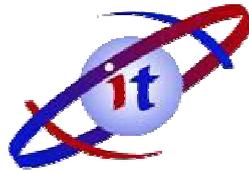


An-Najah National University

Korean-Palestinian IT Institute
of Excellence



جامعة النجاح الوطنية

المعهد الكوري الفلسطيني
المتميز لتكنولوجيا المعلومات

REVIT ARCHITECTURE

COURSE DESCRIPTION

Revit Architecture allows you as an engineer, architect, designer, or technician to design and document a virtual representation of your project. Revit Architecture is an integrated architectural design and documentation environment. You create a virtual building model of your design with intelligent building elements. These smart, parametric building elements automatically adjust and interact with the design environment, and at the same time you are creating views such as floor plans, sections, elevations, schedules, and so on.

This course covers the fundamentals of using the key features of Revit Architecture 2012, including many usable features. Moreover, this course offers numerous Revit tips and tricks, with ample expert recommended advice and techniques. The goal is that you will be able to identify and readily adapt these “best practices” to your daily Revit Architecture usage.

COURSE OBJECTIVES

After completing this course, you will be able to:

- Describe building information modeling, bidirectional associativity, and parametric relationships in Revit.
- Understand the user interface, parametric objects, and families, and start projects using templates.
- Create and modify levels and grids.
- Create a basic floor plan, add and modify walls and compound walls, use editing tools, and work with doors and windows.
- Work with component families.
- Duplicate and manage views, control object visibility in views, and create elevation, section, and 3D views.
- Learn how to use dimensions and constraints.
- Create floors and ceilings, add roofs and curtain walls, and work with stairs and railings in a building model.

- Learn how to create callout views and work with text and tags, detail views, and drafting views.
- Create schedules, rooms and room schedules, and legends and keynotes.
- Work with drawing sheets and title blocks, manage revisions, and present the building model using rendering, walkthroughs, and sun and shadow settings.

PREREQUISITES

This course is designed for new users of Revit Architecture. No previous CAD experience is necessary. It is recommended that you have architectural design, drafting, or engineering experience.

DETAIL OUTLINE

1. Introduction To Revit:

Introduction, Option Bar, Zooming Tools, User Interface.

2. Things You Must Do First:

Installation, Templates, Project Origin, Project Location, True And Project North, Reference Plans, Drawing Area, Levels.

3. Importing CAD Files:

Preparing CAD Files, Linking CAD Files.

4. Walls:

Ribbon, Draw Shapes, Option Bar, Types, Detail Level, Snaps, Properties Palette, Create Similar, Offset, Trim, Split, Align.

5. Columns:

Ribbon, Making And Loading New Types, Option Bar, Properties Palette, Thick And Thin Lines, Detail Level.

6. Windows, Doors, And Openings:

Ribbon, Making And Loading New Types, Properties Palette, Tagging, Dimensions For Review And Moving, Move And Copy.

7. Views:

3D View, Elevation, Sections, Camera, Duplicating Views, Windows, Views Onto Sheets, Active View, Scale, Crop Region, Viewport Titles.

8. Floor:

Sketch Mode, Edit Sketch or Boundary, Making And Editing Types.

9. Roof:

Sketch Mode, Edit Sketch, Option Bar, Attach Walls, Skylights.

10. Ceiling:

Ceiling Plan, Sketch Mode and Automatic, View Range, Lights, Array.

11. Casework And Equipment:

Load Family, Placing Families, Making And Editing Types, Rotate.

12. Building Stairs:

Ribbon, Sketch Mode, Properties Palette, Making And Editing Types.

13. Site:

Toposurface, Trees And Bushes.

14. Rooms:

Room Object, Room Object Properties, Room Tags.

15. Rendering:

Preparing The Scene, Rendering And Adjusting, Materials.

16. Graphics:

Visibility Graphics, Hiding And Revealing Elements, The Sunlenses.

17. Detailing:

Sections and Callouts, Text, Dimensioning, Hatching Filled Regions, Detail Components, Detail Lines, Drafting Views.

18. Printing And Exporting:

Printing, Export To CAD.