

SolidWorks Advanced Consumer 2012 Training Course

Duration: 4 days (This training may be taken as 2 separate Two-day courses.)
• Prerequisites: SolidWorks Essentials. Basic experience with the SolidWorks software and Windows™ operating system, and knowledge of SolidWorks file structure and referencing.

Course Outline

Advanced Part Modelling (2 Days)

LESSON 1 Multibody Solids

LESSON 2 Sweeps

LESSON 3 Lofts and Splines

LESSON 4 Other Advanced Tools

Advanced Surface Modelling (2 Days)

LESSON 1 Understanding Surfaces

LESSON 2 Introduction to Surfacing

LESSON 3 Solid-Surface Hybrid

LESSON 4 Repairing & Editing Imported Geometry

LESSON 5 Advanced Surface Modelling

LESSON 6 Blends and Patches

LESSON 7 Master Model Techniques



Training Content

Advanced Part Modelling (Lessons 1-4 = 2 days)

LESSON 1

Multibody Solids

- Multibody Solids, Bridging, Extrude From
- Solid Bodies Folder, Local Operations
- Combined Bodies, Common Bodies
- Tool Body, Insert Part
- Move/Copy Bodies, Mate Reference
- Patterning, Indent Feature
- Using Cut to Create Multibodies
- Saving Solid Bodies as Parts and Assemblies
- Feature Scope, Save Bodies
- Splitting a Part into Multibodies
- Creating an Assembly
- Using Split Part with Legacy Data

LESSON 2

Sweeps

- Introduction Sweeping
- Sweeping Along a 3D Path
- 3D Sketching
- Introducing: Helix and Spiral
- Introducing: Projected Curve
- Introducing: Composite Curve

- Sweeping
- Introducing: Fit Spline
- Sweeping and Lofting: What's the Difference?
- Creating a Curve Through a Set of Points
- Introducing: Insert Ellipse
- Sweep Options
- The Label Shape
- Working with a Non-planar Path
- Variable Radius Filleting
- Introducing: Split Lines
- Analyzing Geometry
- Introducing: Display Curvature
- Introducing: Show Curvature Combs
- Introducing: Intersection Curve
- Introducing: Zebra Stripes
- Filleting the Label Outline
- Selecting Edges
- Introducing: Select Loop
- Performance Considerations
- Modeling Threads
- Orientation and Twist Control
- Align with End Faces
- Sweeping Along Model Edges
- Introducing: SelectionManager
- Sweeping a Tool Body

LESSON 3

Lofts and Splines

- Basic Lofting
- Introducing: Loft
- Using Derived and Copied Sketches
- Copying a Sketch
- Derived Sketches
- Introducing: Insert Derived Sketch
- Centerline Lofting
- Introducing: Split Entities
- Cleaning Up a Model
- Introducing: Delete Face
- Introducing: Deviation Analysis
- Spline Sketching
- Introducing: Spline
- Advanced Lofting
- Sketch Picture
- Introducing: Sketch Picture
- Layout Sketches

LESSON 4

Other Advanced Tools

- Advanced Fillets
- Flex
- Wrap Feature
- Deform Feature
- Knit Surface
- Move Face and Delete Face
- Using 3D Sketch with the Hole Wizard
- Using Symmetry
- Manual Relief Cut
- Break Corner
- Jog Feature
- Lofted Bends
- Bend Deviation

AUSTRALIA
1300 CAD CAM (223 226)
www.intercad.com.au

NEW ZEALAND
0508 CAD CAM (223 226)
www.intercad.co.nz

| SYDNEY | MELBOURNE | BRISBANE | PERTH | ADELAIDE | AUCKLAND | CHRISTCHURCH |

 **SOLIDWORKS**
LET'S GO DESIGN



continued over page...



SolidWorks Advanced Consumer 2012 Training Course

Duration: 4 days (This training may be taken as 2 separate Two-day courses.) • Prerequisites: SolidWorks Essentials. Basic experience with the SolidWorks software and Windows™ operating system, and knowledge of SolidWorks file structure and referencing.



