



## Civil Site Design

Design - Analyse - Visualise - Deliver

## Civil Site Design

## Intermediate

### Course Description

*The Civil Survey Solutions Civil Site Design (CSD) Intermediate course assumes a strong working knowledge of the fundamental road design commands in Civil Site Design. This includes creating templates, designing strings, creating intersections, adding variations, plotting and outputs.*

*The CSD Intermediate course is intended to tackle a selection of real-life design projects challenging the standard design approaches in CSD and exploring intermediate tools to efficiently undertake any design.*

<b>Course Duration:</b>	2 Days
<b>Delivery:</b>	Instructor led - maximum of 6 participants
<b>Course Times:</b>	9:00 am—5:00 pm
<b>Software Used:</b>	AutoCAD Civil 3D, Civil Site Design

### Prerequisites

Prior to attending this course you should have:

- A strong working knowledge of all fundamental design tools in Civil Site Design
- Already completed the Civil Site Design - Road Fundamentals course

Upon completion you will be issued with a **Civil Survey Solutions Certificate of Training**



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## Course Objectives

- **Be able to approach road re-construction using different design techniques**
- **Develop skills in applying a more comprehensive string design and modelling approach to design**
- **Explore car park design techniques using modelling tools**
- **Expand your understanding of conditional batter controls by applying multi section batters in a range of situations**



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## Topics Covered

- **Multi section batters - creating and applying conditional batter templates**
- **Road re-construction examples**
  - **Intersection re-modelling including kerb outstands**
  - **Intersection reconstruction using a string based design approach and development of sections incorporating subgrade**
  - **Automatically applied vertical design options**
- **Design constraints - using it practically in a variety of design conditions**
- **Model Builder - creating complex and dynamic road models**
  - **Combining multiple roads and strings into a surface model**
  - **Plotting cut sections through a model**
- **Advanced cross section controls**
  - **Conditionally deleting codes**
  - **Using copy label to merge individual roads/strings together and maintain grades/offsets**
- **Surface display control - color discrimination in the surface display output**