

Geography and Geographic Information Science

San Jacinto Campus

(951) 487-MSJC (6752)

1-800-624-5561

Marlon A. Nance (951) 487-3745

mnance@msjc.edu

Menifee Valley Campus

(951) 672-MSJC (6752)

1-800-452-3335

Cindy Nance, Ph.D. (951) 639-5540

cnance@msjc.edu

<http://gis.msjc.edu>

Degree(s)

Transfer:

Transfer:

 A.A.-T in Geography for Transfer ^{31869 AA.GEOG.OPTBAAT} or ^{31869 AA.GEOG.OPTCAAT}

(using General Education Requirements Option B or C)

Non-Transfer:

A.S. in Geographic Information Science ^{12443 AS.GEOG.GIS}

(with General Education Requirements Option A)

Certificate(s)

Certificate in Geographic Information Science ^{22145 CT.GEOG.GIS}

Employment Concentration Certificate(s)

Engineering ^{99999 ECC.GIS.E}

Geographic Information Science ^{99999 ECC.GIS}

Multimedia ^{99999 ECC.GIS.M}

Programming ^{99999 ECC.GIS.VBP}

Visual Design ^{99999 ECC.GIS.C}

PROGRAM DESCRIPTION

The A.A.-T in Geography transfers to a four-year college and prepares students for a future in a field related to Geography. The Geographic Information Science (GIS) non-transfer Certificate and AS degree prepares students for GIS related careers which are enhanced by completion of a bachelor or graduate program. For students currently working within these fields there may be potential for salary and/or career advancement.

From local to global scales, geographers study political organization, transportation systems, marketing, economics, climate and weather, urban planning, land use development, globalization, and more. They examine distribution of land forms, study soils and vegetation, analyze limited resources such as water, and human impacts on the surface of the planet.

Instructional Programs

In general, Geographers work in government research, public agencies, and are environmental consultants for nonprofit organizations.

Geographic Information Science (GIS) involves basic to advanced analysis and scientific research methods for identifying patterns, trends and relationships that are represented spatially and temporally on maps, large databases, reports and animations. Recent advancements make it possible to analyze, interact and produce maps using cloud technology. Students enrolled in our GIS courses online have the advantage of learning advanced communication and mapmaking skills that prepare them for a career in GIS, anywhere.

CAREER OPPORTUNITIES

All career opportunities listed are representative careers in each field. There are no guaranteed positions for students completing these programs. (See: www.onetonline.org)

Transfer A.A. Degree(s)

Geography

For any BA/BS careers, please see your transfer institution.

Non-Transfer A.S. Degree(s)

Geographic Information Science

Geospatial Information Scientists and Technologists, Geographic Information Systems Technicians, Remote Sensing Scientists and Technologists, Remote Sensing Technicians, Precision Agriculture Technicians, Geodetic Surveyors, Surveyors, Surveying Technicians, Mapping Technicians, Cartographers and Photogrammetrists, and many discipline related fields with “GIS skills” as an occupational description.

Certificate

Geographic Information Science

Geospatial Information Scientists and Technologists, Geographic Information Systems Technicians, Remote Sensing Scientists and Technologists, Remote Sensing Technicians, Precision Agriculture Technicians, Geodetic Surveyors, Surveyors, Surveying Technicians, Mapping Technicians, Cartographers and Photogrammetrists, and many discipline related fields with “GIS skills” as an occupational description.

Employment Concentrations

Engineering

Engineering Technician, Surveying Technician, Mapping Technician, CAD Technician

Geographic Information Science

Geospatial Information Scientists and Technologists, Geographic Information Systems Technicians, Remote Sensing Scientists and Technologists, Remote Sensing Technicians, Precision Agriculture Technicians, Geodetic Surveyors, Surveyors, Surveying Technicians, Mapping Technicians, Cartographers and Photogrammetrists, and many discipline related fields with “GIS skills” as an occupational description.

Multimedia

Multimedia Specialist, Multimedia Designer, Multimedia Producer

Programming

GIS Programmer, Database Manager

Visual Design

Computer Graphic Specialist, Cartographic Technician

TRANSFER PREPARATION

Geography

MSJC offers a range of course work to prepare students to transfer to four-year colleges and universities. All four-year institutions prescribe their own standards for course evaluation and admissions. Prospective transfer students are advised to research careers, degrees and majors in the Career/Transfer Center, access www.assist.org, review the MSJC catalog and meet with a counselor to expedite their transfer plan.

