

Course Details:

Duration: 1-3 days

Prerequisite: Intermediate ability in the authoring tool being used for the session (Revit, AutoCAD, or Navisworks). No programming experience is required.

Courseware: Handout included

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 your account representative or our training coordinator at 1-877-438-2231 x227 or via email at training@solidcad.ca

Complete course listing:

www.solidcad.ca/training

DESCRIPTION

This course will teach BIM professionals how to improve their existing Autodesk authoring software with an AI assistant using Model Context Protocol (MCP). Attendees will learn the concept of MCP servers, and how they are used to link an AI assistant to authoring tools like Revit, AutoCAD, and Navisworks to create, edit and retrieve model data using natural language prompts.

At the end of this course, the participants will be able to deploy an MCP server, establish connection to the AI assistant, and leverage the prompt-based workflow in creating, editing, and validating models. They will then be introduced to the concept of extending the MCP server using proprietary tools that you can map to your firm's add-ins and API standards.

Depending on the disciplines and unique requirements of your firm and projects, SolidCAD will facilitate a technical discovery session with one of our Technical Consultants to develop a customized training program for you.

POTENTIAL TOPICS

- Understanding the Model Context Protocol (MCP)
 - What MCP is and the problem it solves for AECO/BIM workflows
 - MCP architecture – hosts, clients, servers
 - Where AI assistance fits responsibly within a BIM process
- Deploying and configuring an MCP server
 - Preparing the environment and installing a server for your tool
 - Connecting the server to an AI client/host
 - Verifying the connection and basic troubleshooting
- Using AI prompts to create and modify model data
 - Writing clear, effective prompts
 - Generating and editing model elements
 - Automating repetitive or batch modeling tasks
- Using AI prompts to extract and analyze data
 - Pulling parameters, schedules, and quantities from a model
 - Model auditing and QA/QC, including health-check style reporting
 - Exporting results for documentation or downstream use
- Extending the server with custom tools
 - Mapping API functionality to new MCP tools
 - Best practices for designing, naming, and testing tools
- Governance and best practices
 - Data privacy and security in AI-assisted workflows