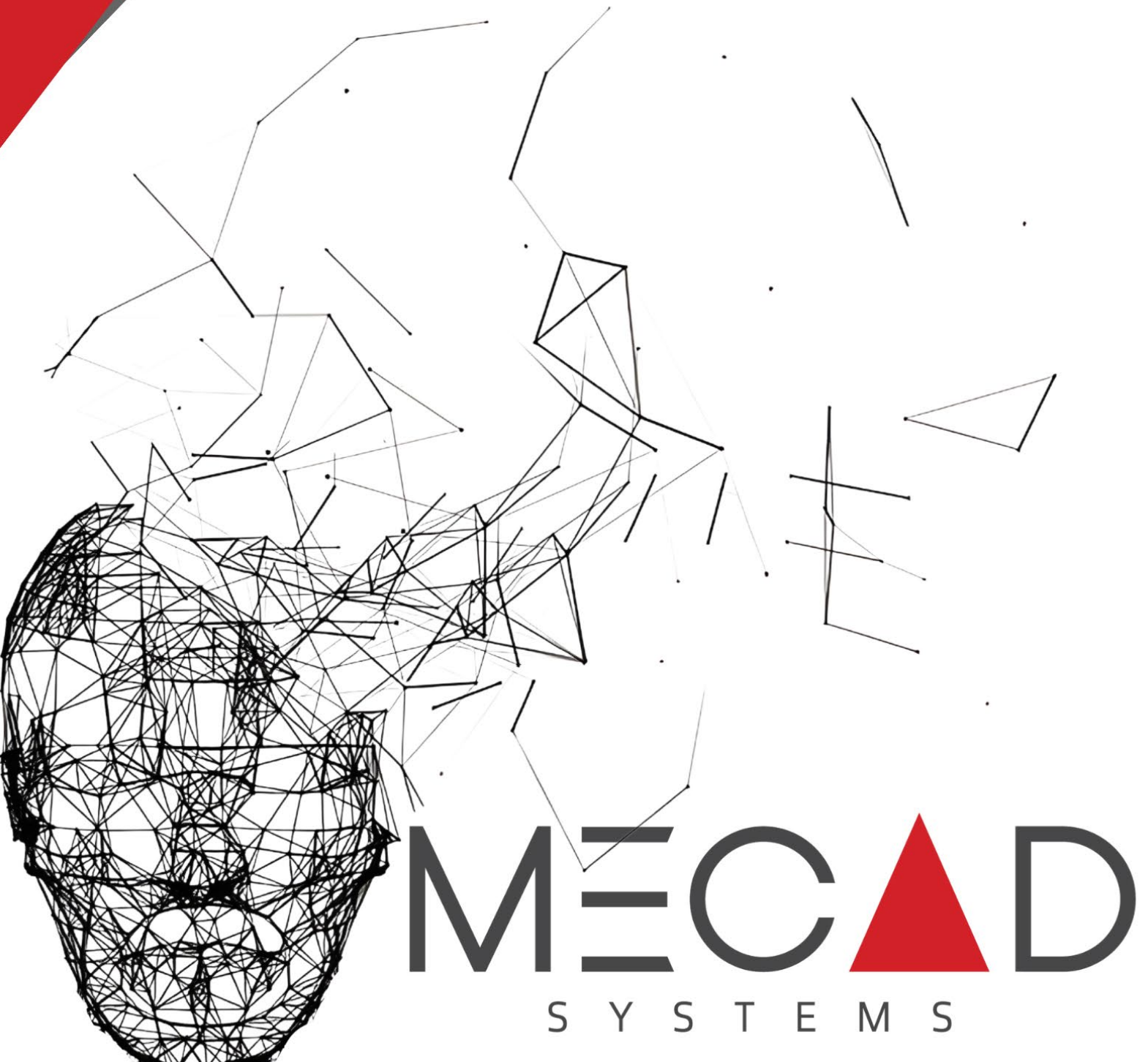


SOLIDWORKS

Training

Course

Catalogue



MECAD  
SYSTEMS

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## **SOLIDWORKS Essentials Training**

5 Day Training Course

### **Essentials & Drawings Introduction**

- Introduction
- SOLIDWORKS Basics and the User Interface
- Introduction to Sketching
- Basic Part Modeling
- Symmetry and Draft
- Patterning
- Revolved Features
- Shelling and Ribs
- Editing: Repairs
- Editing: Design Changes
- Configurations
- Global Variables and Equations
- Using Drawings
- Bottom-up Assembly Modeling
- Using Assemblies

### **EXAMINATION**

An examination will be written at the end of the course. Certificates will be awarded to those that obtain a passing grade.

