

Revit Essentials *all disciplines: Architecture, Structures, MEP*

Training course outline

Revit is a Building Information Modelling (BIM) solution that caters for all aspects of building design.

Revit Essentials training provides a thorough grounding in Revit for beginners. On completion, you will be able to use Revit to take a project from conceptual through the stages of design, analysis, documentation and visualisation.



Course summary

Teaches newcomers to Revit the concepts behind BIM and provides a thorough grounding in key techniques in the main disciplines the application is used for: architectural design, structural design and MEP.

This course is ideal for anyone who wants to gain a good overall knowledge of the application, learning about the techniques used by the different roles involved in a construction project.

Duration

Five days.

Who should attend?

This course covers techniques used by:

- Architects and building designers who need to develop high quality, accurate architectural designs.
- Structural engineers, interested in the tools used to develop structural designs.
- Mechanical, electrical and/or plumbing engineers.

Prerequisites

No prior Revit, BIM or 3D modelling knowledge is required.

You should have a basic understanding of construction principles. If you don't have this knowledge, we can recommend a book to read ahead of your course.

Experience using a CAD application such as AutoCAD is beneficial, but not essential.

In-class or live online

You can attend in-person at our centres, or participate live online from your place of work or home.

To read about our approach to online training, see armada.co.uk/liveonline.

General information

Armada is a long-standing Autodesk authorised Training Centre (ATC), and our courses are accredited by Autodesk.

Courses are hosted by Autodesk Certified Instructors (ACIs) with vast experience of using the application professionally.

Whilst attending training at our centres, you'll have the use of a computer running licensed software to practice the techniques taught.

Refreshments and lunch are provided.

Course fees can be paid by card or bank transfer. We accept purchase orders from UK-registered companies and public sector organisations.

Course materials and certificate

You'll receive:

- A comprehensive training guide and practice files.
- An e-certificate confirming successful completion of an accredited *Revit Essentials* course.

After course support

Following training, you're entitled to 30 days' email support from your trainer.

Further information

See armada.co.uk/course/revitall.

Course syllabus

See over.

Follow-on courses

- [Advanced Revit for Architecture](#) (2 days).
- [Advanced Revit for Structures](#) (2 days).
- [Advanced Revit for MEP](#) (2 days).
- [Revit Families and Content Creation](#) (2 days).

Course syllabus

Day 1 – General Revit techniques

Topics	Sub-topics
BIM	Introduction to BIM
Revit basics	Exploring the user interface Working with Revit elements and families
Viewing the structural model	Working with views Controlling object visibility Working with elevation and section views Working with 3D views
Starting a new project	Setting up a project Setting up view templates Defining discipline settings Importing typical DWG details Linking a Revit model Coordinating linked projects Adding and modifying levels Creating and modifying grids

Days 2 and 3 – Techniques specific to Architecture and Structural Design

Topics	Sub-topics
Detailing and drafting	Creating callout views Working with text and tags Working with detail views Working with drafting views Working with CAD details
Annotations and schedules	Adding dimensions Working with text and tags Creating legends Working with schedules
Construction documentation	Working with sheets and title blocks Printing sheets Exporting content to CAD formats

Topics	Sub-topics
The basics of the Building Model - columns and walls	Adding and modifying walls Working with compound and vertically compound walls Using Editing commands Working with doors Adding and modifying windows
Frames	Adding floor framing Working with beams and beam systems Working with structural steel frames Working with structural concrete beams
Floors and roofs	Adding floors Creating roofs and adding structural framing
Foundations	Adding foundations
Stairs and ramps	Creating stairs Creating ramps
Loading more building components	Adding and modifying component families
Viewing the building model	Managing views Controlling object visibility Working with section and elevation views Creating and modifying 3D views
Dimensions and constraints	Working with dimensions Applying and removing constraints
Developing the building model	Creating and modifying floors Adding and modifying ceilings Adding and modifying roofs
Presentation & visualisation techniques	Working with graphics Enhancing views

Days 4 and 5 – Techniques specific to MEP

Topics	Sub-topics
Starting Revit MEP projects	Linking architectural projects Copying and monitoring elements Setting up and modifying levels
Understanding Revit MEP systems	About MEP systems System creation overview Connecting components
Spaces and zones	Creating spaces Creating zones and colour schemes
Energy analysis	Preparing a project for energy analysis Analysing the heating and cooling loads Exporting for secondary analysis
Piping systems	About piping systems Creating piping systems
HVAC systems	About HVAC systems Adding air terminals and mechanical equipment Adding ductwork Creating and modifying duct systems Automatic ductwork layouts
Electrical systems	About electrical systems Placing electrical components Creating electrical circuits Cable trays and conduit Electrical panel schedules
Annotating construction documents	Adding detail lines and symbols
Tags and schedules	Adding tags Creating schedules Modifying schedules