

CATIA V5

Surfacing (5 Days)

204SUR02_1 Spline Creation and Editing (Unit)

- 1: Spline Creation and Editing Unit Introduction
- 2: Spline Terminology
- 3: Spline Creation and Editing
- 4: Spline Creation in Sketcher
- 5: Spline Editing in Sketcher
- 6: Spline Creation and Editing Unit Summary
- 7: Splines
- 8: Cell Phone #1(WSD #1)

204SUR02_2 Surface and Wireframe

Transformations (Unit)

- 9: Surface and Wireframe Transformations Unit Introduction
- 10: Transformations Overview
- 11: Translation
- 12: Rotation
- 13: Symmetry
- 14: Scaling
- 15: Affinity
- 16: Axis to Axis Transformation
- Surface and Wireframe Transformations Unit Summary
- 18: Transformations

204SUR03_1 Surface and Wireframe Operations (Unit)

- Surface and Wireframe Operations 1 Unit Introduction (ILT)
- Surface and Wireframe Operations Overview (ILT)
- 21: Join Elements
- 22: Split Elements
- 23: Trim Elements
- 24: Sweep Circle Basic (ILT)
- 25: Sweep Explicit Basic (ILT)
- 26: Surface and Wireframe Operations 1 Unit Summary (ILT)
- 27: Cell Phone #3 (WSD #5)

204SUR03_2 Surface Based Features & Multi Section Surfaces (Unit)

- 28: Surface-Based Features & Multi-Sections Surfaces Unit Introduction (ILT)
- 29: Surface-Based Features
- 30: Splitting Solid Bodies
- 31: Thick Surface
- 32: Close Surface
- 33: Sew Surface
- 34: Multi-Sections Surfaces Overview
- 35: Multi-Sections Surfaces
- 36: Surface-Based Features & Multi-Sections Surfaces Unit Summary (ILT)
- 37: Plastic Handle 1
- 38: Plastic Handle 2

- 39: Surface Design (WSD #6)
- 40: Surface Manipulation (WSD #7)

204SUR04_1 Surface and Wireframe Operations 2 (Unit)

- 41: Surface and Wireframe Operations 2 Unit Introduction
- 42: More Surface and Wireframe Operations
- 43: Extracting Edges and Faces
- 44: Extracting Boundary Edges
- 45: Multiple Extract
- 46: Near Elements
- 47: Invert Orientation
- 48: Surface and Wireframe Operations 2 Unit Summary
- 49: Hook Surface Creation (WSD #8)
- 50: 3D Controller 2
- 51: Aircraft Door
- 52: Surface and Wireframe Operations

204SUR05_1 Face and Shape Fillets (Unit)

- 53: Face and Shape Fillets Unit Introduction
- 54: Face and Shape Fillets Overview
- 55: Edge Fillet Creation
- 56: Shape Fillet Creation
- 57: Variable Fillet Creation
- 58: Face-Face Fillet Creation
- 59: Tritangent Fillet Creation
- 60: Extrapolate
- 61: Law Curves Overview
- 62: Law Curves
- 63: Face and Shape Fillets Unit Summary
- 64: Remote

204SUR05-2 Historical Graph (Unit)

- 65: History Revealing Commands
- 66: Parents/Children Analysis
- 67: Show Historical Graph
- 68: Quick Select (Footprints)
- 69: Parameterization Analysis
- 70: Knob (Exercise #1)

204SUR06_1 Surfacing Best Practicces (Unit)

- 71: Surfacing Best Practices Unit Introduction
- 72: Surfacing Considerations
- 73: Avoiding Problems in Surfacing
- 74: How to Fix Imperfect Faces and Bodies
- 75: Finding The Balance
- 76: Implicit vs. Explicit Elements
- 77: Delete Useless Elements
- 78: Healing Elements
- 79: Surfacing Best Practices Unit Summary
- 80: Swept Manifold (Exercise #2)



1 of 2 Course Outline



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204SUR06_2 Surfacing Operations and Multidocument Links (Unit)

- 81: Surfacing Operations
- 82: Extrapolate
- 83: Disassemble
- 84: Untrim Elements
- 85: Surface Operations

204SUR07_1 Advanced Wireframe Geometry 1 (Unit)

- 86: Advanced Wireframe Geometry Unit Introduction1 (ILT)
- 87: Curve Projections and Intersections Overview
- 88: Projection Curves
- 89: Combined Curves
- 90: Intersection Geometry Creation
- 91: Parallel Curves
- 92: 3D Curve Offset
- 93: Helix Creation
- 94: Spiral Creation
- 95: Polyline Creation
- 96: Advanced Wireframe Geometry Unit Summary1 (ILT)
- 97: Advanced Wireframe Geometry

204SUR07_2 Advanced Wireframe Geometry 2 (Unit)

- 98: Advanced Wireframe Geometry Unit Introduction2 (ILT)
- 99: Reflect Lines
- 100: Connect Curve Creation
- 101: Spine Creation
- 102: Conics Unit Introduction
- 103: Conics Overview
- 104: Conic Creation
- 105: Conic Sketch Creation
- 106: Conics Unit Summary
- 107: Advanced Wireframe Geometry Unit Summary2 (ILT)
- 108: 3D Controller 1
- 109: Stamping

204SUR07_2 Automotive Workshops (Unit)

1: Engine Cover Surface Workshop

204SUR07_2 Aerospace Workshops (Unit)

- 2: Inlet Duct Workshop
- 3: Aerospace Composite Panel Workshop #1

304SUR08_1 Analyzing Surfaces and Curves (Unit)

- 1: Analyzing Surfaces and Curves Unit Introduction
- 2: Connect Checker
- 3: Connect Curve Creation
- 4: Draft Analysis
- 5: Surfacic Curvature Analysis

- 6: Porcupine Analysis
- 7: Geometric Information
- 8: Interpreting Analysis Results
- 9: Healing Elements
- 10: Curve Smooth
- 11: Analyzing Surfaces and Curves Unit Summary
- 12: Impeller Blade
- 13: Center Console #1 (Exercise #5)

304SUR09 1 Swept Surfaces (Unit)

- 14: Swept Surfaces Unit Introduction
- 15: Swept Surfaces Overview
- 16: Sweep Explicit
- 17: Sweep Line
- 18: Sweep Circle
- 19: Sweep Conic
- 20: Adaptive Sweep
- 21: Blend Surfaces
- 22: Swept Surfaces Uniit Summary
- 23: General Sweeps
- 24: Center Console #2 (Exercise #6)

304SUR10_1 Geometry Modification Management (Unit)

- 25: Center Console #3 (Exercise #7)
- 26: Center Console Change Management
- 27: Keyfob Project 1
- 28: Keyfob Project 2

304SUR11_1 Power Copies (Unit)

- 29: PowerCopy Introduction
- 30: PowerCopy Overview
- 31: PowerCopy Advantages
- 32: PowerCopy Creation
- 33: PowerCopy Insertion
- 34: PowerCopies
- 35: Center Console Ribs (SAU #1)

304SUR11_2 Surfacing Projects (Unit)

- 36: Surfacing Projects Unit Introduction
- 37: Free Form Hip
- 38: Fan Blade
- 39: Bottle
- 40: Water Jug
- 41: Surfacing Projects Unit Summary



2 of 2 Course Outline