

## COURSE LEARNING OUTCOME

**Training :** Autodesk Alias

**Level :** Beginner To Intermediate

**Software :** Autodesk Alias

**Objective :** This two-day training aims to provide participants with a practical foundation in Autodesk Alias for industrial and automotive surfacing. Through hands-on exercises, they will learn to create and refine curves and surfaces using core tools, evaluate continuity and surface quality, and export designs for prototyping or downstream CAD. By the end of the course, participants will be able to produce clean, high-quality surface models suitable for concept design and digital development.

Day 1	
Topic	Time
<ul style="list-style-type: none"> <li>Welcoming &amp; Interface Orientation <ul style="list-style-type: none"> <li>Overview of Alias software packages (Surface, Auto Studio, Concept)</li> </ul> </li> </ul>	9.30 am – 10.30 am
<ul style="list-style-type: none"> <li>Understanding NURBS vs Polygons</li> <li>What are CVs, spans, degree, knots</li> <li>Importance of clean curves in Class-A surfacing</li> </ul>	10.30 am – 11.00 am
<ul style="list-style-type: none"> <li>Curve Types: CV Curve, EP Curve, Blend Curve, Freeform Curve</li> <li>Curve Editing: Insert/Remove CV, Rebuild Curve, Align, Project Curve</li> <li>Practical: Sketch outline of a car hood or consumer product</li> </ul>	11.00 am – 1.00 pm
<ul style="list-style-type: none"> <li>Lunch</li> <li>Rest</li> </ul>	1.00 pm – 2.00 pm
<ul style="list-style-type: none"> <li>Surface from Curve: Square, Skin, Rail, Planar, Revolve</li> </ul>	2.00 pm – 5.00 pm

<ul style="list-style-type: none"> <li>• Lofting and section-based surface building</li> <li>• Practical: Building a continuous body shell using curves and skin tools</li> </ul>	
<ul style="list-style-type: none"> <li>• Editing tools: Extend, Intersect, Detach, Trim, Stitch</li> <li>• Managing surface boundaries and intersections</li> <li>• Practical: Refine intersecting panels into a single joined body</li> </ul>	5.00 pm – 5.30 pm

Day 2	
Topic	Time
<ul style="list-style-type: none"> <li>• Understanding Visual Diagnostics: Zebra, Curvature Comb, Draft Angle</li> <li>• Continuity Checking (Positional G0, Tangent G1, Curvature G2, G3)</li> <li>• Importance of flow and reflections in automotive styling</li> </ul>	9.30 am – 10.30 am
<ul style="list-style-type: none"> <li>• Align Surface Tool: Set continuity between surface edges</li> <li>• Rebuild Surface: Adjust spans/degrees to optimize surface quality</li> <li>• Evaluate and adjust continuity manually (G1/G2) with live feedback</li> </ul>	10.30 am – 11.00 am
<ul style="list-style-type: none"> <li>• What is Class-A? Industry expectations and tolerances</li> <li>• Patch layout strategy and multi-surface continuity</li> <li>• Practical: Model a fender or electronic housing using aligned surfaces</li> </ul>	11.00 am – 1.00 pm
<ul style="list-style-type: none"> <li>• Lunch</li> <li>• Rest</li> </ul>	1.00 pm – 2.00 pm

<ul style="list-style-type: none"><li>• Choose 1 object: Automotive hood, bottle design, or mouse shell</li><li>• Apply full workflow: Curve setup → Surface → Stitch → Evaluate</li><li>• Exporting for rendering or downstream CAD (STEP, IGES, etc.)</li></ul>	2.00 pm – 5.00 pm
<ul style="list-style-type: none"><li>• Review of key tools and workflows</li><li>• Answer questions from participants</li></ul>	5.00 pm – 5.30 pm