

Module 7: Spatial Analysis Function

This module will cover the topics of presenting data and creating maps using ArcMap. The session will also cover the planning map design and layout, visual balances and exporting maps into graphics format. The session will be completed with number of hands on exercises.

Methodology:

The course will comprise lectures, hands on exercises case studies and group discussions. It is based on the principles of interactive learning in that participants are expected to share their experience and knowledge during the course. The course will be conducted with intensive lectures and user-friendly practices session. Well-experienced trainer and professionals will provide the lectures and conduct the practical session.

Benefits or Takeaway from the Course:

Participants will be able to learn about the application of ArcGIS in both public and private sector organizations. By sharing experience and relating this to course Participants will be able to apply the practical ideas that they have learnt through this for execution of planning activities using ArcGIS for the benefit of their organizations.

Who Should Attend:

This course is for those who are new to ArcGIS and GIS in general. Professional who are working with GIS, University Student and as well as interested persons can also attend the course.

Prerequisites:

Participants should know how to use Windows-based software.

Course Information:

Course Date:

(Evening Course: During working day: 6:00 pm - 8:30 pm and Saturday: 4:00 pm - 8:00 pm)

Tuition Fees: 15,000.00 per participant (inclusive of tuition fees, training materials and refreshment etc.)

Contacts:

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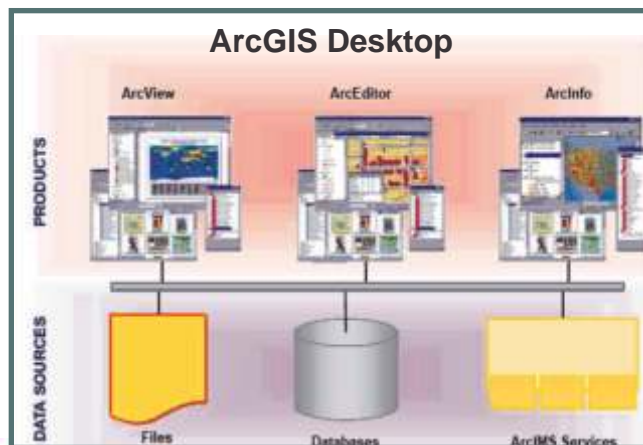
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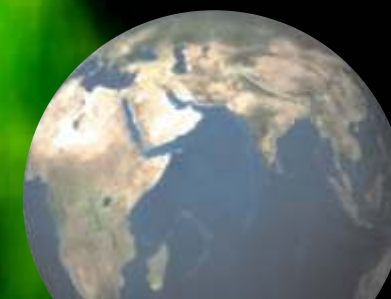
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Important Note: The mentioned dates are tentative and dependent on availability of minimum participant (60% out of 12 person per course).



A training course on

Advance ArcGIS



? September - ? September 2007
(Evening Course)

CEGIS

Center for Environmental and Geographic
Information Services

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Introduction

The Center for Environmental and Geographic Information Service (CEGIS) is a Public Trust under The Ministry of Water Resources

The Center for Environmental and Geographic Information Service (CEGIS) has been training individuals to use GIS and related technologies since 1991. In 1995, CEGIS launched the ArcInfo Learning Center that is recognized as one of the few ESRI certified centers in the regions and the only one in Bangladesh. CEGIS offers certificate course on ArcGIS. Certified ESRI Trainers with highly experienced trainers who have many years of practical experience in the field will conduct the course.

Course Objectives:

- The course objectives are to train the professionals at different level and graduate students
- to know about the concept and possible applications of GIS in planning and natural resources management related activities
- become familiar with the various components and functions of the ArcMap, ArcCatalog and Arc Toolbox; Spatial Analyst and 3D Analyst.
- to develop skills to operate ArcGIS for advance analysis.

Course Description:

This course covers fundamental GIS concepts and functions of ArcGIS software. In this course, participants will learn how to use ArcMap, Arc Catalog and ArcToolbox and explore how these applications perform concurrently to provide complete GIS solutions. This course focuses on GIS database query, manipulate tabular data, edit spatial and attribute data and data representation in terms of maps and charts. Participants will also learn about spatial and attribute data automation and Geodatabase creation techniques. Following topics will be covered under this course:

- Introduction to GIS and ArcGIS components (ArcMap, Arc Catalog and Arc Toolbox etc.)
- Display and query spatial and tabular data.
- Edit spatial and attribute data

- Associates tables with joins and relates
- Data creation through digitizing
- Build geodatabase from existing data and populate geodatabase.
- Usages of Spatial Analysis function for advance analysis
- Usages of 3D Analysis function for advance analysis
- Case studies on ArcGIS Advance Analysis
- Produce maps, reports, and graphs and other relevant topics

Special Features of the Course:

1. *Discussion with Leading Managers or GIS Professionals*

During the course, participants will have the opportunity to discuss with organizational leaders and professionals who have working experience on the application of ArcGIS of in both the public and private sectors, in the region.

2. *Special Study Projects:*

Participants will be formed into Project Teams at the start of the course. They will be assigned projects on ArcGIS use/application, which all members of the team will be expected to contribute. Every member will be expected to make a presentation on his own contribution to his team's project, on the final session.



Course Content:

The course is containing with several modules, which will be covered during the course period.

Module 1: Introduction to GIS and ArcGIS concepts

This module will covered concept of GIS, application of GIS in different sectors, concept of ArcGIS and component ArcGIS. The session will be completed with number of hands on exercises.

Module 2: Displaying data, working with map layers, query and data analysis.

This module will covered displaying different GIS data layers, querying database and analysis of data. The session will be completed with number of hands on exercises.

Module 3: Working with tables

This module will covered the topics of working with tables, creating graph and reports, working with spatial data, explore spatial data format etc. The session will be completed with number of hands on exercises.

Module 4: Editing data and Map projection

This module will covered the topics of, editing spatial and attribute data, working with Map Projection and Map Scale. The session will be completed with number of hands on exercises.

Module 5: Building Geodatabase with ArcGIS

This module will covered the topics of building geodatabase and importing existing data into geodatabase, digitizing data in ArcMap. The session will be completed with number of hands on exercises.

Module 6: Spatial Analysis Function

This module will covered the topics of advance analysis function including concept of spatial analysis, buffering, finding suitable sites for a features (e.g. school), finding alternate accessibility of new features and application of 3D Analysis etc.

