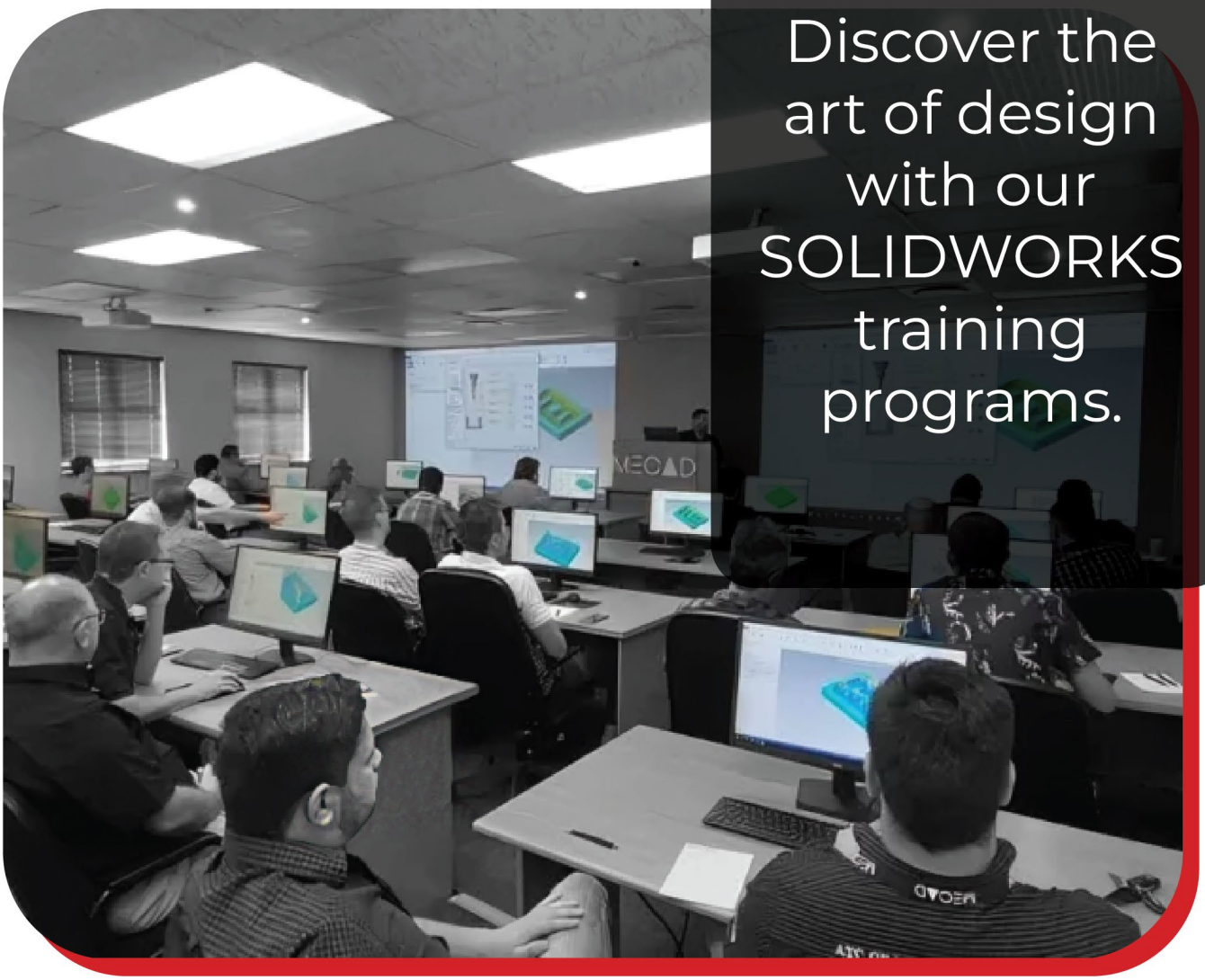
MECAD

SYSTEMS

TRAINING COURSE CATALOGUE



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SOLIDWORKS Essentials

Learn to create parametric models, assemblies, and drawings using real-world case studies with our **SOLIDWORKS Essentials Training Course**. Ideal for new CAD users, experienced designers from other systems, and SOLIDWORKS veterans looking to refine their skills.

