AI for AutoCAD Toolsets

SOLIDCAD | SYMETRI
A SYMETRI COMPANY
PART OF ADDNODE GROUP

Course Details:

Duration: 1 day

Prerequisite: AutoCAD Introduction with a basic understanding of 2D drafting and design.

Courseware: Included

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

Complete course listing: www.solidcad.ca/training

AUTODESK
Authorized Training Center

DESCRIPTION

This one-day course explores how Artificial Intelligence (AI) can extend the capabilities of AutoCAD Toolsets through practical, AI-assisted applications for CAD/BIM management, design, engineering, and digital fabrication. Participants will discover how AI tools and lightweight browser-based applications can automate repetitive tasks, improve quality control, transform design concepts into CAD geometry, and streamline existing workflows.

The course introduces 10 innovative applications developed with AI-assisted programming tools, including ChatGPT, Claude, and Gemini. Topics range from CAD/BIM template management, drawing standards verification, IFC model diagnostics, topography generation to parametric design, mechanical linkage simulation, and AI-assisted flute design. Participants will explore how these applications exchange data with AutoCAD through formats such as DWG, DXF, CSV, and AutoLISP scripts.

Through live demonstrations and practical examples, participants will learn how to identify opportunities for AI-assisted automation, evaluate potential solutions, and turn ideas into useful CAD tools. The course emphasizes practical applications, human expertise, and the integration of AI into existing Design and Makes workflows.

LEARNING OBJECTIVES

- Introduction to AI for AutoCAD Toolsets
- AI-assisted application development and CAD workflow automation
- Automated drawing comparison and CAD standards verification
- IFC model diagnostics and OpenBIM data validation
- Topography generation from survey points and XYZ data
- Parametric tile patterns and digital fabrication
- AI-assisted floor plan interpretation and piping layout generation
- Interactive mathematical geometry and visual design for AutoCAD
- Parametric 3D modeling and engineering configuration
- Mechanical linkage simulation and AutoLISP generation
- Data exchange, workflow integration, and practical applications of AI in design and make

SUPPLEMENTAL LEARNING