ACUITY TRAINING

SolidWorks Essentials

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Course Objectives

SolidWorks® – An Introduction: teaches you how to use the SolidWorks® mechanical design automation software to build parametric models of parts and assemblies and how to make drawings of those parts and assemblies. The Drawings section of the course teaches you how to make drawings of SolidWorks® parts and assemblies.

Prerequisites

No previous CAD experience is necessary. Working knowledge of drafting and/or design is an advantage but not a prerequisite, some basic knowledge of using a computer is required (opening, saving files, how to use a mouse, etc.)

Exercises

This course is instructor led, involving the utilisation of examples and exercises in a workshop environment.

Topics

Introduction

- What is the SolidWorks® Software?
- Design Intent
- File References
- Feature Manager
- Opening Files
- The SolidWorks User Interface

Introduction to Sketching

- 2D Sketching
- Stages in the Process
- What to Sketch?
- Sketch Entities
- Rules That Govern Sketches
- Design Intent
- Sketch Relations
- Dimensioning a Sketch
- Adding Parameters

Basic Part

- Basic Modelling
- Feature including Boss, Cut and Sweep
- Sketching on a Face
- Placing Hole using the Wizard
- Using Fillet and Chamfer
- Changing Features

Bottom-Up Assembly Modelling

- Creating a New Assembly
- Position of the First Component
- Adding Components
- Creating Copies of Instances
- Component Hiding and Transparency
- Sub-assemblies
- Using Mates

Drawing Sheets and Views

- Drawing Sheets
- Creating Views including –
- Base, Projected, Section and Detail
- View Settings
- Drawing Annotation
- Center Marks and Centerlines
- Dimensions
- Moving and Deleting Dimensions
- Dimension Properties
- Parts Listing and Balloon Itemisation