Duration:

- 5 days

Prerequisites:

- SOLIDWORKS 2018 / newer
- Understanding of technical drawings
- Mechanical design experience
- Computer literacy

Recommendation:

- Prior experience with SOLIDWORKS or similar software is beneficial

Module assessment:

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

Learning objectives

- Learn to create parametric models of parts and assemblies in SOLIDWORKS.
- Understand and apply SOLIDWORKS drawing techniques for parts and assemblies.
- Develop the skills to navigate and utilise SOLIDWORKS' user interface.
- Gain proficiency in creating and modifying parts and assemblies for real-world applications.

Lesson Plan	
Introduction to SOLIDWORKS	• Introduction to SOLIDWORKS interface, file management, and design intent
2D Sketching	• Learn 2D sketching tools, dimensioning, and applying relations to sketches
Basic Part Features	• Create parts using extrusions, cuts, and fillets
Patterns and Reference Geometry	• Use patterns, reference geometry, and sketch-driven patterns for complex designs
Revolve, Thin Features, and Materials	• Learn to use the revolve feature, define materials, and analyse mass properties

Draft Analysis and Shelling	• Add draft, ribs, and fillets to parts to optimise design and functionality
Part Editing and Changes	• Edit parts, modify sketches, and suppress features in design changes
Configurations and Equations	• Manage part configurations, use equations, and apply design strategies
Global Variables and Equations	• Master global variables and equations to control part design efficiently
Drawing Views and Annotations	• Create section views, model views, and apply annotations to drawings
Assembly Creation	• Position components, mate parts, and use sub-assemblies in a project
Assembly Analysis and BOM	• Analyse assemblies, check for clearance and create the bill of materials (BOM)

Book Now: SOLIDWORKS Essentials - MECAD Academy

SOLIDWORKS Drawings

The **SOLIDWORKS Drawings Training Course** focuses on developing skills in drawing tools, teaching students to create detailed 2D drawings from 3D models using templates, annotations, and custom views. This instructor-led course includes hands-on exercises to reinforce concepts and build proficiency.

Duration:

- 3 days

Prerequisites:

- Mechanical design experience.
- Completed the SOLIDWORKS Essentials course.
- Experience with the Windows® operating system.

Recommendation:

- Prior experience with SOLIDWORKS or similar software is beneficial

Module assessment:

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

Learning objectives

- Create detailed drawings from 3D models using drawing templates, annotations, and custom views.
- Customise sheet formats and templates.
- Utilise advanced options for drawing views and detailing tools.
- Employ layers, styles, and the Design Library effectively.
- Manage performance when working with complex drawings.

Lesson Plan	
Review of the Basics	• Fundamentals of SOLIDWORKS Drawings, Basic Views, Annotations
Understanding Drawing Templates	• Create and modify drawing templates
Customising the Sheet Format	• Modifying sheet sizes, title blocks, and border customisation
Saving and Testing the Sheet Format File	• Save and implement customised sheet formats
Creating Additional Sheet Formats and Templates	• Advanced template customisation, multi-sheet templates
Advanced Options for Drawing Views	• Generate complex drawing views efficiently

Understanding Annotation Views	• Working with annotation views and smart dimensions
Advanced Detailing Tools	• Utilise advanced annotation tools for technical drawings
Using Layers, Styles, and the Design Library	• Implement structured layer and style usage
Advanced Options for BOM Tables	• Configuring and customising Bill of Materials tables
Additional SOLIDWORKS Tables	• Incorporate additional table types into drawings
Additional Drawing Tools	• Leverage additional tools for drawing efficiency
Managing Performance	• Apply best practices to enhance drawing performance

Book Now: SOLIDWORKS Drawings - MECAD Academy

SOLIDWORKS Metal Fabrication

Master sheet metal and weldment design with **SOLIDWORKS Metal Fabrication Training Course**. This instructor-led course covers creating complex sheet metal parts, working with various materials, and using weldment tools for structural frames. Hands-on exercises ensure practical skills for efficient SOLIDWORKS design.

