



## Electro-Mechanical Integration – AutoCAD Electrical / Autodesk Inventor

1 Day Course

### Who Should Attend?

This course is aimed at electrical and mechanical engineers.

### Objectives

The training course is intended to give an overview of the procedures required to have an electrical and mechanical interface between AutoCAD Electrical & Autodesk Inventor. The course is intended for electrical engineers who have attended a foundation course on AutoCAD Electrical and mechanical engineers who have attended an Inventor foundation course as well as a cable & harness course for Inventor.

### Agenda

**Note:** We normally train on the latest version.

During the course delegates will cover:

#### Agenda Topics:

- Introduction to the course
- Create part of a schematic within AutoCAD Electrical
  - Defining the wire types within AutoCAD Electrical
  - Draw part of a circuit
  - Assigning part information
  - Draw wires & wire number
- Parts Database
  - Component pin connections & their relevance
  - Associating a 3D \*.IPT OR \*.IAM File to a part
- Electromechanical Linking
  - Creating an electromechanical link in AutoCAD Electrical
  - Creating an electromechanical link in Inventor
  - Linking Inventor with an existing EMX file created in AutoCAD Electrical
  - Linking AutoCAD Electrical with an existing EMX file created in Inventor
  - Re-establish a Broken Link Between AutoCAD Electrical & Inventor
  - Location View Tab in AutoCAD Electrical
    - Understanding the tree; the buttons & status icons
- Electromechanical Linking (continued):
  - Location View Tab in Inventor
    - Understanding the tree; the buttons & status icons
  - Manually Synchronising Inventor & AutoCAD Electrical Data
  - Setting Up a Synchronisation Schedule
  - Surfing from the Locations View tab
  - Inserting a linked Inventor part from an existing AutoCAD Electrical component
  - Inserting a linked AutoCAD Electrical component from an existing Inventor part
  - Linking an existing Inventor part to an existing AutoCAD Electrical component
  - Unlinking an AutoCAD Electrical Component from an Inventor part

*(Agenda continued on next page)*

## Agenda Topics (continued):

- Harness Creation
  - Defining the wire types within Inventor
  - Creation of a harness
  - Understanding the harness settings
  - Creating harness segments
  - Creating connections
    - Automatic routing
  - Wire/cable connections list
- Making a 3D part electrically intelligent
  - Defining the pin connections of an existing 3D part
  - Defining the mating surfaces of an existing 3D part

*The above may be varied to suit client's preferences and requirements.*

## Qualifications

On completion of the course you will be presented with an Autodesk Authorised Training Certificate.

### Customer Testimonial

**"The trainer was excellent and he was able to tailor the instruction to suit all of the attendees needs. He answered all of our questions whilst still keeping to the course syllabus. All in all a very good course."**

*Tony Gunter, Highways and Transportation Officer at Stockport Council*



training@cadline.co.uk



www.cadlinetraining.co.uk

