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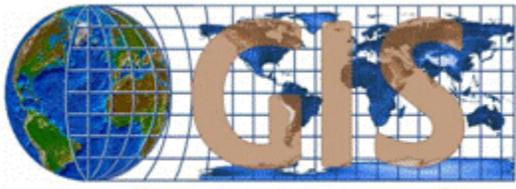
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Geospatial Information Science

Geospatial Information Science

1324129 -4605401 4195114; 41°23'28.30"N 73°57'33.038"W; 18TWL8701682707; zone 18 587016E 4582707; HJBM0244923472

Geospatial Information Science courses are taught with extensive hands-on use of digital technology in the Geographic Science Laboratory (GSL) and in the field. Cadets use GPS, view and analyze satellite imagery, build map databases and produce maps with state of the art hardware and software.

FUNDAMENTALS OF GIS (TAKE ALL THREE)

- EV377 Remote Sensing
- EV378 Computer Cartography
- EV398 Geographic Information Systems

ADVANCED SPATIAL DATA ANALYSIS (TAKE BOTH)

- EV477 Advanced Remote Sensing
- EV498 Advanced Geographic Information Systems

SPATIAL DATA ACQUISITION (SELECT ONE))

- EV379 Photogrammetry
- EV380 Principles of Surveying

GEOGRAPHY FOUNDATION

- EV365 Geography of Global Cultures

INTEGRATIVE EXPERIENCE

- EV482 Military Geography

TWO ELECTIVES

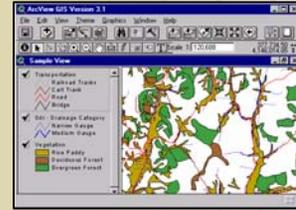
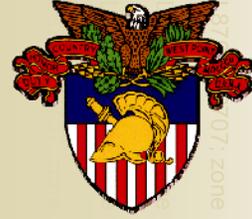
GIS HONORS MAJOR

TWO-COURSE MINIMUM REQUIREMENT:

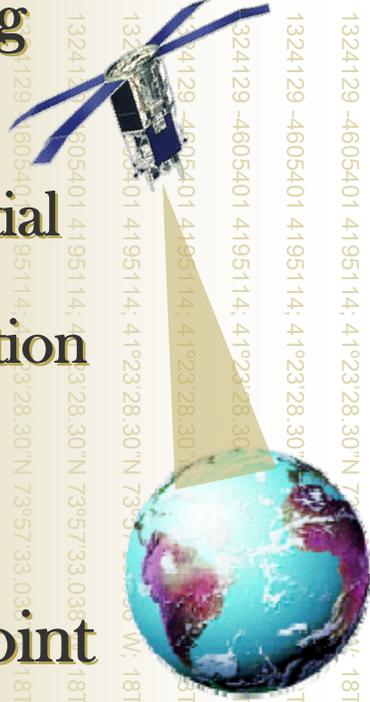
- EV489A Independent Study in Geospatial Information Science
- Select one additional course from the GIS Free Electives list

Cadets majoring in Geospatial Information Science receive a 3Y (Space Activities) Skill Identifier on their official military record

The Science Behind the Map



Majoring in Geospatial Information Science at West Point





Majoring in GEOSPATIAL INFORMATION SCIENCE

Geospatial Technology in the Military

The military increasingly relies on geospatial technology and data to achieve information dominance on the battlefield. Examples include: GPS, satellite imagery, real-time force tracking, sensor integration, and massive geographic databases.

To dominate on the battlefield, the Army's transformed fighting forces depend on leaders who understand the capabilities and limitations of geospatial technologies.

Majoring in **Geospatial Information Science** gives future Army Officers, regardless of branch, the knowledge set to leverage these tools when leading soldiers in our high tech digital Army.

The Geospatial Information Science Program uses a hands-on approach to teach the science behind the technologies that locate, measure, and quantify geographic phenomena.

Specialized courses, taught with an application focus and using a state-of-the-art computer facility, introduce the various components of geospatial science.

EV398 Geographic Information Systems

EV498 Adv. Geographic Information Systems

Study the input, storage, manipulation, and analysis of geospatial data on computer systems

Geospatial Technology outside the Military

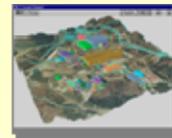
"...technological advances have also helped drive private-sector jobs. The Bureau of Labor Statistics lists G.I.S.-related jobs as among the fastest-growing new or emerging fields." *NY Times Aug 12th, 2007*

Geospatial technology is one of the leading growth industries over the next decade according to the U.S. Department of Commerce. Geospatial technology is becoming an integral component of nearly every business and most government agencies from the local to federal level. Many of these organizations are directly involved in Homeland Defense.

A major in **Geospatial Information Science** allows you to excel in this field and prepares you for graduate school in this or many other related disciplines.

EV379 Photogrammetry

The art and science of making accurate measurements with images



EV380 Surveying



Obtaining accurate measurements in the field with laser range finding and GPS

EV377 Remote Sensing EV477 Adv. Remote Sensing

Analyzing geographic features from satellites and aerial platforms



EV378 Cartography



Teaches the principles of cartographic communication using computer mapping technology