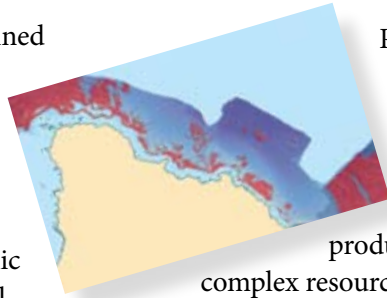


GIS views the world from another perspective!

GEOGRAPHIC INFORMATION SYSTEMS has gained worldwide popularity due to its multi-faceted and versatile applications. Contributing to its popularity is the ability to analyze universal environmental problems, based on integrating mapping and computer databases. It is used by a large variety of private and public agencies to meet the growing demand for vital spatial information and is highly recognized for its ability to interpret data for essential decision-making.

Utilizing satellite communications and advanced computer technology, GIS and GPS (Global



Positioning Systems) can be applied to the fields of natural resources, earth sciences, and environmental systems.

Trained GIS technicians produce *intelligent maps* to help solve complex resource planning and management problems in areas such as watershed analysis, ecosystem analysis, recreation planning, and fire control management to name a few.

Columbia College trains students in the practical application of Environmental Systems Research Institute (ESRI) software, importation of GIS data, display, visualization, exploration, query, analysis, and production of maps and reports.

Fostering Partnerships

Business partnerships with private and governmental agencies allow our students to earn additional units, gaining *firsthand* on-the-job experience while attending classes.

Advance TechPrep

Some courses taken at the high school level may qualify for credit toward the college's certificate.

Transfer Program

Our rigorous curriculum provides excellent preparation and training for students to take advanced GIS coursework at the university level.

Career Opportunities

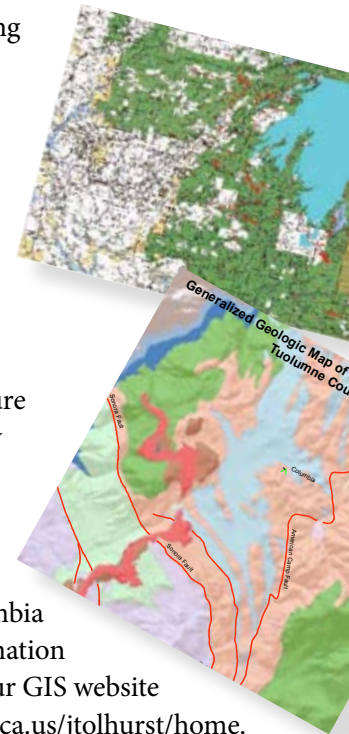
Columbia College offers Geographic Information Systems Degree and Certificate Programs, designed to prepare students for entry-level employment in this growing field. Following are some of the many career opportunities available.



- Archaeology
- Architecture
- Business Geographics
- City & County Planning
- Conservation
- Transportation
- Engineering
- Fire Technology
- Forestry
- Health & Medical
- Natural & Water Resources
- Public Safety
- U.S. Dept. of Agriculture
- U.S. Geological Survey

Register for Classes Now!

Call Jeff Tolhurst
209.588.5235 for more
information *today* on Columbia
College's Geographic Information
Systems Program, or visit our GIS website
at <http://virtual.yosemite.cc.ca.us/jtolhurst/home.htm>.





11600 Columbia College Drive
Sonoma CA 95370

Geographic Information Systems



Certificate Program

Computer Science / Geographic Information Systems

Required Courses	Units
CMPSC 1 Computer Concepts & Information Systems... 4	4
CMPSC 3 Windows and DOS Operating Systems..... 3	3
CMPSC 60 Introduction to GIS – ArcView 3	3
CMPSC 65 GIS Applications 3	3
CMPSC 70 Introduction to Raster-based GIS 3	3
CMPSC 75 GIS Applications in Resource Management ... 3	3
DRAFT 50A Computer Assisted Drafting I..... 3	3
ESC 5 Physical Geology Or 4	4
ESC 10 Environmental Geology Or..... 3	3
GEOGR 15 Physical Geography 3	3
ENGL 1A Reading & Composition: Beginning..... 3	3
ENGL 151 Preparation for College Composition 4	4
FORTC 153 Forest Surveying Techniques 3	3
MATH 101 Algebra I: Fundamentals or equivalent Or 6	6
Higher Level Algebra	
NATRE 1 Environmental Conservation 3	3
NARTC 160 Aerial Photography & Map Interpretation..... 2	2
Total Required Units 42-44	

Recommended Optional Courses	Units
BUSAD 97 Work Experience (AutoCAD or GIS)Min. 4	Min. 4
CMPSC 9 Intro to UNIX/LINUX 3	3
CMPSC 28 Visual Basic 3	3
CMPSC 41 Networking Essentials 3	3
CMPSC 55 Data Base Management 3	3
CMPSC 57 GIS Data Management – Intro to Geodatabase 1	1
CMPSC 58 GIS-ArcView 1	1
CMPSC 59 Geographic Info. & Global Positioning Sys... 1-3	1-3
CMPSC 61 GIS Mapping – Intro to Fire Incident Mapping 1	1
DRAFT 50B Computer Assisted Drafting II 3	3
MATH 2 Elements of Statistics 3	3
MATH 8 Trigonometry 3	3
SPCOM 1 Fundamentals of Speech 3	3



GIS Department 209.588.5235
 Instructional Services **209.588.5142**
 Admissions & Records **209.588.5231**
 Visit our website **www.gocolumbia.edu**
 11600 Columbia College Drive
 Sonoma CA 95370