

Geomatics Course Catalog

Course Title	Course Description	Duration (Days)
Working with ArcGIS Spatial Analyst	<p>This course will provide participants means to produce and control raster data using Spatial Analyst. It is designed for experienced ArcGIS users to create raster data and work with them to identify spatial relationships. Participants will be exposed to variety surfaces creation techniques such as hillshade, cost distance, shortest path analysis, etc. It will also cover map algebra, mathematical functions and operators using the raster calculator.</p> <p><i>Objective: After completion of the course, participants will be able to:</i></p> <ol style="list-style-type: none"> 1. <i>Understand the Spatial Modeling concepts.</i> 2. <i>Understand the Spatial Analyst Extension environment.</i> 3. <i>Understand the Essential modules components.</i> 4. <i>Be able to use Spatial Analyst Extension to examine spatial modeling.</i> <p><i>Pre-requisite: Working with Desktop ArcGIS</i></p> <p>Course Outline:</p> <ul style="list-style-type: none"> • Chapter 1: Introduction to Spatial Analyst <ul style="list-style-type: none"> ▪ What is Spatial Analyst ▪ Overview ▪ ArcGIS Spatial Analyst Extension ▪ Spatial Modeling Concepts ▪ Conceptual Model to Create a Suitability Map ▪ Enabling ArcGIS Spatial Analyst Extension ▪ Quick Start Tutorial • Chapter 2: Raster Analysis <ul style="list-style-type: none"> ▪ Overview ▪ Understanding a Raster Dataset ▪ Rows and Columns ▪ Discrete and Continuous Data ▪ Analysis in Spatial Analyst ▪ Application Function • Chapter 3: Surface Analysis <ul style="list-style-type: none"> ▪ Overview ▪ Analysis Environment ▪ Mapping Distance 	2