Duration:

- 3 days

Prerequisites:

- Mechanical design experience.
- Completed the SOLIDWORKS Essentials course.
- Experience with the Windows® operating system.

Recommendation:

- Prior experience with SOLIDWORKS or similar software is beneficial

Module assessment:

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

Learning objectives

- Create complex sheet metal parts using SOLIDWORKS
- Work with different material thicknesses and properties
- Utilise weldment tools to design structural frames
- Apply best practices in sheet metal and weldment design

Lesson Plan	
Creating Base Flanges and Tabs	• Techniques for creating base flanges and tabs in sheet metal parts
Working with Bends and Bend Tables	• Understanding bend features and managing bend tables
Designing Complex Sheet Metal Parts	• Methods for designing complex sheet metal geometries
Sheet Metal Multibody Parts	• Working with multibody parts in sheet metal design
Converting Solid Parts to Sheet Metal	• Techniques for converting solid models into sheet metal parts
Introduction to Weldments	• Overview of weldment design and SOLIDWORKS weldment tools
Creating Structural Members	• Designing structural frames using standard profiles and custom profiles

Adding Gussets and End Caps	• Techniques for reinforcing weldment structures with gussets and end caps
Managing Cut Lists and Drawings	• Generating and managing cut lists, and creating detailed drawings for fabrication
Advanced Weldment Techniques	• Exploring advanced weldment features and customisation options
Designing a Fabricated Assembly	• Applying learned skills to design a complete fabricated assembly, integrating sheet metal and weldment components

Book Now: SOLIDWORKS Metal Fabrication - MECAD Academy

SOLIDWORKS Advanced 1

This instructor-led **SOLIDWORKS Advanced 1 Training Course** focuses on Advanced Part Modelling and Surfacing. Participants will learn to create complex shapes and features using advanced tools and techniques, including multi-body parts, splines, sweeps, lofts, 3D sketches, and surfacing methods. Hands-on exercises and case studies will reinforce key concepts.

Duration:

- 5 days

Prerequisites:

- Mechanical design experience.
- Completed the SOLIDWORKS Essentials training course.
- Experience with the Windows® operating system.
- SOLIDWORKS 2020, 2021, 2022, or 2023

Recommendation:

- Prior experience with advanced part modelling and surfacing in SOLIDWORKS is beneficial

Module assessment:

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

Learning objectives

- Create and modify complex 3D models using advanced features like lofts, sweeps, and multi-body parts
- Master surfacing techniques, including solid-surface hybrid modelling and repairing imported geometry
- Prepare for the Certified SOLIDWORKS Professional (CSWP) and Certified SOLIDWORKS Professional Advanced Surfacing (CSWPA Surfacing) exams

Lesson Plan	
Advanced Part Modelling	• Introduction to Sweeping, 3D Sketching and Curve Features
Advanced Part Modelling	• Threads and Library Feature Parts, Advanced Sweeping
Advanced Part Modelling	• Advanced Loft and Boundary Features, Advanced Filleting and Other Features
Surfacing	• Understanding Surfaces, Introduction to Surfacing, Solid-Surface Hybrid Modelling

	• Repairing and Editing Imported Geometry, Blends and Patches • Complex Blends, Advanced Surface Modelling • Master Model Techniques

Book Now: SOLIDWORKS Advanced 1 - MECAD Academy

SOLIDWORKS Advanced 2

This instructor-led SOLIDWORKS Mold Design and Plastics course covers Mold optimisation, flow analysis, and cooling, with the option to further your skills with **SOLIDWORKS Advanced 2 Training Course**. Hands-on exercises help reduce defects and production costs.