## **SOLIDWORKS Essentials Plus Training**

5 Day Training Course

### **Drawings (Day 1-2)**

- Review of the Basics
- Understanding Drawing Templates
- Customizing the Sheet Format
- Saving and Testing the Sheet Format File
- Creating Additional Sheets Formats and Templates
- Advanced Options for Drawing Views
- Understanding Annotation Views
- Advanced Detailing Tools
- Advanced options for BOM Tables
- Additional SOLIDWORKS Tools
- Additional Drawing Tools
- Managing Performance

### **Weldments (Day 3)**

- Weldment Features
- Working with Weldments
- Configuring and Detailing Weldments
- Working with Bent Structural Members

### **Sheet Metal (Day 4-5)**

- Basic Flange Features
- Working with the Flat Pattern
- Additional Sheet Metal Techniques

- Converting to Sheet Metal
- Multibody Sheet Metal Parts
- Forming Tools and Gussets
- Additional Sheet Metal Functions

## **EXAMINATION**

An examination will be written at the end of the course. Certificates will be awarded to those that obtain a passing grade.

## **SOLIDWORKS Advanced 1 Training**

5 Day Training Course

### **Advanced Part Modeling (Day 1-3)**

- Multibody Design Techniques
- Saving Solid Bodies
- Sketching with Splines
- Introduction to Sweeping
- 3D Sketching and Curve Features
- Threads and Library Feature Parts
- Advanced Sweeping
- Introduction to Loft and Boundary Features
- Advanced Loft and Boundary Features
- Advanced Filletting and Other Features

### **Surface Modeling (Day 4-5)**

- Understanding Surfaces
- Introduction to Surfacing
- Solid-Surface Hybrid Modeling
- Repairing and Editing Imported Geometry
- Blends and Patches
- Complex Blends
- Advanced Surface Modeling
- Master Model Techniques

## **EXAMINATION**

An examination will be written at the end of the course. Certificates will be awarded to those that obtain a passing grade.

## **SOLIDWORKS Mould Design Training**

2 Day Training Course

### **Mould Design Using SOLIDWORKS (Day 1-2)**

- Surface Concepts and Imported Geometry
- Core and Cavity
- Side Cores and Pins
- Advanced Parting Line Options
- Creating Custom Surfaces for Mould Design

### **Advanced Surfacing for Mould Design**

- Alternative Methods for Mould Design
- Reusable Data
- Competing the Mould Base

### **EXAMINATION**

An examination will be written at the end of the course. Certificates will be awarded to those that obtain a passing grade.



## **SOLIDWORKS Simulation Training**

5 Day Training Course

### **Simulation (Day 1-3)**

- The analysis processes
- Mesh Controls, Stress Concentrations and Boundary Conditions
- Assembly Analysis with contacts
- Symmetrical and Free Self-Equilibrating Assemblies
- Assembly Analysis with connectors and Mesh Refinement
- Compatible/Incompatible Meshes
- Analysis of Thin Components
- Mixed Meshing Shells & Solids
- Beam Elements – Analysis of a Conveyor Frame
- Mixed Meshing Solids, Beams & Shells
- Design Study
- Thermal Stress Analysis
- Adaptive Meshing
- Large Displacement Analysis

### **Motion (Day 3-4)**

- Introduction to Motion Simulation and Forces
- Building a Motion Model and Post-processing
- Introduction to Contacts, Springs and Dampers
- Advanced Contact
- Curve to Curve Contact
- CAM Synthesis
- Motion Optimization
- Flexible Joints

- Redundancies
- Export FEA
- Event Based Simulation
- Design Project (Optional)
- Motion Study Convergence Solutions and Advanced Options
- Mate Friction

## **EXAMINATION**

An examination will be written at the end of the course. Certificates will be awarded to those that obtain a passing grade.

## **SOLIDWORKS Composer Training**

### 2 Day Training Course

- Quick Start
- Getting Started
- Creating Cover and Detail Images
- Creating and Exploded View
- Creating Additional Exploded Views
- Creating Bills of Materials
- Creating a Marketing Image
- Creating an Animation
- Creating Interactive Content
- Creating a Walkthrough Animation
- Creating an Explode and Collapse Animation
- Updating SOLIDWORKS Composer Files Publishing 3D Interactive Content from
- SOLIDWORKS Composer