



Civil 3D Essentials

3-4 Day** Training Course

Overview

This foundation-level courseware covers the essentials of AutoCAD Civil 3D. This four-day training course is intended to give students comprehensive experience with the features and benefits of AutoCAD Civil 3D. Hands-on exercises throughout the course explore how to create 2D and 3D drawings.

Prerequisites

- Before starting this course, the student should have working knowledge of the following:
- Computer Literate and working knowledge of Microsoft Windows proficient
- Creating, opening, and saving drawing files, changing the display of a drawing by zooming and panning, displaying and docking toolbars, saving and restoring named views, using object snaps, and managing layers and controlling layer visibility.
- Experience with drafting, design, or engineering principles
- Proficient in AutoCAD or have attended the AutoCAD Essentials course.

Software

- Autodesk Civil 3D

What's Included?

- Course Notes & Stationery*
- Computer and software for the duration of course*
- Coffee, Tea & Delicious Lunch*
- WiFi Access*
- Autodesk Certified Instructor
- Internationally recognized Autodesk Authorized Training Certificate

* Pertains to in-class training only

** In-class training typically occurs over a 3-4 day period, customised training may differ

Course Content

CHAPTER 1 NAVIGATING THE USER INTERFACE

- Getting to Know the Civil 3D User Interface
- Working with the Application Menu
- Working with the Ribbon
- Working with the Toolspace
- Using the Drawing Area
- Using the Command Line
- Using Panorama
- Using the Transparent Commands Toolbar
- Using the Inquiry Tool

CHAPTER 2 LEVERAGING A DYNAMIC ENVIRONMENT

- Connecting Objects and Styles
- Connecting Labels and Label Styles
- Connecting Objects to Objects
- Connecting Objects to Labels
- Appreciating the Richness of the 3-D Model
- Sharing Data in a Dynamic Environment

CHAPTER 3 ESTABLISHING EXISTING CONDITIONS USING SURVEY DATA

- What Is Survey Data?
- Creating a Survey Database
- Importing Survey Data
- Automating Field-to-Finish
- Editing Survey Points
- Editing Survey Figures
- Creating Additional Points

CHAPTER 4 MODELING THE EXISTING TERRAIN USING SURFACES

- Understanding Surfaces
- Creating a Surface from Survey Data
- Using Breaklines to Improve Surface Accuracy .
- Editing Surfaces
- Displaying and Analyzing Surfaces
- Annotating Surfaces

Course Content

CHAPTER 5 DESIGNING IN 2-D USING ALIGNMENTS

- Understanding Alignments
- Creating Alignments from Objects and
- Using the Alignment Creation Tools
- Editing Alignments
- Applying Design Criteria Files and Check Sets

CHAPTER 6 DISPLAYING AND ANNOTATING ALIGNMENTS

- Using Alignment Styles
- Applying Alignment Labels and Label Sets
- Creating Station/Offset Labels
- Creating Segment Labels
- Using Tag Labels and Tables

CHAPTER 7 DESIGNING VERTICALLY USING PROFILES

- Creating Surface Profiles
- Displaying Profiles in Profile Views
- Creating Design Profiles
- Editing Profiles
- Using Design Check Sets and Criteria Files

CHAPTER 8 DISPLAYING AND ANNOTATING PROFILES

- Applying Profile Styles
- Applying Profile View Styles
- Applying Profile View Bands
- Applying Profile Labels
- Creating and Applying Profile Label Sets
- Creating Profile View Labels
- Projecting Objects to Profile Views

CHAPTER 9 DESIGNING IN 3D USING CORRIDORS

- Understanding Corridors
- Creating an Assembly
- Creating a Corridor
- Applying Corridor Targets
- Creating Corridor Surfaces

CHAPTER 10 CREATING CROSS SECTIONS OF THE DESIGN

- Using the Section Editor
- Creating Sample Lines
- Creating Section Views
- Sampling More Sources