Duration:

- 5 days

Prerequisites:

- SOLIDWORKS Essentials knowledge
- Understanding of basic plastic injection moulding concepts
- Basic experience with 3D CAD modelling

Recommendation:

- Prior experience with Mold design or SOLIDWORKS Plastics is beneficial

Module assessment:

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

Learning objectives

- Create and modify moulds using SOLIDWORKS
- Run simulations to validate and optimise mould designs
- Understand the basic concepts of plastic injection moulding, including flow analysis, sink marks, and cooling analysis

Lesson Plan	
Injection Locations & Sink Marks	• Analysis of injection points and identification of defects
Materials & Mesh Manipulation	• How to adjust mesh for different materials
Warpage and Cooling Analysis	• Simulation of material cooling and detecting warpage issues
Simulations	• Practical application of mould design principles and SOLIDWORKS Plastics tools

Book Now: SOLIDWORKS Advanced 2 - MECAD Academy

Our standard training for this course runs once a year. If that timing doesn't work, we also offer flexible, custom training scheduled around your availability. From one-on-one sessions to full team training, this course can be tailored to your specific needs.

SOLIDWORKS Advanced Assembly Modelling

The **SOLIDWORKS Advanced Assembly Modelling Training Course** teaches advanced techniques for handling large assemblies, converting parts and assemblies, editing assemblies, and using advanced mate functions.

Duration:

- 2 days

Prerequisites:

- SOLIDWORKS Essentials or equivalent experience
- Basic understanding of assembly modelling
- Experience with basic part and assembly creation in SOLIDWORKS

Recommendation:

- Prior experience with SOLIDWORKS or similar CAD software is beneficial

Module assessment:

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

Learning objectives

- Utilise advanced mate techniques in complex assemblies
- Implement top-down assembly modelling
- Use smart components for efficient design
- Apply configurations and sensors in assembly contexts

Lesson Plan	
Top-Down Assembly Modelling	• Editing parts in context, creating features, removing external references
Assembly Features & Smart Components	• Adding assembly features, inserting hardware, creating smart components
Assembly Editing	• Finding and fixing errors, mirroring components, patterning components
Using Configurations with Assemblies	• Creating assembly configurations, custom property manager, using sensors, animating mates
Display States & Appearances	• Selecting components, changing scenes, editing material
Large Assemblies	• Assembly visualisation, creating Speedpak configurations, simplifying components
Facility Layout	• Using facility layout, creating assets, and using magnetic mates

Book Now: SOLIDWORKS Advanced Assembly Modelling - MECAD Academy

Our standard training for this course runs once a year. If that timing doesn't work, we also offer flexible, custom training scheduled around your availability. From one-on-one sessions to full team training, this course can be tailored to your specific needs.

SOLIDWORKS Composer

The **SOLIDWORKS Advanced Assembly Modelling Training Course** teaches advanced techniques for handling large assemblies, converting parts and assemblies, editing assemblies, and using advanced mate functions.

Duration:

- 2 days

Prerequisites:

- Mechanical design experience
- Completed the SOLIDWORKS Essentials training course
- Experience with the Windows® operating system
- Fundamental knowledge of plastic materials. plastic part design and/or injection mould design

Recommendation:

- Prior experience with CAD software is beneficial for ease of learning

Module assessment:

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

Learning objectives

- Create 2D and 3D outputs from CAD data
- Develop exploded views and bill of materials
- Produce high-quality images and animations
- Update and publish SOLIDWORKS Composer files

