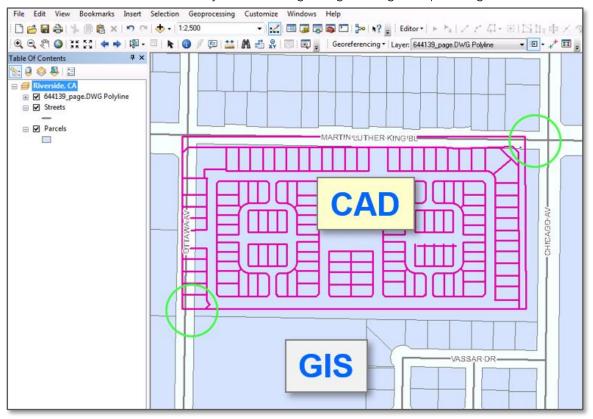






Level: Beginner | Course duration: 2 days

Like GIS data, CAD data is commonly used in design, engineering, and planning workflows.



What is the course about?

This course teaches you what GIS technology is. It provides the knowledge on how to leverage CAD data in ArcGIS and look at common problems encountered in this area. Learn how to use unconverted CAD data in GIS and how does CAD data interprets into GIS feature classes.

Who is the target audience?

Users who want to look at what GIS has to offer besides CAD capabilities and beyond, understand how unconverted CAD data can be used in GIS so as to make an informed decision on whether it is worthwhile to convert or not, and improve your business output through better and easier usage of your CAD drawings by building a platform to facilitate you to make your business decision.

Are there any prerequisites?

- Experience with Windows-based software for basic file management and browsing is required
- CAD or equivalent knowledge is required







After completing this course, you will be able to:

- Transform (Geo-Reference), use and manage CAD data in ArcGIS
- Accurately display CAD features on a GIS map and access information about them
- Understand how CAD data can be used in data management and analysis
- Scaling of usage of CAD drawings by harnessing the capability of Geographical Information System for better planning and decision making
- Visualize all your disparate CAD drawings on a common platform

Course topics

The basics of GIS

- What is GIS?
- The geographic approach
- What can you do with GIS
- Think of ways to apply GIS

The importance of coordinate systems

- What is location?
- How spatial data stores location
- Geographic coordinate systems
- Working with data in different geographic coordinate systems
- Projected coordinate systems

Interacting with a map in ArcGIS

- Symbology and visualisation
- Finding, identifying and selecting features
- Asking questions and getting answers
- Getting information from a GIS map

Integrating data in ArcGIS

- Where does data come from?
- Layers and data
- Commonly used data in ArcGIS
- Getting data into the geodatabase

Creating and editing data

- Editing GIS data
- What types of data can you edit?
- The ArcGIS editing workflow
- Applying the editing workflow
- Review the editing workflow

Managing CAD data in ArcGIS

- CAD formats and versions
- ArcGIS direct-read capabilities
- CAD model and structure in ArcGIS

Using CAD data in ArcGIS

- Modifying CAD symbology in ArcMap
- Selecting CAD features Attributes values and Spatial relationships
- Geoprocessing with CAD data

Transforming CAD files

- Link table
- Universal world file
- Creating projection file

Converting CAD files into GIS

- Converting using geoprocessing tools
- Displaying text data in CAD
- Tips for converting and preparing CAD data for GIS







Creating CAD drawings from GIS data

- Exporting GIS feature classes
- Understanding blocks/cells
- Mapping Specifications for CAD (MSC)

CAD workflows and best practices

- Repairing data in CAD
- Create GIS feature attributes from CAD entities
- Automate common CAD workflows
- Edit a geometric network using CAD data

