Geospatial Technology Career Pathway

Career Technical Education (CTE)



occupations Using Geospatial Technology

High School 2 year AA/AS 4 year BA/BS Graduate

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

Geology

Hazard and Risk Analysis

Health Care Delivery and Policy

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

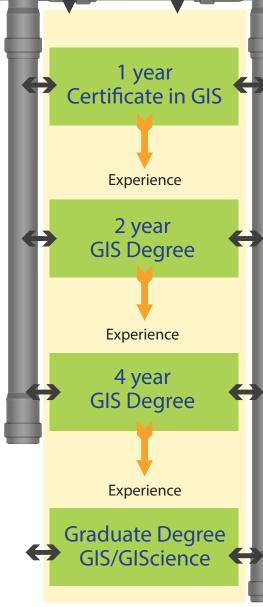
Sustainable Development

Transportation and Logistics

Travel and Tourism

Urban and Rural Planning

Utilities (gas, electric, water, sewer)



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/GIS

Remote Sensing

Spatial Analysis & Modeling

Web Map Development

Note: Job titles vary considerable 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 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:



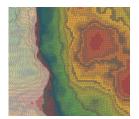
Geographic Information Systems (GIS)

Maps on the web and on TV are helping is to understand and solve problems such as where a wildfire is burning, what states have more cases of the flu, or id 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 group for use in GIS or reote sensing. Learn more about the global positioning system at gps.gov



Remote Sensing

More remote sensing data is available that 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 use geospatial technology – either part time as a tool, in another occupation, such as environmental science or crime analysis, or as a a specialist focusing full time on geospacial technology. To learn more see directionsmag.com or visit ersi.com/industries or videos at YouTube.com and search esrity.

Where can I find out more?

Occupational Sites

Articles about geospacial careers, occupations, jobs and salaries

Careervoyages.gov directionsmag.com Geojobs.org geospatialcareers.net Giscafe.com

gjc.org online.onetcenter.org giscareers.com 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 & Regional Information Systems Association (URISA) urisa.org







GISjobs.com

giwis.org

gislounge.com

Certification

GISCI gisci.org **ASPRS** asprs.org