

**Certified SolidWorks Flow Simulation– 2 Days**

Description	Designed for users who would like to become productive faster, this introductory course offers hands-on training on the use of SolidWorks Flow Simulation.
Prerequisites	Certified SolidWorks Essentials – Part & Assembly Modelling

<p><b>Introduction</b></p> <p><b>Lesson 1: Creating a SolidWorks Flow Simulation Project</b>                  Objectives                  Case Study: Manifold Assembly                  Problem Description                  Model Preparation                  Post processing                  Discussion                  Summary</p> <p><b>Lesson 2: Meshing</b>                  Objectives                  Case Study: Chemistry Hood                  Project Description                  Computational Mesh                  Basic Mesh                  Initial Mesh                  Geometry Resolution                  Optimise Thin Wall Resolution                  Result Resolution/Level of Initial Mesh</p> <p><b>Lesson 3: Thermal Analysis</b>                  Objectives                  Case Study: Electronics Enclosure                  Project Description                  Fans                  Perforated plates                  Discussion                  Summary</p> <p><b>Lesson 4: External Transient Analysis</b>                  Objectives                  Case Study: Flow Around a Cylinder                  Problem Description                  Reynolds number                  External Flow                  Transient Flow                  Turbulence Intensity                  Solution Adaptive Mesh Refinement                  Two Dimensional Flow                  Computational Domain                  Calculation Control Options                  Time Animation                  Discussion                  Summary</p>	<p><b>Lesson 5: Conjugate Heat Transfer</b>                  Objectives                  Case Study: Heated Cold Plate                  Project Description                  Conjugate Heat Transfer                  Real Gases                  Summary</p> <p><b>Lesson 6: EFD Zooming</b>                  Objectives                  Case Study: Electronics Enclosure                  Project Description                  EFD Zooming                  Summary</p> <p><b>Lesson 7: Porous Media</b>                  Objectives                  Case Study: Catalytic Converter                  Problem Description                  Porous Media                  Design Modification                  Discussion                  Summary</p> <p><b>Lesson 8: Rotating Reference Frames</b>                  Objectives                  Rotating Reference Frame                  Case Study: Fan Assembly                  Problem Description                  Summary</p> <p><b>Lesson 9: Parametric Analysis</b>                  Objectives                  Case Study: Piston Valve                  Problem Description                  Parametric Analysis                  Steady State Analysis                  Summary</p>	<p><b>Lesson 10: Cavitation</b>                  Objectives                  Case Study: Cone Valve                  Problem Description                  Cavitation                  Discussion                  Summary</p> <p><b>Lesson 11: Relative Humidity</b>                  Objectives                  Relative Humidity                  Case Study: Cook House                  Problem Description                  Summary</p> <p><b>Lesson 12: Particle Trajectory</b>                  Objectives                  Case Study: Hurricane Generator                  Problem Description                  Particle Trajectories – Overview                  Summary</p> <p><b>Lesson 13: Supersonic Flow</b>                  Objectives                  Supersonic Flow                  Case Study: Conical Bell                  Problem Description                  Discussion                  Summary</p> <p><b>Lesson 14: FEA Load Transfer</b>                  Objectives                  Case Study: Billboard                  Problem Description                  Summary</p>
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