



ROBERT BENTLEY
GOVERNOR

ALABAMA GEOGRAPHIC INFORMATION PROGRAM OFFICE



PHILLIP HENDERSON
DIRECTOR

Introduction to GIS

Prerequisites

A basic understanding of computer hardware and Microsoft Windows operating systems.

Description

This one-day seminar is designed to give participants an overview of the State of Alabama GIS Executive Council and Program Office, to inform participants about Virtual Alabama and to introduce participants to Geographic Information Systems (GIS). Geographic Information Systems provide a variety of tools and technology to unearth and explain relationships, patterns, occurrences, and coincidence of spatially distributed features, objects, and information. Whether you know it or not, GIS impacts your daily life in many ways. The tools GIS offers enable business professionals to identify market areas, law enforcement officials to map and predict where crime is likely to occur, emergency management agencies to plan effective rescue and evacuation strategies in advance of disasters, and city, county, or state agencies to formulate and execute developmental plans in response to future growth trends as well as manage utilities, geo-spatial assets and parcel data. Topics covered in this seminar include GIS history and geospatial concepts, GIS computer operations, and map-making. Participants will gain hands-on experience with the world's leading GIS software, ESRI ArcGIS and Intergraph GeoMedia Professional. In addition, they will work with Global Positioning Systems (GPS) and gain an understanding of how GIS and GPS are combined to solve modern-day geospatial problems as well as provide insight into historical events. A portion of the seminar will touch on the latest 3D and 4D GIS technologies.

Seminar Topics

- How is GIS governed in Alabama?
- What is Virtual Alabama and how is it a common operating picture?
- What is GIS and how is it used?
- Hands-On Session, ESRI ArcGIS 10.1.
- GIS: a Public Health Perspective
- Cartographic Concepts, Map Types, and Computer Cartography, ESRI ArcGIS 10.1.
- Data Types, Data Storage: Building Relational Databases, ESRI ArcGIS 10.1.
- Working with Images and Digitizing Features, ESRI Arc GIS 10.1.
- Overview and Hands-On with Intergraph GeoMedia Professional.
- Remote Sensing, GPS and 3D GIS.

Seminar Leaders

- Dr. Terry Winemiller
- Dr. Steve McKinney
- Phillip Henderson
- Agency GIS Specialists