

SolidWorks Plastics - 3 Days

Description	This course teaches how to use specialised simulation software tools to predict how melted plastic flows during the injection moulding process. Predicting how the plastic will flow enables you to predict manufacturing defects such as weld lines, air traps, short shots, and sink marks. By predicting these defects, you can change the part or mould geometry, the processing conditions or the plastic material itself to eliminate or minimise them, saving energy, material, time, and money. The SolidWorks Plastics Professional course covers all the features and functions of SolidWorks Plastics Professional (for part designers).
Prerequisites	Certified SolidWorks Essentials – Part & Assembly Modelling and a fundamental knowledge of plastic materials, plastic part design, and/or injection mould design.

<p>Introduction Injection Molding SolidWorks Plastics</p> <p>Lesson 1: Basic Flow Analysis Basic Flow Analysis Stages in the Process Element Types Meshing The Plastics Manager Tree Material Injection Location Running a Flow Analysis Flow Results</p> <p>Lesson 2: Detecting a Short Shot Detecting Short Shots Stages in the process Fill Settings Flow Front Central Temperature Design Changes Simulations After Design Changes</p> <p>Lesson 3: Automation Tools Automation Tools Stages in the Process Duplicate Study Copying Settings Batch Manager Summary and Report</p> <p>Lesson 4: Injection Locations and Sink Marks Injection Locations and Sink Marks Stages in the Process Injection Location Rules Sink Marks</p>	<p>Lesson 5: Materials Material Properties Stages in the Process User-defined Database Resin Properties Temperature Properties Heat Transfer Properties Viscosity PVT Data Mechanical Properties</p> <p>Lesson 6: Mesh Manipulation Mesh Manipulation Stages in the Process Local Mesh Refinement Element Issues Mesh Editing Leader Lines Solid Mesh Solid Mesh Types</p> <p>Lesson 7: Detecting Air Traps Detecting Air Traps Stages in the Process Air Traps Venting</p> <p>Lesson 8: Gate Blush Gate Blush Stages in the Process Runner Elements Gate Blush</p> <p>Lesson 9: Packing and Cooling Times Packing and Cooling Stages in the Process Flow/Pack Switch Pack Stage Pack Analysis Pack Results X-Y Plot Clipping Plane Mode Isosurface Mode Cooling Times</p>	<p>Lesson 10: Multiple Cavity Molds Multiple Cavity Molds Stages in the Process Mirroring Cavities Mold Layouts Channel Design Runner Channel Design Clamping Force Runner Wizard Channel Design Family Mold Layout</p> <p>Lesson 11: Symmetry Analysis Symmetry Analysis Stages in the Process Case Study 1: Runner Design Case Study 2: Symmetry Face Symmetry Face</p> <p>Lesson 12: Valve Fates and Hot Runners: Valve Gates and Hot Runners Stages in the Process Valve Gates Hot Runners</p> <p>Lesson 13: Reaction Injection Molding: Reaction Injection Molding Stages in the Process Reaction Injection Molding</p> <p>Lesson 14: Using Inserts: Using Inserts Stages in the Process Cavities and Inserts Materials for Inserts</p> <p>Lesson 15: Multi Shot Mold: Multi Shot Mold Stages in the Process Multi Shot Mold</p>
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To Book call: 1300 SWX CAD (1300 799 223)



Course Outline



<p>Lesson 16: Gas Assistance Molding: Gas Assisted Molding Stages in the Process Gas Assist</p>	<p>Lesson 17: Cooling Analysis: Cooling Analysis Stages the Process Cooling Cooling Channels and Mold Bodies Coolant Mold Cool Settings Cooling Simulations Cool Analysis Cool Results Baffle Bubbler</p>	<p>Lesson 18: Warpage Analysis Warpage Analysis Stages in the Process Shrinkage Warpage Warp Settings Warp Results Reducing and Fixing Warped Parts</p>
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