Lesson Plan	
Getting Started	• User interface, views, navigation tools, camera views, creating 2D output
Creating Cover & Detail Images	• Rendering tools, camera alignment, custom rendering
Creating an Exploded View	• Visibility tools, exploded views, vector graphics output
Creating Additional Exploded Views	• Paper space, aligning actors, linking views
Creating a Bill of Materials	• Textures, lighting, high-resolution images
Creating an Animation	• Timeline pane, location keys
Creating Interactive Content	• Views for animation, improving animation, digger keys, events

Creating a Walkthrough Animation	• Camera keys, grids, additional camera functionality
Adding Special Effects to Animations	• Animation library workshop, scenarios
Updating SOLIDWORKS Composer Files	• Updating assembly, geometry changes
Working with Projects	• Product files, product orientation
Publishing from SOLIDWORKS Composer	• Publishing to PDF, PowerPoint, HTML, linked SVG, multiple views

Book Now: SOLIDWORKS Composer - MECAD Academy

Our standard training for this course runs once a year. If that timing doesn't work, we also offer flexible, custom training scheduled around your availability. From one-on-one sessions to full team training, this course can be tailored to your specific needs.

SOLIDWORKS Electrical

The **SOLIDWORKS Electrical** T**raining Course** covers the basics of SOLIDWORKS Electrical Schematic and 3D. It is designed for engineers, designers, and technicians to learn how to create electrical schematics, wiring diagrams, and documentation using SOLIDWORKS Electrical, including its user interface and design tools.

Duration:

- 5 days

Prerequisites:

- Mechanical design experience
- Completed the SOLIDWORKS Essentials training course
- Experience with the Windows® operating system
- Fundamental knowledge of plastic materials. plastic part design and/or injection mould design

Recommendation:

- Previous experience with electrical design or SOLIDWORKS Electrical is beneficial

Module assessment:

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

Learning objectives

- Gain proficiency in creating electrical schematics and wiring diagrams using SOLIDWORKS Electrical
- Learn to manage components, symbols, and project data effectively
- Understand and apply schematic and 3D electrical design techniques
- Collaborate on electrical design projects using SOLIDWORKS Electrical tools

Lesson Plan	
Project Templates	• Starting SOLIDWORKS Electrical, User Interface, Projects, Project Templates, Project Configurations, Project Structure
Modifying Project Templates	• Environments, Draw Multiple Wires, Project Macros, Environment Data Selection
Drawing Types	• Drawing Types, Unarchiving Projects, Opening Existing Projects, Line Diagram Symbols, Adding Cables, Symbol Panel

Symbols and Components	• Components, Deleting Components, Description Columns, Symbol-Component Association
Manufacturers Parts	• Manufacturers Parts, Finding Manufacturers Parts, Electrical Assemblies
Wires and Equipotential	• Wire Style Manager, Replacing Wires, Wire Numbering, Nodal Indicators
Cabling	• Cables, Detailed Cabling, Terminal Strip, Pin to Pin Connections, Copy/Paste
Symbol Creation	• Symbol Manager, Symbol Properties, Attributes, Library Management
Macros	• Creating and Adding Macros
Cross-Referencing	• What is Cross-Referencing?
Managing Origin-Destination Arrows	• Origin-Destination Arrows, Interpreting Arrows Text
Dynamic Programmable Logic Control	• Adding and Editing PLC, PLC Marks
Automated Programmable Logic Control	• Automating PLCs, IO Manager
Connectors	• Insert Connectors
2D Cabinet Layouts	• Creating Layouts, Inserting Ducts, Rails, and Components, Optimise Cabling Order
Design Rule Checker	• Design Rule Checks, Conflicts, Duplicates
Reports	• Report Templates, SQL Query Columns, Sorting and Breaking
Simple Reports	• Creating Simple Reports
Assembly Creation	• Assemblies, Unarchiving Projects, SOLIDWORKS Assembly
Cabinets, Ducts, Rails	• Cabinets, Ducts, Rails
Component Intelligence	• Defining Faces, Connection Points, Cable Connections
Insert Components	• Inserting Components, Aligning, Inserting Terminals
Routing Wires	• Routing Path and Wires
Routing Cables	• Routing Cables, Set Origin-Destination, Cable Bookings

Book Now: SOLIDWORKS Electrical - MECAD Academy

Our standard training for this course runs once a year. If that timing doesn't work, we also offer flexible, custom training scheduled around your availability. From one-on-one sessions to full team training, this course can be tailored to your specific needs.

