

MFG125567-L

CAM Certificate 3 of 5: 3D

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Learning Objectives

- Understand how 3D toolpaths are generated
- Know when and how to apply 3D finishing operations
- Program complex geometry using 3D strategies
- Improve existing workflows and incorporate industry best practices

Description

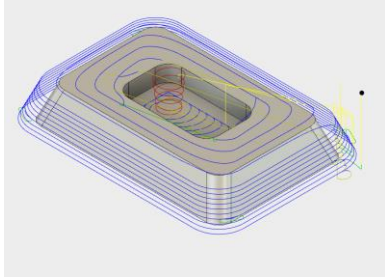
This class will cover the core concepts of 3D programming in Fusion 360 software, including valuable tips, tricks, and best practices from product experts. Attendees should expect to learn full 3D workflows, including generating, containing, and manipulating a variety of 3D roughing and finishing toolpaths. Users will leave with an understanding of what it takes to utilize Fusion 360 to quickly and effectively program parts. We'll highlight the power and flexibility of integrated CAM using Fusion 360, providing real-world scenarios in the manufacturing industry.

Speaker(s)

Angelo has 29 years of experience in the machining industry and came to Autodesk from Tesla Motors R&D Prototyping Lab. While at Tesla, Angelo was responsible for machining complex vehicle components and sub-assemblies using state of the art CNC machine tools with very short lead-times and extremely tight tolerances. In addition, Angelo spent many years teaching CNC, and installing and servicing CNC machines for Americas largest machine tool builder, Haas Automation by way of Selway Machine Tool Company in California. Angelo has a vast knowledge of machining principles using CAD/CAM software for manufacturing in many industries including: Semiconductor, Defense, Aerospace, Disc Drive, Automotive and Robotics Industries.

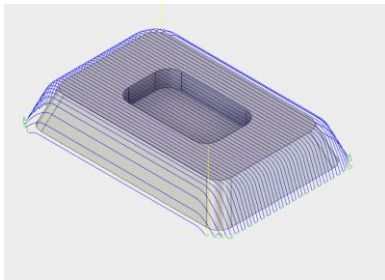
3D Roughing

3D Adaptive Clearing

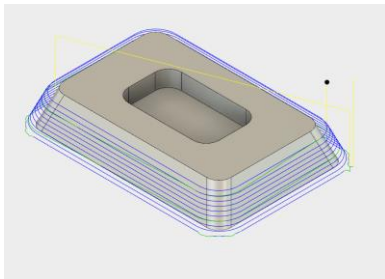


3D Finishing

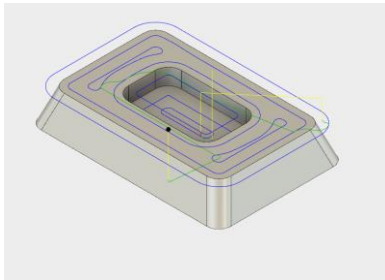
Parallel



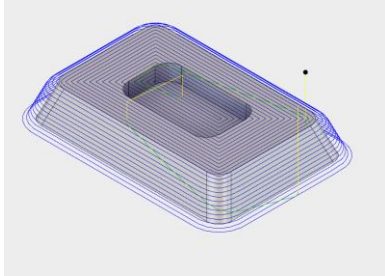
3D Contour



Horizontal



Scallop



Morph

Additional Resources

Fusion 360 Adoption Content (Prerequisite)

3D Adaptive Clearing: <http://f360ap.autodesk.com/courses/fundamentals-of-milling/lessons/lesson-3-roughing>

3D Adaptive Clearing – In Depth: <http://f360ap.autodesk.com/courses/fundamentals-of-milling/lessons/lesson-3-1-adaptive-in-depth>

3D Finishing: <http://f360ap.autodesk.com/courses/fundamentals-of-milling/lessons/lesson-5-3d-finishing>

Stock Simulation: <http://f360ap.autodesk.com/courses/fundamentals-of-milling/lessons/lesson-6-stock-simulation>

Toolpath Management: <http://f360ap.autodesk.com/courses/fundamentals-of-milling/lessons/lesson-7-toolpath-management>