Training Content

Advanced Surface Modelling (Lessons 1-7 = 2 days)

LESSON 1

Understanding Surfaces

- Solids and Surfaces
- Working with Surface Bodies
- Why Use Surfaces?
- Continuity Explained
- Workflow with Surfaces

LESSON 2

Introduction to Surfacing

- Similarities between Solid and Surface Modelling
- Basic Surfacing

LESSON 3

Solid-Surface Hybrid Modelling

- Hybrid Modelling
- Using surfaces to Modify Solids
- Interchanging Between Solids and Surfaces
- Performance Implications
- Surfaces as Construction Geometry
- Making Copies of Faces

LESSON 4

Repairing and Editing Imported Geometry

- Importing Data
- Repairing and Editing Imported Geometry

LESSON 5

Advanced Surface Modelling

- Stages in the Process
- Ruled Surfaces
- Lofting Surfaces
- Modeling the Lower Half
- Conclusion
- Design Changes

LESSON 6

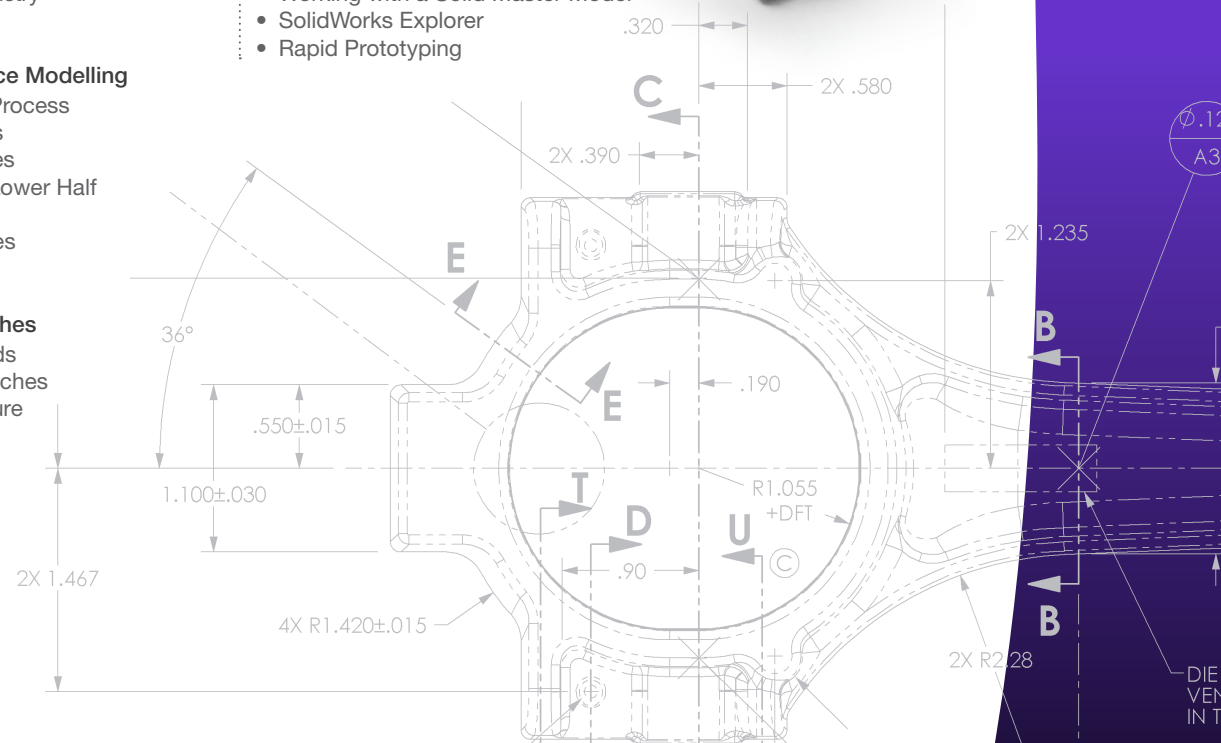
Blends and Patches

- Complex Blends
- Smoothing Patches
- Freeform Feature
- Corner Blends

LESSON 7

Master Model Techniques

- Introduction to Master Models
- Surface Master Techniques
- Working with a Solid Master Model
- SolidWorks Explorer
- Rapid Prototyping



AUSTRALIA
1300 CAD CAM (223 226)
www.intercad.com.au

NEW ZEALAND
0508 CAD CAM (223 226)
www.intercad.co.nz

| SYDNEY | MELBOURNE | BRISBANE | PERTH | ADELAIDE | AUCKLAND | CHRISTCHURCH |

SOLIDWORKS
LET'S GO DESIGN



intercad
driving the design