Geographic Information Science

MSJC offers a range of course work to prepare students to transfer to four-year colleges and universities. Courses that fulfill major requirements for an associate degree in this program might not be the same as those required for transfer into the major at a four year university. All four-year institutions prescribe their own standards for course evaluation and admissions. Prospective transfer students are advised to research careers, degrees and majors in the Career/Transfer Center, access www.assist.org, review the MSJC catalog and meet with a counselor to expedite their transfer plan.

LEARNING OUTCOMES

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

DEGREES

An Associate in Arts in Geography for Transfer will fulfill the requirements for students to transfer to a four-year college or university as a Geography major.

The major required for an A.A.-T in Geography for Transfer may be met by:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.

- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.

A.A.-T in Geography for Transfer (18-21 units)

Required Core (6 units)

GEOG-101	Physical Geography	3 units
GEOG-102	Cultural Geography	3 units

List A: Select two to three (6-8 units)

GEOG-103	Field Studies in Geography	2-4 units
GEOG-104	Physical Geography Lab	1 unit
GEOG-105	Map Interpretation and Spatial Analysis	3 units
GEOG-106	Introduction to Weather and Climate	3 units
GEOG-108	World Regional Geography	3 units
GEOG-111	Geography of California	3 units
GEOG-115	Introduction to Geographic Information Science	3 units

List B: Select two (6-7 units)

ANTH-102	Cultural Anthropology	3 units
or		
ANTH-102H	Honors Cultural Anthropology	3 units
GEOL-100	Physical Geology: Dynamic Planetary Systems of Spaceship Earth	4 units
GEOG-107	Urban Geography	3 units

Units for Major	18-21
CSU General Education or IGETC Pattern	37-39
Possible double counting	10
Transferable Electives (as needed to reach 60 CSU transferable units)	60 units
Total Units for A.A.-T Degree	60 units

This Associate in Arts in Geography for Transfer degree is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. A student completing this degree is guaranteed admission to the CSU system, but not a particular campus or major. Students should meet with a counselor to develop an educational plan and receive university admission and transfer requirements.

Degree in Geographic Information Science (18 units)

An Associate in Science degree in GIS may be earned by completing the 18 units for the GIS Certificate, as well as all MSJC General Education Option A requirements (for a total of 60 units)

CERTIFICATES

Certificate in Geographic Information Science (18 units)

Required Courses (12 units)

GEOG-105	Map Interpretation and Spatial Analysis	3 units
GEOG-115	Introduction to Geographic Information Science	3 units
GEOG-120	Intermediate Geographic Information Science	3 units
GEOG-125	Advanced Geographic Information Science	3 units

Elective Courses (minimum 6 units)

Elective courses are identified under the following concentration areas. Students must complete 6 units (any combination) under one concentration area to earn a Certificate in GIS. Once a Certificate in GIS has been earned, additional Certificates in GIS may be awarded for completion of 6 units in other concentration areas.

EMPLOYMENT CONCENTRATIONS

Engineering (6 units)

ENGR-157	Microstation I	3 units
ENGR-164	Plane Surveying I	4 units
ENGR-166	Legal Aspects of Surveying	3 units
ENGR-167	Global Positioning Systems	4 units

Geographic Information Science (6 units)

GEOG-081	Spatial Awareness	0.5 unit
GEOG-082	Programming for GIS	3 units
GEOG-083	Spatial Database Design and Management	3 units
GEOG-084	Water Management with GIS	3 units
GEOG-085	GIS for Catastrophes	3 units
GEOG-086	GIS for Web Applications	3 units
GEOG-088	GIS Client-Based Projects	3 units
GEOG-149	Occupational Internship: Geographic Information Science	1-4 units
GEOG-298*	Various Topics in Geographic Information Science	0.5-3 units
GEOG-299	Special Projects: Geographic Information Science	1-3 units

Multimedia (6 units)

MUL-110	Introduction to Multimedia	3 units
MUL-131	3D Animation	3 units
MUL-299	Special Projects: Multimedia	1-3 units

Programming (6 units)

CSIS-111B	Fundamentals of Computer Programming	3 units
CSIS-214	Principles of Database Management Systems	3 units

Visual Design (6 units)

ART-120	2D Design	3 units
ART-123	Graphic Design I	3 units

