

# Fusion 360 CAM Beginner Courses

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## Introduction to Creating Toolpaths for a CNC Lathe 2-3 Days

 **AUTODESK**  
Authorised Training Centre

 **AUTODESK**  
Learning Partner

### Course Overview

Our Fusion 360 "Introduction to Creating Toolpaths for a CNC Lathe" course is a 2-3 day hands-on practical course. It will teach the student the processes involved to create a CNC program for Lathes. The course covers CNC basics such as creating tools, tool libraries, machine parameters and setting up. We will create some CNC programs using several different tool paths and turning operations also touching upon C axis with live tooling. The toolpaths are then exported to setup sheets and machine code.

The turning content overleaf is designed to last three days, however this can be accomplished in two days for those that are already familiar with Fusion 360 or are fast computer learners. We can split the course so that one day is spent on CAD basics and design changes, with days 2-3 spent on CAM.

### 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 and 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	2-3 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 — Creating a CAM Setup for CNC Turning</b>	
Lesson 1 — CNC Lathe Coordinate Systems	Lathes vs Fusion 3620 Coordinates, Creating a CAM Turning setup
Lesson 2 — Setting up stock for a CNC Lathe	Modify default stock parameters, Creating CAM Output Parameters
Lesson 3 — Stock Visualisation Settings	Stock simulation options and visibility
Lesson 4 — Lathe tools in Fusion 360	Understanding Lathe Tools and Tool libraries in Fusion 360
Lesson 5 — Creating Lathe Tools	Tool Parameters, Copy and edit existing tools, tools for different materials
Lesson 6 — Cloud Tool Libraries	Sharing Tool Libraries on the Cloud
<b>Day Two - Basic Lathe Toolpath Operations</b>	
Lesson 7 — External Roughing	Creation of a basic external roughing toolpath
Lesson 8 — External Finishing	Modify roughing operations/parameters, facing toolpaths, rest machining options for finishing
Lesson 9 — Internal Profiles	Create an internal turning profile, fixing warnings, modify toolpath orientations
Lesson 10 — Radial Grooves	Create, edit radial groove operations and identify different options
Lesson 11 — Profile Leads/Transitions	Modify toolpath approaches, lead in/outs safe distances and retracts
Lesson 12 — Single Groove Toolpath	Create, edit and simulate single groove toolpaths, exploring options
Lesson 13 — Multiple External Grooves	Multiple Groove Roughing command options and create a custom groove tool
Lesson 14—Internal Grooving	Create an internal groove toolpath, modify parameters to fix errors
<b>Day Three—Additional Lathe Operations and Output</b>	
Lesson 15 — Reuse operations	Duplicate roughing toolpaths for finishing, derived vs duplicate toolpaths, organising copies
Lesson 17— Addressing duplicate conflicts	Modify roughing and finishing operations to errors. Advanced Simulations
Lesson 18 — Parting and secondary spindles	Finish operations including parting off with or without a secondary spindle.
Lesson 19 — Milling with C Axis	Creating pockets and drilling using C Axis live tooling
Lesson 20 — Set Up Sheets & G Code Posts	Create & Customise Set Up Sheets, Post Processing G code, Specific Post Options

**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

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