

Working with ArcGIS Spatial Analyst**Three days (24 hours)**

Overview

ArcGIS Spatial Analyst software provides tools for conducting sophisticated spatial analyses and creating different types of spatial models. This course covers fundamental raster data concepts and shows how to use ArcGIS Spatial Analyst tools to create, process, and analyze spatial data. Participants focus on problems that are best solved in a raster environment such as surface analysis and distance measurement. The use of ArcGIS Spatial Analyst tools in the ArcGIS 9 geoprocessing environment is emphasized, and participants learn how to access ArcGIS Spatial Analyst functionality through ArcToolbox, the command line, ModelBuilder, and scripting. This course is designed for experienced ArcGIS users who want to conduct raster-based analysis, conversion, and editing.

Goals

Those completing this course will be able to

- Understand fundamental raster concepts.
- Display and query raster data.
- Georeference, transform, and project raster data.
- Create raster databases.
- Understand how ArcGIS Spatial Analyst tools are organized.
- Apply ArcGIS Spatial Analyst tools for surface and distance analyses.
- Use groundwater hydrology tools.
- Use map algebra functions.
- Interpolate surfaces from sample points.
- Understand basic suitability modeling methodology.
- Use ModelBuilder to create suitability models.

Prerequisites and recommendations

Participants should have completed *Introduction to ArcGIS 1* or *Learning ArcGIS 9* or have equivalent knowledge.