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:
AA-T in Geography for Transfer 31869 AA.GEOG.OPTBAAT and 31869 AA.GEOG.OPTCAAT
(transfer credit)

Non-Transfer:
A.S. in Geographic Information Science 12443 AS.GEOG.GIS
(transfer credit)

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 AA-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 A.S 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
Instructional Programs

resources such as water, and human impacts on the surface of the planet. 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

Geography

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

Non-Transfer A.S. Degree

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.

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

AA-T in Geography for Transfer (19-23 units)
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 AA-T in Geography for Transfer may be met by:

- Completion of 60 semester 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 in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.

Required Core (7 units)
GEOG-101 Physical Geography 3 units
GEOG-102 Cultural Geography 3 units
GEOG-104 Physical Geography Lab 1 unit

List A Elective (6-9 units)
GEOG-103 Field Studies in Geography 2-4 units
GEOG-105 Map Interpretation and Spatial Analysis 3 units
GEOG-106 Climate and Weather 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 Elective (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 Planets Earth 4 units
GEOG-107 Urban Geography 3 units
Units for Major 19-23
CSU General Education or IGETC Pattern 37-39
Possible double counting 0-10

Total Units for AA-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 Plan 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-149 Occupational Internship:
Geographic Information Science 1-4 units
GEOG-298A-Z: Special Topics in Geographic Information Systems 0.5-3 units
GEOG-299 Special Projects:
Geographic Information Science 1-3 units

Multimedia (6 units)
ART-130B/MUL-140 Digital Art - Illustration 2 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-112A Visual Basic Programming – Level 1 3 units
CSIS-122A Visual Basic Programming – Level 2 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
ART-130A Digital Art - Imaging 2 units
ART-130B/MUL-140 Digital Art - Illustration 2 units

Note: Every effort has been made to keep program information current. Please use this information as a guide and consult with the chair of the department/program or an MSJC counselor.