Robot Structural Analysis Professional
ESSENTIALS

Course Length: 16 Hours

Overview:
This course is recommended for structural engineering design students and professionals.

Learning Objectives:
- Model, analyze, and design structures using code standards.
- Apply different types of loading.

Prerequisites:
It is recommended that the student has a working knowledge in Structural Engineering design and are familiar with the latest versions of Microsoft Windows operating systems.

Acquisition:
Trainees will get a training manual and an industry recognized Certificate of Completion.

Notes:
The course length is a guideline. Course topics and duration may be modified by the instructor based upon the knowledge and skill level of the students.

Course Description:
This course will display the capabilities of the tools and workflows used in Autodesk Robot Structural Analysis Professional. This includes essentials in frame analysis and code checking of structures based on AISC steel design, ACI concrete design, wind analysis, and seismic analysis.

Topics Covered:

Introduction
- Robot in BIM
- Robot screen layout
- Methods of working with Robot interface

Preferences
- Units
- Design codes
- Material libraries
- Seismic loads

Analysis Setting
- 2D Frames
- 3D Frames

Modeling Structure Elements
- Creating Grid
- Creating Levels
- Model Columns and Beams
- Model the Floor and Roof Deck

Boundary Conditions and Loads
- Define Supports
- Add Load Cases

Load Application and Analysis
- Dead and Live Loads
- Wind Load Analysis
- Seismic Loading Analysis
- Define Load Combinations

Steel Design
- AISC Code Requirements

Concrete Design
- ACI Code Requirements
- Reinforcement

Results of Analysis and Code Checking Design
- Explore Results of Analysis
- Define Design Groups
- Perform Verification and Optimization of Design Groups

Integration with Revit Structure
- Export Revit model to Robot
- Structure Analysis in Robot
- Modification of the Structure in Robot
- Update Revit Model from Robot

For inquiries, please call or email:

8899-7853 loc 2158/2154
09399734872
inquiry@mscorp.com.ph

maximum SOLUTIONS CORPORATION

AUTODESK Solutions Provider Gold Partner Authorized Training Center

Maximum Engineering Solutions Hub