



Revit® Architecture 2008 Tutorial Series

What You Will Learn: 205 video lessons over 19 hours

Your instructor, Lay Christopher Fox, is an independent architectural drafter/illustrator, author, and educator. He is the author of *Introducing and Implementing Revit Building*, produced by Autodesk Press, and will update his book for the new release of Revit Architecture in 2007. He has produced Autodesk Official Training Courseware on Revit Architecture and Revit Structure. He is the Revit Technical Editor for AUGI WORLD Magazine, the bi-monthly newsletter of Autodesk User Group International.

Topics covered:

Getting Started with Revit Architecture

Course outline and explanation of the learning objectives.

Starting Revit Architecture.

Obtaining the drawings, project files and data sets used in the tutorials.

An overview of the Menu Bar and Shortcut Key.

How to use the Toolbars.

An overview of the Design Bar.

How to use the Type Selector Bar and Options Bar.

This lesson covers the Project Browser and Workspace.

How to use the Status Bar and View Control Bar.

This lesson covers Right-Clicking and Shortcut Menus.

Understanding Viewing Tools.

An overview of Revit File Types and Loading Families.

An overview of the User Interface.

How do I save a project?

Creating a new project, setting units and snaps.

Understanding Project Options.

How to use Drawing Aids.

Learning to use the Basics Tab of the Design Bar.

How to use the Modeling Tab of the Design Bar.

How do I create a Wall?

How to Modify Wall Properties.

This lesson covers default wall types.

How to modify a Wall Profile and add an Opening to a Wall.

How to create Curtain Wall types.

This lesson covers curtain wall grids, mullions and panels.

How to embed one wall type in another.

This lesson covers the horizontal structure of walls.

How to create walls with differing vertical structure.

Using stacked wall types.

How do I add Doors and Windows?

Basic Modeling I

Prerequisites:

None

Requirements:

DVD requires Windows XP or higher.
Internet Explorer 6.0+
Browser
Flash
DVD Drive
Pointing device
2 GB Drive Space

Online versions need only a high speed Internet connection, a browser and Adobe® Flash.

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This lesson covers Door and Window Properties.
How to load door families from libraries and create new door types from existing ones.

How do I create a New Level?
How to Copy and Move Objects.
This lesson covers Rotating and Arraying.
This lesson covers Mirroring and Resizing.
This lesson covers Aligning Objects, Splitting Walls and Lines and Offsetting Objects.
How to Trim and Extend Objects.
An overview of Grouping.
This lesson covers Match, Creating Similar Objects and Pinning Objects.
How to Create Grids.
How do I Add Columns?
This lesson covers Adding Structural Columns.
How do I Add Structural Walls?
This lessons covers Adding Structural Foundations.
How to Add Structural Beams.
How to Add Structural Braces.
An Overview of View and Creating Floor Plans.
What are the various locations of zoom and pan controls?
This lesson covers the View Menu.
Using the View Toolbar.
What are the types of Views?
Instance and type properties of views using the Element Properties dialog.

This lesson covers the Visibility/Graphics dialog.
The View Scale and Detail Level controls on the View Control Bar.
The Model Graphics Style display modes for views.
How to use Sun and Shadow controls for views.
How to use the Crop Region controls for views.
Understanding the controls for hiding and displaying elements in views.

This lesson covers the controls for the annotation crop region available to non-perspective model views.

This lesson covers Ceiling Plans.
This lesson covers Plan regions.
Understanding Elevation Views.
An overview of the properties of Framing Elevations.
Understanding Section Views.
This lesson covers Callout Views.
This lesson covers non-model views: Legends and Sheets.
Using Camera Views.
How to create and modify 3D Orthographic (parallel projection) views.

This lesson covers perspective and parallel projection views.
This lesson covers Schedules and Quantities.
Understanding Visibility Graphics.

Model Views

Develop a Project

Understanding Object Styles.

This lesson covers View Templates.

This lesson covers View Properties.

View Section Boxes for 3D views.

The Phase and Phase Filter properties of views.

How to Duplicate views, Duplicate with Detailing and Duplicate as Dependent.

How to use the Units and Snaps dialogs to alter project settings.

How to control display characteristics of object categories and lines.

How to set project information parameters for title block display and how to set project place for sun settings.

How to transfer system families and settings from one project file to another.

How to set views to display either True North or Project North

Understanding the basics of Project template files.

How to create and apply user defined category filters.

How to import and place image files.

How to import and place CAD files.

How do I link image, CAD and Revit files?

This lesson covers the Import Lineweights dialog.

How do I export views to CAD files?

This lesson covers the Export Layers dialog.

How to use imported CAD or image files as a basis for creating model objects.

How to use imported CAD or image files as a basis for creating 2D drafting or details.

How to convert imported CAD files to Revit objects.

How do I export views to image files?