SOLIDWORKS Inspection

The **SOLIDWORKS Inspection Training Course** teaches students how to use the software to automate and create accurate inspection documentation for quality control in manufacturing.

Duration:

- 1 day

Prerequisites:

- Completed SOLIDWORKS Essentials training course
- Mechanical design experience
- Experience with the Windows operating system
- Basic knowledge of plastic materials and part design

Recommendation:

- Prior experience with SOLIDWORKS or similar software is beneficial.

Module assessment:

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

Learning objectives

- Create accurate inspection documents using SOLIDWORKS Inspection
- Customise inspection reports, sheets, and ballooned drawings
- Export inspection documents in various formats (PDF, Excel, XML)
- Utilise SOLIDWORKS Inspection for roles in quality control and manufacturing

Lesson Plan	
Inspection Add-in	• Introduction to the SOLIDWORKS Inspection Add-in; Creating and managing projects
Standalone Application	• Using SOLIDWORKS Inspection as a standalone tool; Customising inspection documents
SOLIDWORKS Inspection Professional	• Advanced features of SOLIDWORKS Inspection Professional; Integration with SOLIDWORKS and Microsoft Excel

Book Now: SOLIDWORKS Inspection - MECAD Academy

Our standard training for this course runs once a year. If that timing doesn't work, we also offer flexible, custom training scheduled around your availability. From one-on-one sessions to full team training, this course can be tailored to your specific needs.

SOLIDWORKS Routing Bundle

The **SOLIDWORKS Routing Bundle Training Course** provides comprehensive training on creating and modifying complex electrical, piping, and tubing systems using SOLIDWORKS Routing. The hands-on course covers 3D modelling, generating detailed drawings, analysis, and optimising design efficiency, helping participants enhance their routing design skills and productivity.

Duration:

- 4 days

Prerequisites:

- SOLIDWORKS 2018 or newer
- Basic understanding of technical drawings
- Mechanical design or engineering experience
- Familiarity with routing concepts
- Computer literacy

Recommendation:

- Prior experience with SOLIDWORKS or similar CAD software
- Experience with electrical or mechanical routing is beneficial

Module assessment:

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

Learning objectives

- Confidently create and manage piping, tubing, and electrical routes in SOLIDWORKS
- Apply advanced piping and tubing techniques to complex designs
- Understand and create routing components for piping, electrical ducts, and HVAC systems
- Use SOLIDWORKS Content for routing electrical components and circuits
- Effectively manage changes in routing for both electrical and mechanical designs
- Import electrical data and create electrical drawings using routing tools
- Work with flex cables and electrical conduits within a SOLIDWORKS environment

Lesson Plan	
Fundamentals of Routing	• Introduction to routing basics and interface setup

Advanced Piping Routes	• Advanced techniques for piping routes
Advanced Piping Routes	• Continued advanced techniques for complex piping routes
Piping Fittings	• Understanding and placing fittings in piping designs
Tubing Routes	• Techniques for creating and managing tubing routes
Piping and Tubing Changes	• Managing changes in piping and tubing routes
Creating Routing Components	• Building custom components for routing systems
Electrical Ducting, Cable Tray, and HVAC Routes	• Creating routing for electrical and HVAC systems
Using SOLIDWORKS Content Routing – Electrical	• Importing and utilising SOLIDWORKS content for routing
Fundamentals of Routing	• Review and reinforce basic routing concepts
Basic Electrical Routing	• Introduction to basic electrical routing techniques
Routing with Clips	• Using clips in routing designs
Electrical Routing Components	• Understanding and placing electrical routing components
Standard Cables and Reusing Routes	• Working with standard cables and reusing routes
Electrical Data Import	• Importing electrical data into routing
Electrical Drawings	• Creating electrical drawings using routing tools
Flex Cables	• Working with flex cables in electrical routing
Electrical Conduits	• Creating and managing electrical conduits in routing

