



ROBOT STRUCTURAL ANALYSIS PROFESSIONAL

Robot™ Structural Analysis Professional structural software helps engineers more quickly perform simulation, analysis, and code-based design for any type of structure.

Autodesk® Robot™ Structural Analysis Professional software:

- Provides a smoother workflow and interoperability with the Autodesk structural engineering BIM solution.
- Utilizes state-of-the-art finite element auto-meshing capabilities.
- Comprehensive global analysis application with an open API, delivering more flexibility to analyze and design a broad range of structures.

Course Summary

Robot Structural Analysis

Course provides the basic skills for structural engineers and civil engineering students in Autodesk Robot Structural Analysis. In this course you will be introduced to Robot Structural Analysis basic tools and techniques and going through stages of modeling, applying loads and designing concrete elements.

Trainees will learn how to:

- Navigate through the user interface of Autodesk Robot Structural Analysis
- 2D & 3D frame analysis
- RC and steel member design
- Integrating with Revit Structure

Duration/Price:

3 days – 4.000.000vnd/person.

Who Should Attend?

This course is ideal for new users of Autodesk Robot Structural Analysis including:

- Civil engineering students who have a basic understanding of concrete structures.
- Professional structural engineers from the industry.

Requirements:

Knowledge of the basic principles of structural analysis used in structural engineering is required. An understanding of Revit is recommended but not required.

Detailed Course Outline

Topics	Sub Topics
Introduction	Introduction to Robot Structural Analysis
	Background of frame analysis
	Discussion of loading types Review of codes supported
Using Autodesk Simulation	Navigate the user interface
	Configuring material database
	Design code setup Analysis settings
Modeling in Robot Structural Analysis	Layout of grids and levels
	Modeling bar elements
	Modeling beam elements
	Modeling column elements
	Support and end conditions
	Importing model from other software Structure modifications
Load Application & Analysis	Load placement techniques
	Manual load combination
	Automatic load combination
Results & Reporting	Result viewing and searching
	Design optimization
	Report generation
	Verification of results
Lateral Load Definition	Wind simulation and load definition
	Seismic static analysis
	Seismic dynamic analysis Soil pressure loads
Concrete Design	ACI code requirements
	Members design and provided reinforcement