



AUTODESK/AUTOCAD TRAINING

Autodesk Revit Structural Essentials Course

Master structural design and BIM workflows using Autodesk Revit. Learn to create accurate structural models efficiently.

DURATION

Flexible

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

The Autodesk Revit Structural Essentials Course is an intensive, intermediate-level program designed for professionals seeking to master the robust structural capabilities of Autodesk Revit. This course dives deep into Building Information Modeling (BIM) principles, focusing specifically on how Revit empowers structural engineers and designers to create intelligent, data-rich structural models. Participants will learn to model various structural elements, generate comprehensive documentation, and collaborate effectively within a BIM environment.

Through hands-on exercises and practical projects, you will gain proficiency in creating precise structural grids, columns, beams, walls, floors, and foundations. The curriculum also covers advanced topics like rebar detailing, structural analysis model preparation, and extracting critical project information for scheduling and quantity take-offs. By the end of this course, you will be equipped to develop complete structural models, produce accurate construction drawings, and enhance your productivity and precision in structural design workflows. This proficiency is crucial for modern infrastructure and building projects, where BIM is increasingly becoming the industry standard.

Mastering Revit Structural will not only streamline your design process but also significantly reduce design errors and improve communication across project teams. You will learn to leverage Revit's parametric modeling capabilities to make quick design iterations and ensure consistency across all project deliverables, positioning you as a valuable asset in any engineering or construction firm seeking to implement cutting-edge BIM practices.

Level	Intermediate
Vendor	Autodesk/AutoCAD

COURSE CURRICULUM

01 Module 1: Introduction to Revit Structural

- Understanding BIM and Revit's Role in Structural Design
- Revit User Interface and Navigation for Structural Engineers
- Setting Up a Structural Project: Templates, Grids, and Levels
- Introduction to Core Structural Elements: Columns and Beams
- Working with Views: Plans, Sections, and Elevations

02 Module 2: Modeling Fundamental Structural Elements

- Modeling Structural Walls and Foundations (Footings, Slabs on Grade)
- Creating Structural Floors and Slabs (Concrete and Composite)
- Adding Bracing and Trusses
- Modifying and Aligning Structural Elements
- Creating and Managing Load-Bearing Families

03 Module 3: Advanced Structural Components and Connections

- Modeling Stairs, Ramps, and Ramps with Structural Implications
- Placing Structural Connections (Basic Steel Connections)
- Creating Custom Structural Families and Components
- Introduction to Analytical Models for Structural Analysis
- Understanding Element Properties and Parameters

04 Module 4: Reinforcement and Detailing

- Placing Reinforcement in Concrete Elements (Rebar Sets and Layouts)

- Creating Rebar Schedules and Quantity Take-offs
- Generating Detailed Structural Sections and Callouts
- Dimensioning and Annotating Structural Drawings
- Creating Repeating Details for Standard Components

05 Module 5: Structural Documentation and Collaboration

- Generating Structural Sheets and Plotting
- Creating Schedules for Structural Components (e.g., Column, Beam Schedules)
- Linking and Importing CAD Files and Revit Models
- Introduction to Worksharing and Collaboration in Revit
- Exporting to Structural Analysis Software and IFC

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Structural BIM Modeler**
- > **Structural CAD Specialist**
- > **Junior Structural Engineer (with advanced drafting skills)**

FREQUENTLY ASKED QUESTIONS

Q: What prior knowledge or software experience is recommended before enrolling in the Autodesk Revit Structural Essentials Course?

This intermediate course assumes a foundational understanding of structural engineering principles and basic CAD software navigation. While no prior Revit experience is strictly mandatory, familiarity with architectural drawing conventions or other CAD platforms (like AutoCAD) will be beneficial. The course focuses specifically on structural applications within Revit, so a grasp of structural components and their functions is essential.

Q: How will this course enhance my ability to collaborate effectively in a Building Information Modeling (BIM) environment?

This course specifically teaches you how to leverage Revit's collaborative features for structural projects. You will learn best practices for worksharing, linking models from different disciplines (architectural, MEP), and preparing your structural models for clash detection. This hands-on experience will significantly improve your ability to communicate and coordinate with other team members, reducing errors and ensuring a smoother project delivery within a BIM framework.

Q: What types of structural elements and projects will I be able to confidently model and document after completing this course?

Upon completion of the Autodesk Revit Structural Essentials Course, you will be proficient in modeling and documenting a wide range of common structural elements including concrete and steel columns, beams, walls, floors, and foundations. You will also gain skills in rebar detailing, creating basic structural connections, and generating comprehensive schedules and construction documents for standard building structures. This prepares you to work on various commercial, residential, and industrial building projects with structural complexity.

ABOUT COMPUTER PRIDE



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With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

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Take the next step in your technology career.

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