

## Exam Guide

### Autodesk Certification in CAM 2.5 Axis Milling for Machinists with Fusion 360 – Associate

The purpose of this guide is to prepare you for the Autodesk Certification in CAM 2.5 Axis Milling for Machinists with Fusion 360 exam. Please review this document to understand the requirements needed to prepare for this exam. It's also important to understand that **you will not have access to the software during the examination process**, all questions are selective response and they can be answered without the software.

#### Pre-requisites

Autodesk Certification in CAM 2.5 Axis Milling for Machinists with Fusion 360 is an associate-level certification intended for students and industry professionals who possess foundational knowledge and skills in computer aided manufacturing (CAM) for 2.5 axis mill using Autodesk Fusion 360 and are ready to enter the job market. This Autodesk certification is industry-recognized and suitable for users who have mastered CAM skills using Autodesk Fusion 360. This exam is most suited to those who have developed these CAM skills in an academic program or professional manufacturing environment over one to two years.

Candidates who obtain this certification demonstrate CAM skills for 2.5 axis mill and are prepared for entry level CNC programmer machining jobs in a competitive professional environment. This exam covers common skills that can be applied across a wide range of industries including aeronautics, aerospace, defense, automotive, general manufacturing, and medical fields.

We've summarized the core Fusion 360 skills below so you can familiarize yourself with them before taking the exam. We recommend that you are proficient in these areas, in the knowledge and abilities outlined below prior to taking this exam.

It's expected that all candidates understand how to:

- Navigate the user interface
- Identify areas of the browser
- Transition through various environments
- Know the available file types
- Display a part or assembly
- Create fully constrained sketches
- Use Parameters in a sketch
- Extrude, hole, loft, and patch features
- Identify various planes and axes
- Understand detailed drawing intent
- Identify GD&T Symbols and their meanings
- Identify work holding devices for CNC Milling
- Create a distributed design
- Fully constrain assembly parts
- Use Direct Modeling
- Create a CAM setup for CNC Milling
- Create and manage a tool library

- Create 2.5axis toolpaths for roughing and finishing
- Create drilling and tapping operations
- Simulate toolpaths
- Create a setup sheet
- Export NC code for a single setup

### Resources for the exam

In order to prepare for this exam, we recommend you familiarize yourself with the following content:

- [Introduction to CAD, CAM, and Practical CNC Machining](#)
- [3-Axis Machining with Fusion 360](#)
- [Creating Toolpaths for a CNC Lathe](#)
- [Multi-Axis CNC Toolpaths](#)

### Beta Exam information

**Total Time Required for exam:** 90 minutes

#### Question types in the exam:

- **Multiple choice** – The purpose of a multiple-choice item is to measure a candidate’s ability with regards to a specific content topic. A multiple-choice item has a stem which asks a question and multiple possible answers.
- **Drag and drop** – This item measures a candidate’s object association and placement skills with a Drag-and-Drop questions. Test takers select and reposition answer options within a list or graphics.
- **Active screen** – This items measure’s a candidate’s familiarity with the software’s UI by using interactive images of the software.
- **Hot Area** – This item measures the ability to answer a question by clicking on “hot” areas of an exhibit. Hot Area items are essentially multiple-choice items with graphical answer choices.
- **Graphic Interpretation** – This item measures a candidate’s ability to read a graphic and interpret the information successfully.