Forma Fundamentals

SOLIDCAD
A SYMETRI COMPANY

General Information:

Duration: 1 day

Achievement: Certificate

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

Burnaby, BC
Calgary, AB
Edmonton, AB
Winnipeg, MB
Richmond Hill, ON
Montreal, QC
Quebec City, QC
Dartmouth, 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

AUTODESK
Learning Partner

Course Description:

Feasibility and Conceptual Design using Forma offers fast iterations as a cloud-based solution for early-stage architecture and planning workflows. It also provides macro-scale insights into building performance. This course provides a comprehensive overview of Forma and is intended for designers and planners who wish to explore Forma for proposals and other related work seamlessly within the Autodesk product ecosystem. Work as a team to make compelling data driven designs and move forward with those designs in an integrated BIM workflow. As these topics will vary by discipline and based on the unique needs of your projects, SolidCAD will schedule a technical discovery meeting with one of our Technical Consultants to help customize a training program based on your needs.

Learning Objectives and Topics:

Getting Started

- Vision for unified BIM workflows using Forma
- Licensing and Hub creation
- Projects and sharing
- Forma board for project conception
- Site Design Interface and navigation

Workflow 1: Setting Up a Geolocated Project

- Ordering data across projects and hub, accessing library
- Importing terrain and building data
- Making sites, zones and constraints, Zoneomics 3D Envelope add-in
- Coordinates-Forma and Revit
- Terrain types
- Adjusting reference buildings
- Importing site boundary and zoning dxf
- Design alternatives and option management
- Exporting to other platforms (Revit, Rhino, SketchUp)

Workflow 2: Authoring Tools and Early Concepts

- Editing terrain and Buildings
  - Terraforming terrain and sloped edges
  - Add units, floorplates. Copy and adjust between levels
  - Volume, generic shapes and solid transform tools
  - Line, Basic, 3D Sketch, House Buildings
  - Explore: AI building design iteration generation
  - Understanding area metrics, detailed area schedules
  - Setting up functions and custom categories
  - Custom floor plan templates

- Parking
    - Stacked. Including below grade
    - Surface, using Testfit
    - Parking Demand calculator
- Landscaping
    - Terrain pads
    - Trees, Thicket add-in
    - roads, rail-not too important
    - Calculating green space, Naviate Outdoor Area add-in
    - Adding traffic data to roads and rails

Workflow 3: Analyses and Performance Comparison

- Analysis
    - Area Metrics: GFA, GCA, Unit size and mix, Parking ratio
    - Solar: Sun Hours Analysis, Daylight potential analysis, Shadow Study, Solar Energy Analysis
    - Wind and Microclimate
    - Noise Analysis
    - Embodied Carbon Analysis
- Comparison of proposals
- Schedules, exporting csv

Workflow 4: Collaboration

- Views, Camera Options, Measuring, Section Box, Layers, Display Settings
- Techniques to compose presentations
- Camera angles
- Labels
- Compose and print presentations, comparisons
- Access controls: forma site design, board, hub, compare

Extensions and Integrations

- Export and import settings and workflow
- Forma to Revit Workflow and settings
    - Units from Forma to Revit
    - Best practices sending Revit back to Forma
- Forma and Dynamo Workflow
    - Automated building footprints and volumes based on site boundaries
    - Automated geometries
- Forma to Veras
- ArcGIS -Forma Workflow
- Brief overview of other extensions - View Study, Plug-In for Rhinoceros, Envelope Analysis, inCituAR®, Finch, One Click LCA Generative Design

Best Practices and Next Steps

- Project size, workflow limitations and expectations management
- Settings for custom parameters
- Adding custom integrations
- Navigation tips, Strategies for fast iteration, and user interface features