CHAPTER 11 DISPLAYING AND ANNOTATING SECTIONS

- Applying Section Styles
- Applying Section Labels
- Controlling Corridor Section Display with Code Set
- Applying Labels with Code Set Styles
- Applying Section View Styles
- Applying Section View Bands
- Applying Group Plot Styles
- Creating Section View Labels

CHAPTER 12 DESIGNING AND ANALYZING BOUNDARIES USING PARCELS

- Understanding Parcels
- Creating Parcels from Objects
- Creating Parcels by Layout
- Editing Parcels

CHAPTER 13 DISPLAYING AND ANNOTATING PARCELS

- Applying Parcel Styles
- Applying Parcel Area Labels
- Creating Parcel Segment Labels
- Editing Parcel Segment Labels
- Creating Parcel Tables

CHAPTER 14 DESIGNING GRAVITY PIPE NETWORKS

- Understanding Gravity Pipe Networks
- Creating Gravity Pipe Networks
- Editing Gravity Pipe Networks

CHAPTER 15 DESIGNING PRESSURE PIPE NETWORKS

- Understanding Pressure Pipe Networks
- Creating Pressure Pipe Networks
- Editing Pressure Pipe Networks

CHAPTER 16 DISPLAYING AND ANNOTATING PIPE NETWORKS

- Displaying Pipe Networks Using Styles
- Annotating Pipe Networks in Plan View
- Annotating Pipe Networks in Profile View
- Creating Pipe Network Tables

CHAPTER 17 DESIGNING NEW TERRAIN

- Understanding Grading
- Understanding Feature Lines
- Creating Feature Lines
- Editing Feature Lines
- Understanding Grading Objects
- Creating Grading Objects
- Editing Grading Objects

CHAPTER 18 ANALYZING, DISPLAYING, AND ANNOTATING SURFACES

- Combining Design Surfaces
- Analyzing Design Surfaces
- Calculating Earthwork Volumes
- Labeling Design Surfaces

Course Registration Form

Please complete, sign and return together with proof of payment to mgfxsales@mgfx.co.za or fax 086 694 9404

Student Details			
Name	Cell No	Email address	Dietary requirements

Course Attending		Mark Course Type & Venue with X							
Course Name	Civil 3D Essentials								
Course Type	AutoCad Essentials		Civil 3D Essentials						
Course Venue	Cape Town		Port Elizabeth		Durban		Midrand*		Centurion*
Course Date					Course Duration	3-4* Days			

Invoicing Details			
Invoice Date		Vat no.	
Company Name		Telephone	
Physical Address		Fax	
		Account Contact	
		E-mail	
Micrographics SA (Pty) Ltd Bank Details	ABSA Newton Park Branch: 632005 Account: 4093 847 926 Reference: invoice number		

Terms & Conditions:

- Above Pricing Excludes VAT.
- Students are to be at the training venue by 08h00 in preparation for a 08h30 start time.
- Bookings can only be considered confirmation on receipt of payment.
- Bookings may be changed up to three weeks in advance of the course. A fee of 20% will be levied to cover charges.
- For full day courses, we will supply you with the relevant training material. A desktop computer to use for the training (where applicable) tea/coffee and a full lunch for full day InClass training hosted at the training center only. Catering is not included for OnSite training and laptop is available for hire at an additional cost if required.
- Cancellation or rescheduling requests must be in writing and reach us at least 5 (five) working days prior to the course commencement date. Full course fees may be retained for no shows or requests within 5 working days prior to commencement.
- Although we go to great lengths to ensure that all training proceeds as scheduled, we reserve the right to cancel or postpone\ dates if we require to do so and undertake to inform clients in writing and telephonically of these changes.
- We suggest clients wait until a week prior to course commencement that a course has been confirmed to go ahead as scheduled before booking flight and accommodation. We are NOT responsible for cost associated with cancellation of classes such as flight and accommodation for clients.
- Full training fees will apply if the above condition is not complied with.

Signed & Accepted Name Location