

## **ATC Training:** **ATC AutoCAD Civil 3D 2010 – Designing Intersections & Cul-de-Sacs**

### **Courseware Description**

In this courseware, students use AutoCAD® Civil 3D® 2010 to complete the engineering tasks on an intersection and cul-de-sac design. The courseware guides students through one possible design process from the examination of existing site conditions to a final design solution. The primary focus is to teach students how AutoCAD Civil 3D 2010 can be used as a tool to perform common engineering tasks in the modeling and design process with greater accuracy and speed.

### **Objective**

The primary objective of this courseware is to teach students the recommended workflows and basic skills needed to create, model, and modify intersections and cul-de-sacs in AutoCAD Civil 3D. Upon completion of the course, students will be proficient in creating and working with the design process.

### **Who Should Attend**

The target audience for this class includes experienced civil engineers and designers with a firm grasp on the fundamental features of Civil 3D and engineering principles.

### **Prerequisites**

Before using this courseware, students should have completed an *AutoCAD Civil 3D Essentials* course or have in-depth knowledge of Civil 3D features and functionality, and have experience with civil engineering processes and terminology. It is also recommended that students have a working knowledge of Microsoft® Windows® XP or Microsoft® Windows® 2000.

**Course Code: EM0615\_Civil2010DesInt**

**Course Duration: 1 day**

*File Name: TRN\_AIT\_ATC\_Civil2010\_DesInt\_140909\_dg\_v1*

*Date: 14 September 2009*

# AIT Spatial Ltd

Wellingborough Innovation  
Centre  
Church Street  
Wellingborough  
Northamptonshire  
NN8 4PD UK  
Tel: +44(0)1933 303034  
Email: [info@aitspatial.co.uk](mailto:info@aitspatial.co.uk)  
[www.aitspatial.co.uk](http://www.aitspatial.co.uk)



## ATC Training:

### ATC AutoCAD Civil 3D 2010 – Designing Intersections & Cul-de-Sacs

.....Continued

## Course Outline

### Creating Cul-de-Sacs

- Ø Designing Cul-de-Sacs
- Ø Modeling the Main Road
- Ø Designing a Cul-de-Sac Bulb
- Ø Creating a Corridor Surface and Cul-de-Sac Island
- Ø Revising the Cul-de-Sac and Rebuilding the Model
- Ø Preparing to Plot the Cul-de-Sac

### Creating Knuckles

- Ø Designing Knuckles
- Ø Preparing for Knuckle Modeling
- Ø Modeling the Knuckle
- Ø Revising the Knuckle

### Creating an Intersection: Peer Roads

- Ø Designing an Intersection for Peer Roads
- Ø Designing Intersection Curb Returns
- Ø Completing the Peer Road Intersection Model

### Creating an Intersection: Side Street Joins Main Road

- Ø Designing an Intersection for a Side Street and Main Road
- Ø Designing Intersection Curb Returns
- Ø Finalizing the Intersection Model

*Note: The suggested course duration is a guideline. Course topics and duration may be modified by the instructor based upon the knowledge and skill level of the course participants.*

### AIT Spatial Workshops

As an alternative to the standard ATC course, we are also able to provide an AutoCAD Civil 3D 2010 Workshop covering a selection of those topics listed above. If you are interested in undertaking an AutoCAD Civil 3D 2010 Workshop, please contact us and we can discuss your bespoke requirements. You may also wish to incorporate items from two, maybe three different course outlines. We can accommodate this easily with a bespoke workshop customised to your needs.

*Registered at  
Sterling House  
31/32 High Street  
Wellingborough  
Northamptonshire  
NN8 4HL UK*

*Registered No: 3902353  
VAT Reg. No: GB748 0238 29*