

Geospatial Technology Career Pathway

Career Technical Education (CTE)



High School Graduate

2 year AA/AS
4 Year BA/BS

Incumbent Workforce

Career "Pipeline"

- Agriculture
- Archeology
- Banking and Financial Services
- Business
- Census
- Conservation
- Criminal Justice
- Defense and Intelligence
- Disaster Management
- Education
- Economic Development
- Education Administration
- Education and Research
- Elections
- Emergency Response
- Energy
- Engineering
- Environmental Health
- Environmental Law
- Environmental Planning
- Epidemiology
- Fire Science Forestry
- Geography
- Government
- Geology
- Hazard and Risk Analysis
- Health Care Delivery and Policy
- History
- Homeland Security
- Hydrology
- Insurance
- Land Records and Cadastral
- Law Enforcement
- Libraries
- Location Based Services
- Mapping and Cartography
- Marine and Coastal Ecology
- Media and Press
- Military
- Mining
- Museums
- Oceanography
- Oil and Gas Pipelines
- Political Science
- Real Estate
- Social Services
- Surveying
- Sustainable Development
- Transportation and Logistics
- Travel and Tourism
- Urban & Rural Planning
- Utilities (gas, electric, water, sewer)

Occupations Using Geospatial Technology

1 year
Certificate in
GIS

Experience
2 year GIS
Degree

Experience
4 year GIS
Degree

Experience
Graduate
Degree GIS/
GIScience

GIS Assistant

GIS Technician

GIS Specialist

GIS Analyst

Senior GIS Analyst

GIS Coordinator

Geographic
Information Officer
(GIO)

GIS Manager

GIS Scientist

Example Geospatial Focus Areas:

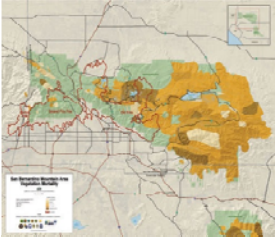
- Cartography & Visualization
- Application Development
- Database Design & Development
- Data Collection & Development/GPS
- Remote Sensing
- Spatial Analysis & Modeling
- Web Map Development

Note: Job titles vary considerably in this industry. These titles are representative, but not all inclusive.



Geospatial Technology Careers

On the opposite page is a list of some of the exciting job possibilities you can pursue if you know how to use geospatial technology. Follow the Pipeline to see how increasing your education and experience in geospatial technology can lead to higher paying and rewarding careers. Geospatial Technology includes:



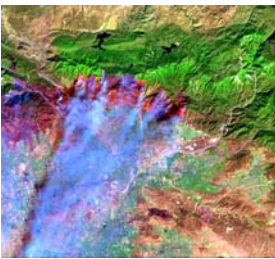
Geographic Information Systems (GIS)

Maps on the web and on TV are helping us to understand and solve problems such as where a wildfire is burning, what states have more cases of flu, or if bad weather is approaching. GIS is the technology that is helping create those maps. Learn more about GIS at gis.com



Global Positioning Systems (GPS)

A GPS can tell you where you are and help you navigate to another location by the best route. Professional grade GPS equipment can serve as a high precision field data collection tool to create locations of features on the ground for use in GIS or remote sensing. Learn more about the global positioning system at gps.gov



Remote Sensing

More remote sensing data is available than ever before to help make finding solutions for complex problems easier, faster and less expensive. People who understand how to use images and other data from satellites and ground sensors are in demand. Learn more about remote sensing at rst.gsfc.nasa.gov

What are the Career Opportunities?

Even with the downturn in the economy, opportunities continue to be good for people who know and can use geospatial technology — either part time as a tool, in another occupation, such as environmental science or crime analysis, or as a specialist focusing full time on geospatial technology. To learn more see directionsmag.com or visit esri.com/industries or videos at YouTube.com and search esrity.com.

Where can I find out more?

Occupational Sites: - articles about geospatial careers, occupations, jobs, and salaries

careervoyages.gov	geospatialcareers.net	GISjobs.com	gjc.org
directionsmag.com	giscafe.com	gislounge.com	online.onetcenter.org
Geojobs.org	giscareers.com	giwis.org	urisa.org

Professional Organizations: Some offer student internships at meetings and conferences.

Association of American Geographers	(AAG)	aag.org/careers
Geospatial Information & Technology Association	(GITA)	gita.org
National Council for Geographic Education	(NCGE)	ncge.org
The Imaging & Geospatial Information Society	(ASPRS)	asprs.org
The Society for Conservation GIS	(SCGIS)	scgis.org
Urban and Regional Information Systems Association	(URISA)	urisa.org

Certification: GISCI gisci.org ASPRS asprs.org Digital Quest: digitalquest.com