

# Fusion 360 CAM Beginner Courses

**F****360**

## Introduction to CAD, CAM & CNC Machining (Milling) – 3 Days

**AUTODESK**  
Authorised Training Centre**AUTODESK**  
Learning Partner

### Course Overview

Our Fusion 360 “Introduction to CAD, CAM & CNC Machining” course is a 3 day hands-on practical course. It will teach the student the processes involved to properly sketch and model 3D parts for machining, along with editing supplied 3rd party 3D. We then look at CNC basics such as creating tools, tool libraries, machine parameters and setting up. We will create some CNC programs using several different tool paths with each course being aimed at either 3 axis milling or general turning with C axis. The toolpaths are then exported to setup sheets and machine code.

This is the same basic process that gets repeated for the design and manufacture of any part and is a critical step in learning and understanding the process.

### Who should attend / prerequisites

This course is run on demand for individual companies only or on a 1 to 1 basis for individuals. It is aimed at new users of Fusion 360 who wish to start drawing and programming as soon as possible. Ideally you should be a machinist or programmer migrating from another system. It is essential that you have a basic understanding of using CNC machine tools and be a confident computer user. Note: we do not cover multi axis machining advanced/complex machining strategies.

### Courseware / Certificate / Instructor

Included in the price of your course will be:-

- An Autodesk Official Training Manual with practical exercises and supporting Fusion 360 files/examples.
- An e-certificate in pdf format direct from Autodesk confirming successful completion of an Accredited Fusion 360 Course.
- The instructor is an Gold Standard Autodesk Certified Instructor (ACI).

### Location & Facilities

Our training facility in Colchester, Essex, is an Autodesk Authorised Training Centre. We have all the latest Fusion 360 software and can supply training licenses if you do not have your own license. We limit the number of attendees to a maximum of six people to ensure you have quality time with the instructor. We can provide one to one or group training at your premise anywhere in the UK.

### Dates, Pricing & Discounts

This course is run on demand and the price will be depend on the number of attendees and location. Please contact us for a quotation.

### Summary

Level	Beginners
Course Type	On Demand
Duration	3 Days
Time	9:15am - 4:30pm
Cost	P.O.A.
Frequency	On Demand
Dates	<a href="#">Click Here</a>
Support	<ul style="list-style-type: none"><li>• 12 months Phone</li><li>• Lifetime via e-mail</li></ul>
Class Size	6 people maximum
Software	Fusion 360 Training Licences provided or you can use your own
Certification	Autodesk Authorised e-certificate
Courseware	Autodesk Training Guide included
Location	<ul style="list-style-type: none"><li>• Colchester, Essex; or,</li><li>• On site (at extra cost)</li></ul>
Prerequisites	See main text

For further information call us on

## 0333 772 2025

Or e-mail [training@cad-bureau.co.uk](mailto:training@cad-bureau.co.uk)



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Topics	Sub-Topics
<b>Day One — CAD</b>	
Lesson 1 — Interface Options	User Interface, Workspaces, Fusion 360 on the web,
Lesson 2 — Sketch Basics	Create and Edit Sketches, Sketch Parameters, Sketch Visibility
Lesson 3 — 3D Operations	Extruding, Revolve, Press/Pull, Surface Creation
Lesson 4 — Editing Fusion & 3rd Party Files	Modification tools, Direct Editing Tools, Draft, Shell
Lesson 5 — Bodies vs Components	Body & Component Creation, Understanding the Differences
Lesson 6 — 2D Inspection Drawings	Creating a 2D drawing, symbols and notes, Assembly Drawings, Custom Drawing Borders

<b>Day Two - Fusion 360 CAM Basics * (All milling operations can be substituted for turning Operations)</b>	
Lesson 7 — CNC Basics	Stock in Fusion 360, Workholding, Work/Tool Coordinate systems on Lathes & Mills
Lesson 8 — Tooling	Creating a Custom Tool, Copy/Edit Existing Tools, Using Fusion 360 Tool Libraries, Create a Library
Lesson 9 — Machine Configuration	Create and Modify a CNC Machine,
Lesson 10 — Create a Basic Program	CAM set up for waterjet as it has just 1 tool use profiles only, Create/Modify a program and Simulate
Lesson 11* — 2.5 Axis Milling	CNC Mill CAM Set Up, Creating Facing Toolpaths / External Contours.
Lesson 12 — Editing Toolpaths	Correcting Simulation Errors by Editing Toolpaths and Machine Set Ups

<b>Day Three—Fusion 360 Fundamental Machining Operations</b>	
Lesson 13 — Open and Closed Pockets	Closed & Open Pocket Roughing, Adaptive Clearing, Finishing Pockets Using Rest Machining
Lesson 17— Drilling and Tapping Operations	Spot Drilling, Peck Drilling Toolpaths
Lesson 18 — Set Up Sheets & G Code Posts	Create & Customise Set Up Sheets, Post Processing G code, Post Options for specific Machines
Lesson 19 — Secondary Operations	Chamfer / Bevel Edges, Face Underside
Lesson 20 — Basic Probe Setup	(Time Permitting). How to use probing to set up a datum and coordinate system

**Note:** The instructor may add or remove topics depending upon the ability of the students attending.

The topics above are from the Official Autodesk Training Guides that may change at the discretion of Autodesk of which we have no control.



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## Contact Us

For more information about our products and services:



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