfer into a similar major at a four-year university. Please meet with a Counselor to confirm transfer requirements.

Transfer students are advised to do research on prospective majors and careers. The MSJC Transfer Center and MSJC catalog can be helpful tools. Students interested in transferring to CSU's or UC's can access major preparation by visiting ASSIST (<http://www.assist.org>). All students are advised to meet with a counselor at least once a semester to create or update their comprehensive education plan.

Contact Information

San Jacinto Campus

(951) 487-MSJC (6752)
1-800-624-5561

Roy Mason, Ph.D. (951) 639-5730
rmason@msjc.edu

Menifee Valley Campus

(951) 672-MSJC (6752)

1-800-452-3335

Roy Mason, Ph.D. (951) 639-5730

rmason@msjc.edu

Degrees/Certificates

Degrees

Non-Transfer Degree

- Geographic Information Science, A.S. (<https://catalog.msjc.edu/instructional-programs/geospatial-information-science/geographic-information-science-as/>)

Certificate

- Drone Applications in Geospatial Information Science Certificate (<https://catalog.msjc.edu/instructional-programs/geospatial-information-science/drone-applications-in-geospatial-information-science-certificate/>)
- Geographic Information Science Certificate (<https://catalog.msjc.edu/instructional-programs/geospatial-information-science/geographic-information-science-certificate/>)

Employment Concentration

- Geographic Information Science Employment Concentration (<https://catalog.msjc.edu/instructional-programs/geospatial-information-science/geographic-information-science-ecc/>)

Program Learning Outcomes

- Integrate spatial thinking with applied technology to analyze physical and cultural patterns, and discuss trends and relationships.
- Explore spatial relationships at different scales from local, regional to global.
- Explain the interrelationship between humans and the physical environment.
- Apply the scientific method to objective and subjective analysis of cultural and physical environments.
- Appreciate different cultural and ethnic perspectives within the context of opportunities and challenges.

Careers and Salaries

Discover in-demand careers and education options based on your interests! See the list of careers below or explore further by searching for **Careers or Programs** (<https://msjc.emsicc.com>).

Note: There are no guaranteed positions for students completing these programs. Education and work experience required will vary by employer. The salary and benefits for specific occupations will be dependent on work experience, education, background, and employer. Labor market statistics are from the Bureau of Labor Statistics, US Census Bureau, O-NET, EMSI.

Career/Industries	CA Annual Median Salary or Range	Employment Demand or Opening CA
Geodetic Surveyor (B)	\$97,811	410
Geographic Information Systems Technician (B, M)	\$109,228	7,346
Remote Sensing Technician (C, A, B)	\$57,065	1,690
Remote Sensing Scientists and Technologists (B, M, D)	\$114,314	348

(degree required: SM some college, C: Certificate, A: Associate degree, B: Bachelor's degree, M: Master's degree, D: Doctorate)