

## Course Details:

**Duration:** 3 days

**Prerequisite:** Inventor Introduction or equivalent experience; CNC machining experience

**Courseware:** n/a

**Achievement:** Certificate

**Time:** 8:30 a.m. – 4:30 p.m.

## General Information:

**Locations:** All courses are offered online, on-site, or in-person at SolidCAD training facilities across Canada, including:

Burnaby, BC  
Calgary, AB  
Edmonton, AB  
Regina, SK  
Winnipeg, MB  
Richmond Hill, ON  
Ottawa, ON  
Montreal, QC  
Quebec City, QC  
Hanwell, NB  
Halifax, NS

## Pricing, Registration &

**Scheduling:** Please contact our training coordinator at 1-877-438-2231 x227 or via email at [training@solidcad.ca](mailto:training@solidcad.ca)

**Complete course listing:**

[www.solidcad.ca/training](http://www.solidcad.ca/training)

## Course Description:

This training course teaches CNC machine-tool (*i.e.*, mill, lathe, mill-turn, sheet-material cutter) programming through Inventor CAM add-in module for the Inventor 3D parametric CAD environment.

It is expected that attendees have experience in basic functions of Inventor (creation of simple parts, creation of simple assemblies with constraints, creation of reference geometry). While students with little or no CAM experience are welcome, it is expected that they have experience or good understanding of principles of machining (cutting tool geometry, cutting speed, feed, width of cut, depth of cut, roughing vs finishing).

Note that HSM technology is available for Inventor CAM, SolidWorks (HSM Works), and Fusion 360 CAM. Because its implementation is similar across all platforms, this training course could be adequate for users of SolidWorks or Fusion 360 as well as users of Inventor.

Upon completion of this course, users will have the ability to skillfully create efficient machine tool paths and corresponding G-code instruction sets.

## Learning Objectives:

- Overview of the Inventor CAM workflow and interface
- 3-axis milling:
  - setup;
  - 2.5D milling operations;
  - drilling operations;
  - 3D milling operations;
  - intelligent roughing.
- 4-and 5-axis milling:
  - 3+1/3+2 pre-positioning for 2.5D and 3D operations;
  - simultaneous 5-axis operations.
- 2-axis turning:
  - setup;
  - standard turning operations
- Combining turning and milling operations for mill-turns
- Sheet-material cutter operations; overview of Inventor Nesting
- Program clean-up
- Stock-removal simulation
- Insertion of “Manual NC” operations
- Posting and G-code editing
- Productivity topics