D&B Ξmerging Tech

Revit Crash Course
For Architectural Design

Instructor:
Name: TBD
Email: TBD
Session Times: TBD
Office Hours: TBD

Course Duration: 5 sessions (around 10 hours, but sessions may go longer)

Course Description:
This course equips participants to use Revit in professional practice according to international best practice. The course includes the following sections: Introduction, Modeling, Documentation, and Families. It is intended for students and professionals of all levels who would like to advance to a professional standard of using Revit.

The course is split into 4 sections and is designed to cover an overview of the advanced skills required to use Revit in a professional environment.

The overall course contains the following resources:

• Dataset files for use when following the sessions.
• Practice exercises with exercise files.
• Challenge assignments.
• Certificate of Completion.

Prerequisites:
There are no prerequisites for this course, but participants are expected to have some knowledge about architectural design and modeling, and general computer literacy.

Participants are required to have their own:

• Computer with Windows installed
• Autodesk Revit Software

Course Sections:

Each section will be covered over 2/3 hour-long sessions. They will all begin with a list of Session Content to be covered in the session. The dataset mentioned throughout the sessions are available for participants to follow along or practice after the session. The entire course will be a minimum of 5 sessions (around 10 hours).

Course Sections		
Section	**Title**	**Sessions**
00	Introduction to BIM and Revit for architectural design	1 Sessions
01	Modeling for architectural design	2 Sessions
02	Documentation for architectural design	1 Sessions
03	Families for architectural design	1 Sessions

Practice exercises:

There are 10 practice exercises included, each exploring a different set of topics. The practice exercises are designed to give participants an opportunity to test their knowledge and apply what they have learned.

Practice Exercise Schedule	
Title	**Duration**
Practice Exercise: Create a wall type	15 Mins
Practice Exercise: Adjust family visibility	10 Mins
Practice Exercise: Create view templates	10 Mins
Practice Exercise: Create revisions	7 Mins
Practice Exercise: Set project location	5 Mins
Practice Exercise: Organize the browser	10 Mins
Practice Exercise: Create a schedule	7 Mins
Practice Exercise: Create area plans	10 Mins

Challenge exercises:

There are 3 challenge exercises included, each one focusing on a set of topics covered in the course. Participants are presented a challenge in an applicable real-world situation, and they apply their skills and the techniques learned to solve the challenge.

Challenge Exercise Schedule	
Title	**Duration**
Challenge: Create a basic 3D parametric family	20 Mins
Challenge: Create a room tag family	20 Mins

Section 00: Introduction to BIM and Revit for architectural design
Total Time In-Class Required for Section: minimum 1 sessions - 2 hours

Session 1

Introduction
- About you
- About me
- Disclaimer
- Course objectives
- Course schedule
- Session content

Introduction to BIM
- What is BIM?
- Different definitions
- BIM vs CAD?
- Rhino Screen
- Revit Screen
- Tech vs philosophy/process?
- Why do we need it?
- What is "Achitect"?
- Evolution of design technology
- Evolution of CAD/BIM
- Most used BIM software
- Career Paths
- Case studies
- Opening Revit
- Revit Interface
- Session recap
- Q&A

- Revit Tips & Tricks

Section 01: Modeling for architectural design
Total Time In-Class Required for Section: minimum 2 sessions - 4 hours (2 hours per session)

Practice exercise: Create a wall type (15 Minutes)
Challenge exercise: Create a basic 3D parametric family (20 Minutes)

Session 2

- Course content
- Last section recap
- Session content
- Origins and massing
- Levels & Grids
- View Setup
- Families & Types
- Floors
- Linking CAD
- Shafts
- Roofs
- Columns
- Session recap
- Q&A

- Revit Tips & Tricks

Session 3

- Last session recap
- Session content
- Walls
- Curtain Walls
- Doors & Windows
- Ceilings
- Railings
- Stairs
- Families
- Model In-Place
- Topography
- Session recap
- Q&A

- Revit Tips & Tricks

Section 02: Documentation for architectural design
Total Time In-Class Required for Section: minimum 1 sessions - 2 hours

Practice exercise: Create view templates (10 Minutes)
Practice exercise: Create revisions (7 Minutes)
Challenge exercise: Create a room tag family (20 Minutes)

Session 4

- Course content
- Last section recap
- Session content

ANNOTATION
- Dimensions
- Drawing & Text
- Drawing Settings
- Tagging
- Editing Tags
- Detail Components
- Detail Drawings

DRAWING SETS
- Sheets
- Title block
- Sheet List
- View Placement
- View Tips & Tricks
- Starting View
- Sheet Review
- Printing & Exporting
- Session recap
- Q&A

- Revit Tips & Tricks

Section 03: Families for architectural design
Total Time In-Class Required for Section: minimum 1 sessions - 2 hours

Practice exercise: Adjust family visibility (10 Minutes)
Challenge exercise: Create a basic 3D parametric family (20 Minutes)

Session 5

- Course content
- Last section recap
- Session content
- Creating Families
- Generic Models
- Curtain Panels
- Massing
- Detail Items
- Session recap
- Q&A

- Revit Tips & Tricks