Book Now: SOLIDWORKS Routing Bundle - MECAD Academy

Our standard training for this course runs once a year per campus. If that timing doesn't work, we also offer flexible, custom training scheduled around your availability. From one-on-one sessions to full team training, this course can be tailored to your specific needs.

SOLIDWORKS Simulation

The **SOLIDWORKS Simulation Training Course** teaches users how to simulate, validate, and optimise designs prior to manufacturing. Participants will learn essential analysis techniques to improve product performance.

Duration:

- 5 days

Prerequisites:

- SOLIDWORKS 2018 / newer
- Understanding of technical drawings
- Mechanical design experience
- Computer literacy

Recommendation:

- Prior experience with SOLIDWORKS or similar software is beneficial
- Familiarity with finite element analysis (FEA) principles is recommended

Module assessment:

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

Learning objectives

- Navigate the SOLIDWORKS Simulation interface and tools with ease
- Conduct linear static analysis, stress and strain analysis, and thermal simulations
- Perform mesh refinement and optimise simulation results for better accuracy
- Apply boundary conditions, contact interactions, and load cases effectively
- Carry out assembly analysis and use connectors to simulate complex designs
- Use motion analysis tools to simulate the dynamic behaviour of assemblies
- Understand large displacement analysis, thermal stress analysis, and adaptive meshing for complex simulations

Lesson Plan	
The Analysis Process	• Overview of the analysis process, preprocessing, meshing, processing, and post-processing steps.
Mesh Controls, Stress Concentrations and Boundary Conditions	• Learn mesh control techniques, the effect of boundary conditions on simulations, and how to manage stress concentrations.
Assembly Analysis with Interactions	• How to analyse assemblies with interactions, including contact and bonded interactions, and local interactions.

Symmetrical and Free Self-Equilibrated Assemblies	• Analyse symmetrical assemblies and free self-equilibrated parts, including shrink-fit parts and soft spring analysis.
Assembly Analysis with Connectors and Mesh Refinement	• Use connectors in assembly analysis and apply mesh refinement for better results in assemblies.
Bonded Mesh Options	• Discuss bonded mesh options, centrifugal force, and bonding formulations.
Analysis of Thin Components	• Techniques for analysing thin components, solid vs shell elements, and creating shell elements for thin parts
Mixed Meshing Shells & Solids	• Learn how to mix mesh types, including solids and shells, and apply them to pressure vessel analysis.
Beam Elements – Analysis of a Conveyor Frame	• A project that applies beam elements to the analysis of a conveyor frame.
Mixed Meshing Solids, Beams & Shells	• Understanding mixed meshing with solids, beams, and shells in complex designs.
Design Study	• Use design study features to apply multiple load cases and modify geometry for optimal performance.
Thermal Stress Analysis	• Learn to perform thermal stress analysis and save the model in its deformed shape for further examination.
Adaptive Meshing	• Explore adaptive meshing, including H-adaptivity and P-adaptivity studies for improved simulation accuracy.
Large Displacement Analysis	• Learn to distinguish small vs large displacement analysis and perform linear and nonlinear large displacement analysis.
Introduction to Motion Simulation and Forces	• Basics of motion simulation, applying forces, and understanding results.
Building a Motion Model and Post-processing	• Create motion models, add mates, and analyse results with local mates and plot kinematic results.
Introduction to Contacts, Springs and Dampers	• Learn how to handle contact, and friction, and apply translational springs and dampers in motion simulations.
Advanced Contact	• Advanced Contact
Curve to Curve Contact	• Examine curve-to-curve contact and solid body contact solutions.
Cam Synthesis	• Learn how to synthesise cam motion paths and export trace path curves.
Motion Optimisation	• Use motion optimisation tools, sensors, and optimisation analysis for refining motion models.
Flexible Joints	• Analyse systems with flexible joints and how they affect motion behaviour.

