

Data Acquisition in Geographic Information Systems Workshop Agenda

Description: This course provides students with the knowledge and practical experience necessary to develop skills in the acquisition, management, conversion, analysis, and creation of spatial data, an integral part of the development and implementation of geographic information systems. Topics include acquisition of existing data sets, data format conversion, georeferencing, digitizing from maps, address matching, and acquisition of data from remote sensing sources and the global positioning system (GPS). Class format: approximately 50% lecture, 50% software applications.

Day 1

- What is Data Acquisition?
- **Lecture 1:** Georeferencing
- Hands-on Training : Georeferencing
- **Lecture 2:** Editing Spatial Data
- Hands-on Training: Vector Digitizing
- Lunch Provided (1 hr)
- **Lecture 3:** Data Attributing
- Hands-on Training: Creating and Working with Attributes
- **Lecture 4:** Address Matching
- Hands-on Training: Geocoding and Address Locators

Day 2

- **Lecture 5:** Data from Satellites (Imagery, LiDAR, GPS)
- Hands-on Training: Working with Remotely Sensed Imagery
- **Lecture 6:** Data Sources and Conversion
- Hands-on Training: Working with Existing Spatial Data Sources
- Lunch Provided (1 hr)
- **Lecture 7:** Spatial Manipulation and Processing
- Hands-on Training: Creating and Modifying Spatial Data with Tools
- **Lecture 8:** Metadata