

## GEOMATICS & SURVEYING

### Geomatics & Surveying on the Job

Geomatics is the modern term referring to an integrated approach to the measurement, analysis, and management of spatial data. Geomatics employs advanced technologies such as Geographic Information Systems (GIS), the Global Positioning System (GPS), digital photogrammetry, digital total stations, and satellite remote sensing to create a detailed but understandable picture of the Earth's physical features and the built environment.

### Skills & Disciplines

Geomatics encompasses disciplines that depend on georeferenced spatial data, including surveying, cartography, land information management, geodesy, remote sensing and engineering. Geomatics professionals design, develop and operate systems for collecting and analyzing spatial information about the land, the oceans, natural resources, and the environment.

#### MECOP Intern Project Samples

- Surveying
- Cartography
- Remote Sensing
- GPS Applications

#### Key Course Highlights

- Calculus and Physics
- Engineering Geology
- Computer Aided Drafting
- Plane Surveying
- Boundary, Construction, and Engineering Surveying
- GPS Applications
- Remote Sensing
- Geographic Information Systems