Redundancies	• Learn how to detect redundancies in mechanisms and check for typical redundant mechanisms.
Export to FEA	• Understand how to export results from SOLIDWORKS Motion and directly solve problems within SOLIDWORKS FEA.
Event-Based Simulation	• Explore event-based simulations, including servo motors, sensors, and task automation.
Design Project (Optional)	• A final project that applies course knowledge to solve a real-world design problem.

Book Now: SOLIDWORKS Simulation - MECAD Academy

Our standard training for this course runs once a year per campus. If that timing doesn't work, we also offer flexible, custom training scheduled around your availability. From one-on-one sessions to full team training, this course can be tailored to your specific needs.

SOLIDWORKS Visualize Essentials

The **SOLIDWORKS Visualize Essential Training Course** teaches users to create professional, high-quality renderings, animations, and VR outputs for marketing. It covers essential tools and techniques to enhance visual presentations.

Duration:

- 2 days

Prerequisites:

- SOLIDWORKS 2018 or newer
- Basic understanding of rendering and visualization concepts
- Mechanical design experience is beneficial
- General computer literacy

Recommendation:

- Prior experience with SOLIDWORKS Visualize or other rendering software is beneficial

Module assessment:

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

Learning objectives

- Import and manage CAD models in SOLIDWORKS Visualize
- Navigate the user interface efficiently and utilise rendering tools
- Apply and manipulate appearances, decals, and textures effectively
- Configure camera settings and create professional-quality renderings

Lesson Plan	
CAD to SOLIDWORKS Visualize	• Importing techniques, UI introduction, render selections, denoiser, appearances, file libraries, scenes, rendering output tools
Import Settings and Appearances	• Import settings, part grouping, structuring, selection tools, object manipulation, splitting parts, copy & paste, appearance types & parameters, texture mapping, merging parts
Decals	• Decal features, depth, mapping, blending textures, multi-layer decal process
Cameras	• Aspect ratios, perspective, camera orientation, grid overlay, depth of field, filters
Backplates, Environments, and Lights	• Scenes, cutting planes, backplates, environments (HDR & sunlight), lighting techniques

Productivity Tools	• Multiple views, different render outputs, configurations
Animation and Grouping	• Groups, animations, rotate animations, animation timeline, motion blur, keyframe animation
Camera Animations	• Camera movement, camera animation, keyframe properties
Animating Appearances and Scenes	• Scene animation, appearance animation
Alternative Outputs	• Turntable, interactive images, panorama view, sun study, 360 camera, export options
Simulations	• Simulated physics, shake simulations, simulation manager, vehicle simulations, physics animations

Book Now: SOLIDWORKS Visualize Essentials - MECAD Academy

Our standard training for this course runs once a year per campus. If that timing doesn't work, we also offer flexible, custom training scheduled around your availability. From one-on-one sessions to full team training, this course can be tailored to your specific needs.

Enrol in a Course Today

At MECAD Systems, we believe in empowering professionals with the knowledge and tools they need to succeed. Our expert-led training programs are designed to help you master the software, improve efficiency, and gain a competitive edge in your industry.

Whether you're an engineer, designer, or manufacturer, our courses are tailored to suit all skill levels, from beginners to advanced users.

Book Your Training
Take the first step towards mastering your skills with our comprehensive training courses. Browse our available sessions and secure your spot today.
Book Now

Contact Us
Not sure which training is right for you? Need more details about course content, schedules, or pricing? Our team is ready to assist you. Get in touch with us for personalised guidance.
Contact Us