

Course Title: Civil 3D Introduction

Course Code: CIV-1

Duration: 2 Days

Courseware Description

This hands-on foundation-level courseware covers the essentials of AutoCAD® Civil 3D®. Students learn how to work with point data in AutoCAD Civil 3D; create and analyze a surface; develop a site; model roads, corridors, and pipe networks; work with survey data; and import and export data. Hands-on exercises throughout the courseware are provided in both a printed format as well as an onscreen format.

Objectives

The primary objective of this courseware is to familiarize students with the concepts and application of the essential functions of AutoCAD Civil 3D.

After completing this course, students will be able to:

- Create points, change point styles, and manage points in groups.
- Create, edit, and analyze surfaces, and view surfaces in 3D.
- Create parcels and parcel tables.
- Create a site, create and edit alignments, and create profiles and cross-sections.
- Create assemblies, corridors, pipe networks, and cross-sections, and calculate corridor volumes.
- Create a grading solution from multiple objects.
- Import AutoCAD® Land Desktop data and export AutoCAD Civil 3D data.
- Import and work with survey data.

Who Should Attend

This course is designed to teach new users the essential elements of AutoCAD Civil 3D for creating, analyzing, and managing civil engineering drawings and projects.

Prerequisites

It is recommended that students have a working knowledge of:

- Completion of [ACAD-1A / 1B](#) course or equivalent working knowledge of the content of either course.
- The current or a previous release of AutoCAD.
- Creating and editing basic AutoCAD objects.
- Microsoft® Windows® XP or Microsoft® Windows® 2000

Tel: 1300 368 609 – Fax: 1300 362 140 – E-mail: training@aecsystems.com.au – Web: www.aecsystems.com.au

NSW	QLD	VIC	WA	New Zealand
Level 1	Engineering House	Level 4	Bldg B, Level 1, Suite 3	Unit 1
255-259 Pacific Hwy	Level 3, 447 Upper Edward St	37-41 Prospect St	661 Newcastle St	74 France St
North Sydney NSW 2060	Brisbane QLD 4000	Box Hill VIC 3128	Leederville WA 6007	Auckland 1001 New Zealand

Course Outline

Working with Point Data

- Creating and Editing Points
- Changing Point Styles
- Managing Points
- Using Transparent Commands
- User-Defined Properties

Surface Modeling

- Creating a Surface from LandXML
- Editing a Surface
- Analyzing a Surface
- Viewing a Surface in 3D
- Adding Masks, Borders, and Contour Labels

Site Development

- Creating Parcels
- Labeling Parcels
- Generating Parcel Tables and Reports

Road Design

- Creating a Site
- Creating and Editing Alignments
- Creating Profiles
- Creating Sections
- Creating and Editing Layout Profiles

Corridor Modeling

- Creating a Corridor Model
- Creating an Assembly
- Calculating Corridor Volumes
- Creating Corridor Cross-Sections
- Editing Corridor Sections

Grading

- Creating Grading Criteria
- Creating a Grading Object
- Creating a Grading Solution from Multiple Objects

Pipes

- Creating a Pipe Network
- Viewing Pipe Networks in Profile and Section Views
- Editing a Pipe Network in Plan View
- Editing Pipe Networks in a Profile View
- Working with Pipe Network Parts

Sharing Data

- Importing AutoCAD Land Desktop Data
- Exporting Civil 3D Data
- Data Check In and Check Out
- Data Shortcuts

NSW	QLD	VIC	WA	New Zealand
Level 1	Engineering House	Level 4	Bldg B, Level 1, Suite 3	Unit 1
255-259 Pacific Hwy	Level 3, 447 Upper Edward St	37-41 Prospect St	661 Newcastle St	74 France St
North Sydney NSW 2060	Brisbane QLD 4000	Box Hill VIC 3128	Leederville WA 6007	Auckland 1001 New Zealand