

## **Geospatial Links GIS & RS Training**

# 2017 Course Catalogue



#### Introduction

At Geospatial Links, we recognize individual and distinct learning styles and training goals. With our complete range of training solutions, for beginners, intermediate and advanced users, we caters for all skill sets and educational requirements. We offer instructor-led and self-paced training solutions that teach fundamental GIS and RS technology skills and best practices to accomplish expert workflows. Geospatial Links closely monitors new training technologies to offer creative and cost-effective solutions to our users. Training and education are critical to every successful GIS and RS implementation and will help you/your organization derive maximum benefits through spatial solutions.

#### Why train with Geospatial Links?

- You are assured of quality based on our exceptional group of highly qualified, knowledgeable, experienced and friendly instructors who have all been certified through rigorous GIS practical experience and trainings.
- Our instructors are also equipped with wide knowledge and skills acquired from consultancy and technical support as well as regular training on the latest software updates.
- We offer you a wide range of courses that are tailored to suit your exact needs.
- Our curriculum provides demonstrations and hands-on exercises which reinforce the course lectures.
- Geospatial Links offers a conducive learning environment.
- We offer flexible trainings and Geospatial Links can organize trainings to be conducted at your organization's premises. We can simply bring training to your doorstep.
- Affordable trainee fee

#### **Our Training Solutions**

Get individual attention, direct peer interaction, and immediate response to your questions with our instructor-led training; a combination of personal delivery, hands-on experience, and class participation in creating a rich learning environment.

## Under this module we offer a range of courses to enable you acquire the required skills:

- Principles of GIS
- Concepts and terminologies
- Data types and their sources

#### Designing Maps with ArcGIS

- Georeferencing
- Digitizing
- Editing Data with ArcGIS for Desktop
- Attribute data creation
- Spatial analysis (user specific)
- How to present your output
- Data collection using GPS, etc.
- And
- Principles of RS
- Image classification with both Edras Imagine and ArcGIS, Mosacing etc.

#### Applications areas of GIS/RS

- Environment Management
- Site selection
- Emergency Response Planning
- Agriculture
- Petroleum
- Logistics, transportation and infrastructure management
- Urban Planning
- Disaster management
- Wildlife management
- Crime analysis, etc.



#### Customized training

With our customized instructor-led training, we train based on your needs, workflows and what you do at your workplace. We can customize our courses and programs to meet you and your organization's needs.

#### [A] Course Description (GIS)

### 1. Introduction to GIS Duration: One day

Are you new to GIS? Equip yourself with fundamental GIS principles, concepts and terminologies. Also get introduced to ESRI ArcGIS software application, its interface, and tools.

#### After Course completion, Trainee must be able to:

- Understand GIS fundamental concepts and its massive benefits
- Navigate through ArcGIS application
- Find and organize geographic data and other GIS resources for a mapping project.

## 2. ArcGIS Essential Workflows Duration: Two days

Explore a range of ArcGIS functionalities and skills!

#### After Course completion, Trainee must be able to:

- Organize, create, and edit geographic data so that it is accurate and up to date for further use in the system.
- Use ArcGIS software and content to create high-quality maps that combine data from different sources.
- Manage, symbolize, and label map layers to support visualization and data exploration.
- Design an attractive page layout for maps that can be printed.
- Apply a standard workflow to analyze GIS data and solve spatial problems.
- Deliver maps and analysis results to multiple platforms for access to both GIS users and non-GIS
  users.
- Provide the fundamental ArcGIS knowledge and experience needed to enroll in courses such as Data and Map Production, Geoprocessing and Analysis, Enterprise GIS and Multi-user Geodatabases..

#### 3. ArcGIS Geoprocessing and analyses Duration: Two days

Find out how you can extend your ArcGIS skills in the areas of data creation and editing, geoprocessing models, and GIS analysis for better decision making.

#### After Course completion, Trainee must be able to:

- Choose appropriate data, methods, and tools to plan, execute, and document a given analysis project.
- Automate analysis tasks using geoprocessing models.
- Execute a use specific analysis, e.g. Topographic, Network or Site Selection process.
- Apply spatial statistics to examine distribution patterns and identify hot spots.
- Share analysis results so they are accessible and repeatable.



## 4. ArcGIS Geo-data collection (Field work) Duration: one day

Learn how to deploy mobile GIS solutions in your organization including how to collect and update data in the field using your preferred mobile device.

#### After Course completion, Trainee must be able to:

- Effectively collect, update, analyze, and process GIS data using various mobile devices.
- Learn the skills that will prepare you for using ArcPad, ArcGIS for Windows Mobile, and ArcGIS for Smart-phones and Tablets in your daily work.
- Use ArcMap for the preparation of data and maps for field work.
- Capture and edit data in the field using Global Positioning System units, smartphones or tablets, and transfer field edits to an existing GIS database using ArcMap.

#### [B] Course Description (Remote Sensing)

#### 1. Introduction to Remote Sensing Duration: One day

Are you new to RS? Equip yourself with fundamental RS principles, concepts and terminologies. Also get introduced to Intergraph's Erdas Imagine software application, its interface, and tools.

#### After Course completion, Trainee must be able to:

- Understand RS fundamental concepts and its massive benefits
- Navigate through Erdas Imagine application
- Find and organize geographic data and other RS resources for a project.
- Solve spatial and environmental problem using RS techniques

## 2. Erdas Imagine Essential Workflows Duration: Three days

As an Image Analyst Erdas Imagine workflows and tools is very essential for your image analysis.

#### **Benefits**

- Learn and master the basics of Erdas Imagine
- Raster data management
- Image display concepts
- Performing Image to Map registration
- Regions of interest and classification





Did you know that as an Environmental Manager or Natural Resource Scientist you can use remote sensing to derive and analyze information on land use/land cover to solve environmental problems such as?

- Vegetation analyses (e.g. Normalized Difference Vegetation [NDVI])
- Land degradation assessment (e.g. Gully erosion, desertification, oil spill, etc)
- Vulnerability assessment (e.g flooding)
- Trend analyses (e.g Landuse change deforestation, urban growth, etc)

This course explains how you can do this and explore much more with remote sensing.

#### [C] Course Description (Computer Aided Drafting- Duration 5 days)

Are you an Architect, Engineer, Surveyor, Town Planner, etc.? Equip yourself with Computer Aided Drafting (CAD) techniques tailored down to your profession to give yourself an edge and increase your relevance in the industry. Learn how to use the following software applications at basic and advanced level:

**AutoCAD** 

- AutoCAD
- AutoCAD Land Development
- Autodesk Revit Architecture





#### **Find Out More about GSPL Trainings**

Plot 45, Pwambara Layout, FCT, Abuja, Nigeria.

