

GenerativeComponents V8i Essentials

Course Type: Classroom – Hands on

Products Covered: MicroStation GenerativeComponents

Target Audience: Administrator; Analyst; Application Developer; Architect; Architectural Designer; Architectural Engineer; Civil Engineer; Consultant; Designer; Design Engineer; Hydraulics Engineer; Instrumentation Engineer; Manager; Mechanical Engineer; Mechanical Engineering Designer; Naval Engineer; Pipe Stress Engineer; Piping Designer; Plant Engineer; Process Engineer; Product Designer; Project Manager; Structural Designer; Structural Engineer

Course Description:

In this course users will learn that GenerativeComponents is an advanced parametric and associative design system which gives designers and engineer's new ways to efficiently explore alternative forms. Once the underlying logic and design relationships have been defined, the designer can create new options without manually drawing (or re-drawing) the detail design model for each possible scenario.

This course will show how GenerativeComponents allows designers to work completely graphically, or to combine this with scripting where appropriate. The integration of algorithmic design with conventional interaction, based on direct manipulation, allows GenerativeComponents to fully support alternative approaches to design that span the intellectual and creative spectrum. The Essentials course will take students through the principles of design with GenerativeComponents. Students will become familiar with installation, general interface principles, basic geometric generation, basic scripting and importing/exporting data, with an emphasis on many design problems.

Upon completion of the course users will be able to:

Learning Objectives:

- Install and set up GenerativeComponents
 - Use GenerativeComponents tools to create geometry
 - Apply principles of Transactional and Programmatic design
 - Import and Export with Excel and databases
 - Use principles of scripting to design
 - Integrate GenerativeComponents design with their CAD workflow
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Course Topics:

- Introduction to GC
- Basic Interface Review
- Basic Geometry Creation

- Series and Collections
- Law Curves
- Import/Export
- Working with Solids
- BIM Objects
- Design Problems
- Scripting

**Course
Details:**

Course Prerequisites: Ability to use 3D Applications

Learning Units: 24

Display LUs in: hours