

## Getting a Degree/Certificate in...

# GEOGRAPHIC INFORMATION SYSTEMS

---

Geographic Information Systems (GIS) are computer-based data management systems for gathering, storing, analyzing, and displaying spatial information. GIS can produce overlay maps, perform spatial analysis and modeling and be interfaced with data from satellite imagery and global positioning systems (GPS). GIS technology is applied to environmental assessments, city and regional planning, marketing, criminal justice, location analysis, or any problem requiring the analysis and display of information.

### What type of career can I have with this major?

Since this major is so comprehensive, you will have a variety of excellent skill sets and knowledge to bring to the following careers.

- Renewable Energy Analyst
- Archaeology Technician
- Economic Research Analyst
- Geological Technician
- GIS Analyst / Specialist / Technician
- Mapping Technician
- Marketing Assistant
- Market Research Analyst
- Natural Resource Technician
- Petroleum Technician
- Planning Technician
- Real Estate Broker/Appraiser
- Software Engineer
- Survey Technician
- Telecommunications Analyst
- Transportation Technician
- Utility Technician

### Where can I work?

This profession provides you with a choice of various work environments including government agencies, non-profit organizations, for-profit agencies, and public and private companies.

- Agricultural Industries
- Business Industries
- City Planning Offices
- Communications Operations
- Corporations
- Engineering Industries
- Environmental Planning Offices
- Geography Field
- Geology Field
- Government Agencies / Contractors
- Health Field
- Life Sciences Field
- Mapping Services
- Archaeology Firms
- Natural Resource Management Firms
- Oceanography Field
- Petroleum Industries
- Physical Sciences Field
- Police, Fire, and Ambulance Dispatch
- Property Management Firms
- Real Estate Brokerage
- Real Estate Offices
- Regional Planning Offices
- Retail Marketing Offices
- Surveying Services
- Telecommunications Industries
- Tourism Industries
- Transportation Management Offices
- Utility Operations

### What type of professional organizations and resources are available in this industry?

There are many professional organizations that offer resources, articles, job opportunities, training and conference information. We suggest you visit each organization's website to gather more information and contacts in your field.

- Accreditation Board for Engineering and Technology, Inc.
- American Congress on Surveying and Mapping
- American Geological Institute
- ASPRS: Imaging and Geospatial Information Society
- Association of American Geographers
- Bureau of Land Management
- Environmental Systems Research Institute (ESRI)
- Geological Society of America
- GIS.com
- National Society of Professional Surveyors
- United States Geological Survey
- Urban and Regional Information Systems Association (URISA)

### What type of Geographic Information Systems (GIS) program does San Diego Mesa College offer?

The program at San Diego Mesa College integrates the mapping sciences, geographic information systems technology, and spatial analysis with computer supported data storage, management, and display functions. Completion of the program requires a work-study course in a public or private agency involving hands-on professional projects.

- Certificate of Performance: Geographic Information Systems Technician
- Associate in Science: Geographic Information Systems

# GEOGRAPHIC INFORMATION SYSTEMS

## Associates Degrees/Certificates

### Getting Started

- Step 1:** [Application](#) - Start by completing the online application for admission
- Step 2:** [Orientation](#) - Complete the online New Student Orientation (Flash player required)
- Step 3:** [Assessment](#) - Visit the Assessment office to learn about English and math testing
- Step 4:** [Advisement](#) - Complete the online First Semester Planning Workshop
- Step 5:** [Registration](#) - Register for classes

### While You're Taking Classes

- |  |                      |                              |
|--|----------------------|------------------------------|
| Update your resume and craft a cover letter  | Attend job fairs     | Conduct industry research    |
| Look into volunteer/internship opportunities | Perform job searches | Think about transfer options |
- See the Transfer or Career Center for assistance*

*See college catalog for program descriptions, course titles, and areas of emphasis.*

## Transfer Options

### Getting Started

- Join a professional Geographic Information Systems (GIS) association as a student member
- Identify your intended major at the university(ies) you wish to apply by carefully looking at the program descriptions. This major is also known as: "Environmental Studies" and "Geography"
- Map out where you want to transfer for your GIS Bachelor's degree

### Education Planning

#### **Fall semester 1<sup>st</sup> year (1-15 units):**

- 1) Attend transfer workshops
- 2) Review articulation agreements
- 3) Map general education (GE) requirements
- 4) Identify 4-year institutions to apply
- 5) Attend a Transfer Fair
- 6) Meet with a counselor

#### **Spring semester 1<sup>st</sup> year (16-30 units):**

- 1) Continue to attend transfer workshops
- 2) Check-in with a counselor to make sure your educational plan is on track
- 3) Seeking tutoring assistance in the academic skills center to keep your grades competitive

#### **Fall semester 2<sup>nd</sup> year (31-45 units):**

- 1) Submit admissions applications to 4-year institutions: Fall for CSU/UC; Early spring for private and out-of-state institutions
- 2) Identify deadlines and due dates for admissions transcripts and other documents

#### **Spring semester 2<sup>nd</sup> year (46-60 units):**

- 1) Identify deadlines and due dates for admissions transcripts and other documents
- 2) Submit your FAFSA between January 1<sup>st</sup>-March 1<sup>st</sup>.
- 3) Turn in your deposit and registration forms to the institution you decide to attend.
- 4) Attend the transfer orientation event(s) at your new campus
- 5) Complete academic coursework and transfer!

### While You're Taking Classes

- Update your resume
- Prepare a cover letter
- Complete an internship in GIS
- Build your network
- Maintain a strong GPA
- Hold a leadership position in a GIS club/society
- Find a mentor
- Conduct informational interviews with individuals in your desired position(s)
- Visit your Career Center as much as possible!