SOLIDWORKS Essentials – 4 days (28h) (2 sessions)

1. SOLIDWORKS Basics and the User Interface

- What is the SOLIDWORKS Software?
- Design Intent
- File References
- Opening Files
- The SOLIDWORKS User Interface
- Using the Command Manager

2. Introduction to Sketching

- 2D Sketching
- Stages in the Process
- Saving Files
- Sketching
- Sketch Entities
- Basic Sketching
- Rules that govern Sketches
- Design Intent
- Sketch Relations
- Dimensions
- Extrude
- Sketching Guidelines

3. Basic Part Modeling

- Basic Modeling
- Terminology
- Choosing the best Profile
- Choosing the Sketch Plane
- Details of the Part
- Boss Feature
- Sketching on a Planar Face
- Cut Feature
- View Selector
- Using the Hole Wizard
- Filleting
- Editing Tools
- Detailing Basics
- Drawing Views
- Center Marks

- Dimensioning
- Changing parameters

4. Symmetry and Draft

- Boss feature with Draft
- Symmetry in the Sketch
- Sketching inside the Model
- View Options
- Using Model Edges in a Sketch
- Creating Trimmed Sketch Geometry
- Copy and Paste Features

5. Patterning

- Why use Patterns?
- Linear Patterns
- Circular Patterns
- Reference Geometry
- Planes
- Mirror Patterns
- Using Pattern seed only
- Up to Reference
- Sketch Driven Patterns

6. Revolved Features

- Revolved Features
- Building the Rim
- Building the Spoke
- Edit Material
- Mass Properties
- Files Properties
- SOLIDWORKS SimulationXpress
- Using SOLIDWORKS SimulationXpress
- The SimulationXpress Interface

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SOLIDWORKS Essentials *(part 2)*

7. Shelling and Ribs

- Shelling and Ribs
- Analyzing and adding Drafts
- Other options for Drafts
- Shelling
- Ribs
- Full round Fillets
- Thin features

8. Editing: Repairs

- Part Editing
- Editing Topics
- Sketch issues

9. Editing: Design Changes

- Part Editing
- Design Changes
- Information from a Model
- Rebuilding Tools
- Sketch Contours
- Replace Sketch Entity

10. Configuration

- Configurations
- Using Configurations
- Other methods to create Configurations
- Modeling strategies for Configurations
- Editing Parts that have Configurations
- Design Library

11. Global variables and equations

- Using global Variables and Equations
- Renaming Features and Dimensions
- Design Rules using global Variables and Equations
- Global Variables
- Equations
- Using Operators and Functions

12. Using Drawings

- Removed section
- Detail Views
- Drawing Sheets and Sheet Formats
- Model Views
- Section Views
- Annotations

13. Bottom-up Assembly Modeling

- Bottom-up Assembly
- Creating a new Assembly
- Position of the first Component
- Feature Manager Design Tree and Symbols
- Adding Components
- Mating Components
- Using Part Configurations in Assemblies
- Subassemblies
- Smart Mates
- Inserting subassemblies
- Pack and Go

14. Using Assemblies

- Using Assemblies
- Analyzing the Assembly
- Checking for clearances
- Changing the values of Dimensions
- Exploded Assemblies
- Rollback and Reorder Explode Steps
- Explode Line Sketch
- Bill of Materials
- Assembly Drawings

Appendix

- Options Settings
- Document Templates

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