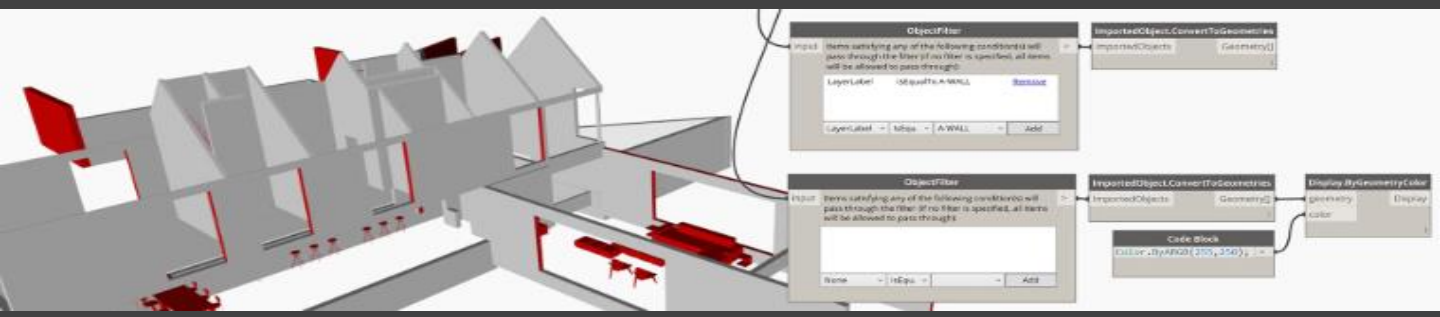
AUTODESK DYNAMO TRAINING



CSG Training Centre | Authorized Autodesk Training Centre | Certiport Authorized Testing Centre

FOR WHOM
Construction and Build Professionals, Practice Leaders, Architects, Engineers, Students, Academics in related fields, CAD/BIM Managers, Project Managers, Designers, Digital Modelers

PRE-REQUISITION
Working knowledge of Windows Operating Systems.
Revit Architecture Fundamentals.
Revit Architecture Advanced (recommended).

DURATION | VERSION
2 DAYS, Version 2021

COURSE OBJECTIVES
Autodesk® Dynamo is a standalone programming environment that lets designers create visual logic to explore parametric conceptual designs and automate tasks. Extend your designs into interoperable workflows for documentation, fabrication, coordination, simulation, and analysis.

It also allows Revit users to build custom tools to solve their modelling challenges in smarter, faster ways. It can generate algorithms to analyse data, read and edit data from outside sources, create geometry in Revit files –all using Dynamo's node-based visual language. This training helps participants to understand the basic programming concepts behind Dynamo and the extension through the lends of architectural modelling. It shows participants how to construct data-driven geometry, analyse relationships between Revit elements, and incorporate data into the BIM environment from multiple non-Revit sources and formats, including Excel and digital images. It can also reduce modelling and documentation time in Revit placing families and components, adjusting parameter values and more...

We also provide real live project situations solving tips by Trainers who possesses actual site experiences and also live project datasets for you to work-on.

COURSE TOPICS
Getting Started with Dynamo
1. Downloading Dynamo
2. Installation
3. Opening Dynamo

Understanding the Dynamo UI

COURSE TOPICS
Connecting Nodes makes Data Flow
1. Node Structure
2. Using Nodes
3. Node States
4. Organizing a Definition

Using Visual Programming
1. Common Input Nodes
2. Basic Concept of Workflow

Additional Dynamo Tools
1. Code Blocks
2. Managing Data
3. Geometric Manipulation and Analysis
4. Revit to Dynamo to Revit
5. Category, Type, and Element Selections
6. Interoperability
7. Package Manager
8. Node to Code

Useful Dynamo Node Configuration
1. Get & Set Parameters
2. Filter Element Selection using Filter By Bool Mask
3. Isolated Pick Element Selection with Color Overlay
4. Obtaining/Verifying Element Parameters

Custom Nodes
1. Creating Custom Node
2. Converting Existing Nodes to Custom Node
3. Saving & Reusing Custom Nodes

Dynamo Player

Project Application with Dynamo – Revit
1. Batch Input of Project Information
2. Creation of Project/Shared Parameter through Dynamo
3. Automated Grid & Level Creation
4. Pile Family Placement using Existing Excel Data File
5. Rotating Column Family on its individual Axis
6. Wall and Floor Automated Revit Modelling from Existing CAD Drawing Files
7. Adding Adaptive Components in Revit – Dynamo Driven
8. View to Sheet Generation from Bounding Box
9. Automation of Room Data/Layout Sheets
10. Automation on Asset Tagging for As-Built Requirements

Additional Resources

T: + 65 6588 2378 | E: training@csglobal-group.com | W: www.csglobal-group.com | FB: www.facebook.com/CSGGroup