How to control visibility of imported CAD and image files.

This lesson covers the Manage Links dialog.

Loading a Mass Family, Placing Massing Elements and Mass Visibility Controls.

Massing and Building Maker

Creating a Mass Solid Extrusion.

Creating a Mass Solid Blend.

Creating a Mass Solid Revolve and importing CAD Geometry.

This lesson covers Reference Planes and Reference Lines.

This lesson covers Work Planes, Creating a Mass Solid Revolve and Assigning Materials to Elements.

Creating a Mass Solid Sweep.

Creating Mass Void Extrusions and Mass Void Blends.

This lesson covers Mass Void Revolves and Mass Void Sweeps.

How to create Floors from Mass Elements.

How to create Walls from Mass Elements.

How to create Curtain Systems from Mass Elements.

How to create Roofs from Mass Elements.

This lesson covers Using SketchUp Models.

Basic Modeling II

Understanding Compound Structures.

This lesson covers Vertical Compound Walls.

Editing and Preventing Wall Joins.

How to place and manage walls with editing tools: Copy, Offset, Mirror, Trim/Extend, and Align.

Creating and Modifying Floors.

How to change the instance or type properties of a floor.

How do I create sloped floors?

How to edit a floor sketch to create an opening, and how to use the Opening tool on a floor.

Shape editing tools for slabs.

Creating and Modifying Ceilings.

How to place ceiling-hosted components.

This lesson covers Creating Roof by Footprint.

The use of the Slope Arrow when Creating Roofs.

This lesson covers Creating Roof by Extrusion.

This lesson covers Creating Fascias and Gutters.

How to create Soffits.

How to create Openings in Walls, Floors, Roofs and Ceilings.

This lesson covers Modifying Roofs and aligning Eaves.

How to Create Stairs.

Creating Stairs with Landings.

This lesson covers Creating Stairs by Sketching Boundaries and Riser Lines.

How to create Spiral Stairs.

How to create and modify Railings.

This lesson covers Railing Properties.

How to create Ramps.

This lesson covers Architectural columns.

How to create Curtain Walls.

How to create and modify Curtain Wall Grids and Mullions.

Creating Curtain Walls with Automatic Grids

This lesson covers Curtain Wall Properties.

How to create stepped walls and associated foundations.

Dimensions and Constraints

Understanding Temporary Dimensions.

Understanding Permanent Dimensions.

Creating and Modifying Dimension Styles.

The Equality constraint toggle of dimensions.

How to set units for dimensions.

How to align model objects, pin and unpin objects and how to use reference planes with dimensions.

Rooms and Areas

This lesson covers Room objects.

This lesson covers Room Tags.

Understanding Areas and Area Plans.

This lesson covers Color Fills.

This lesson covers Room Keys and Room Schedules.

Drafting and Detailing

This lesson covers Drafting and Detail Views.
Understanding Legends.
Understanding Tags.
Sketching and drafting techniques.
The use of CAD files in Detail views.
This lesson covers Detail Components.
This lesson covers Filled Regions.
This lesson covers Annotation Linework.
How to create repeating detail components for detail and drafting views.
How to create reference detail views.
How do I create text?
How to create different Text Styles.
How to set up sheet views.
The properties of view titles when placed on sheets.
This lesson covers titleblocks.
The use of labels and project parameters on titleblocks.
This lesson covers Print Setup.

Components and Families

How to find and load family files and use Type Catalogs.
How to edit families while in a project.
How to create in-place families.
The various types of Family files.
The basics of 3D modeling in families.
The basics of using Parameters in families.
The use of nested families.

Schedules

How do I create a schedule?
This lesson lists and describes the types of schedules.
This lesson covers component schedules.
How to create and use schedule keys and project parameters.
The appearance of schedules.
Exporting schedule information to external applications.

Presentation Views

3D orthographic views for presentations.
Creating cutaway model views.
How to apply shadows and silhouettes to model views.
How to create overrides for the appearance of components in model views.
The use of perspective views for presentations.
How to create animated sun/shadow studies.
What is the basic setup procedure for rendering perspective views?
Environment settings for rendering.
The basics of materials for rendering.
Capturing and exporting rendered images.
How do I create and play a walkthrough?
Editing walkthrough camera and path properties and how to export to avi.

Site Tools

How to create a Toposurface by placing points.

How to create a Toposurface by using an imported CAD file.

How to create a subregion in a Toposurface, split a Toposurface into separate parts, and merge surfaces.

This lesson covers how to create a graded region on a Toposurface.

How to add Property Lines and create a building pad in a Toposurface.

How to place parking, entourage and landscaping elements in a project.

Groups

How to place contour labels on a toposurface.

Creating groups of model and annotation elements.

This lesson covers editing and ungrouping groups.

How to save groups to external files and load external files as groups.