

## Edgecam Workflow

This foundational Edgecam training course explains the fundamentals of toolpath creation for CNC machines using Edgecam's revolutionary Workflow software. By learning through hands-on exercises guided by an experienced instructor, students will quickly gain the knowledge needed to begin creating basic milling and turning toolpath. The course provides new or novice Edgecam users with the software knowledge needed for single-part machining applications. The course applies to both prismatic milling and 2-axis turning, and also introduces toolpath creation for 4th & 5th axis (mill) and C-axis (lathe) positioning.

## Objectives

After completing the course, students should be able to:

- Quickly prepare CAD models for toolpath creation, adding stock, fixturing, and even the machine tool (post processor) to complete the virtual setup.
- Build toolpath that leverages CAD model intelligence by using Edgecam's Toolpath Accelerators.
- Use simulation to visualize the machining process, making toolpath adjustments as needed, and creating CNC code that is ready for machining.

## Duration

2 days

## Typical Schedule

The class runs from 9:00 AM to 4:00 PM each day, with an hour break from lunch. Please note that lunch is not included, in order to reduce cost to our customers.

## Prerequisites

- No experience with Edgecam is necessary. This is an introductory class.
- Knowledge of basic CNC machining.
- Proficient with Microsoft Windows. Unless otherwise specified, workstations currently run on Windows 7 operating system.

## Course Description

This 2-day training course is designed for the new or novice Edgecam user. The course provides students with an understanding of how to create toolpath for parts requiring prismatic milling and turning using Edgecam's revolutionary Workflow software. It also includes an introduction to rotary axis indexing, suitable for both 4/5-axis milling and C/Y-axis turning. The class also introduces students to the ToolStore, providing the basic knowledge required to begin adding user-specific cutting tools, stock, fixtures and setup information to the database. Students will learn how to create toolpath using solid models. Please note that this class is focused on toolpath creation (CAM), with most of the classroom training spent on creating toolpath using solid models, not drawing part geometry (CAD). Importing DXF, DWG & IGES and sketching wire-frame geometry are also covered, but the focus is on machining solids. Students will have the opportunity to create toolpath for their own prismatic parts. This is a great opportunity to get started toolpath for that first part project, so we encourage students to bring their own solid CAD models for use in the lab projects.

## Topics Covered

### Edgecam Workflow Fundamentals

- User Interface
- Software Preferences
- Part Orientation for Milling (both VMC and HMC)
- Part Orientation for Turning (both horizontal and VTL)
- Stock
- Workholding Fixtures
- Importing DXF / DWG / IGES files
- Sketching Wireframe Geometry

### Working with Solid CAD Models

- Opening solid models
- Feature Recognition
- Creating Features Manually
- Leveraging Solid Model Intelligence
- Knowledge Based Machining
- Handling Design Changes
- CAD-to-Toolpath Associativity

### 3+2 Prismatic Milling

- Facemilling
- Roughing
- Finish Milling
- Hole Drilling
- 4<sup>th</sup> and 5<sup>th</sup> axis Indexing (basic introduction)

### 2CY Turning

- Facing & Turning
- Grooving
- Threading
- Fixed Hole Drilling
- Part Off
- C & Y Axis Drilling (basic introduction)

### Preparing For Machining

- Toolpath Simulation
- Optimizing Machining Instructions

- Creating CNC Code
- Capturing Edgecam Information with Setup Reports

- Jobs
- Live Job Reports
- Stock
- Fixtures

#### ToolStore Database Overview

- Tooling

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