



AUTODESK REVIT

2020

THE ULTIMATE COURSE

A STEP-BY-STEP GUIDANCE TOWARDS SMART ENGINEERING

COURSE BROCHURE



**AUTODESK
REVIT**

Instructor

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OVERVIEW

The Autodesk Revit 2020 course is an interactive, online-based, professional course with a particular focus on software applications associated with the AEC industry. The course provides master-class content for industry professionals, engineers, graduate students and students with an abstract engineering background.

AIM AND STRATEGY

The course aims to provide students with a comprehensive and detailed education of the applications, tools and techniques of Autodesk Revit 2020 throughout a master-class series of lectures that well-prepare students to practice Autodesk Revit 2020

An online-based platform will be used for presenting and recording the lectures. The platform enables students to attend the course from any geographical location, where students will be able to interact, share and discuss throughout the lectures.

OBJECTIVES

The objectives of the course are designated to provide students with all the necessary tools and applications to master Autodesk Revit 2020.

The objectives are classified by three principal stages:

Preparation

1

- Software fundamentals
- User Interface
- Basic Tools
- Basic Instructions
- Mass creation
- Abstract Modelling
- Conceptual Design
- Conceptual Detailing

Application

2

- Real-case Design
- Building Specifications
- Material Properties
- Site Modelling
- Mass Crafting
- Advanced Modelling
- Developed Design
- Drawing Sets

Advanced

3

- Site Analysis
- Building Analysis
- Structure and Services
- Material Take-offs
- Scheduling
- Costing and QS
- Energy Simulations
- Production and Output

COURSE DESCRIPTION

The Autodesk Revit 2020 course is designated to provide a comprehensive approach and detailed understanding of the applications, techniques and tools of the software. The course presents, in a series of lectures, a complete and integrated syllabus for learning Autodesk Revit software. The syllabus is designed to prepare students with the proper tools and methods in order to master the software. The course covers all engineering backgrounds from engineering students, junior engineers to seniors and industry professionals, and will be delivered in three main levels from software basics to advanced software applications.

COURSE OUTCOMES

After a successful completion of the course, students will be able to:

- Understand and effectively use the tools and applications of Autodesk Revit 2020.
- Project modelling and advanced mass creation.
- Site modelling, analysis and site furnishing.
- Achieve developed design level and detailed design level.
- Prepare drawing sets and presentations.
- Add, modify and design structural and MEP systems.
- Conduct project scheduling and quantity take-offs in professional standard.
- Link projects with BIM network and supplying chains.
- Project costing, energy simulations, building analysis and material specifications.
- Project Production (rendering and visualizations).

CAREER OPPORTUNITIES

After a successful completion of the course, students can work on:

Architecture Projects

Civil Engineering Projects

MEP Projects

Project Modelling

Design Levels

Architecture Sets

Project Schedules

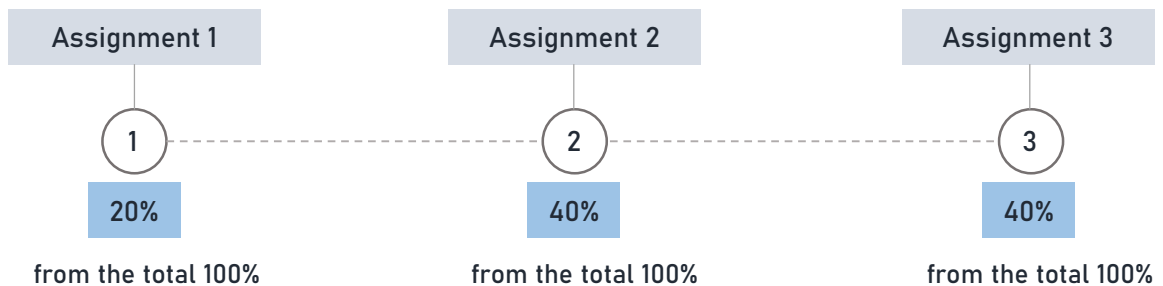
Q.S and costing

Production

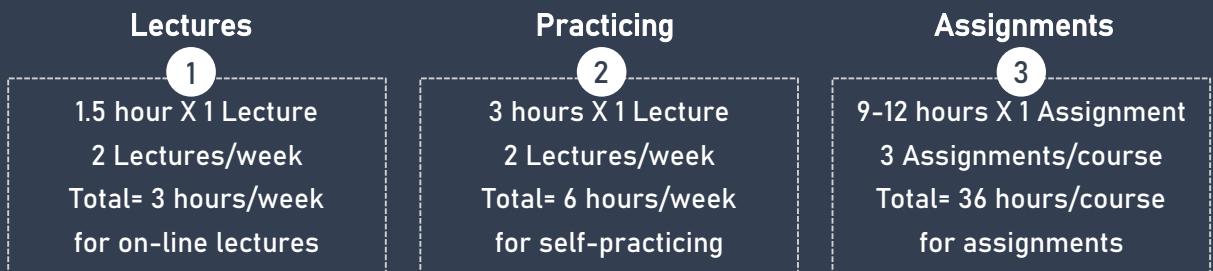
COURSE TIME-TABLE

Weeks	Lectures	Time	Lectures	Time	Platform
Week 1	L1: Overview	2.0 h	L2: User Interface	2.0 h	On-line
Week 2	L3: 2D/3D Basic Tools	2.0 h	L4: Modelling basics	2.0 h	On-line
Week 3	L5: Building Elements	2.0 h	L6: Building Specifications	2.0 h	On-line
Week 4	L7: Conceptual Design	2.0 h	L8: Advanced Modelling	2.0 h	On-line
Week 5	L9: Revit Families	2.0 h	L10: Families Advanced	2.0 h	On-line
Week 6	L11: Site Modelling S.A.	2.0 h	L12: Site Advanced	2.0 h	On-line
Week 7	L13: Building Structure	2.0 h	L14: MEP Systems	2.0 h	On-line
Week 8	L15: Building Schedules	2.0 h	L16: Costing and Q.S.	2.0 h	On-line
Week 9	L17: Building Analysis	2.0 h	L18: Developed Design Level	2.0 h	On-line
Week 10	L19: Project Production 1	2.0 h	L20: Project Production 2	2.0 h	On-line

COURSE ASSIGNMENTS



SUGGESTED STUDY PLAN



COURSE INSTRUCTOR

Zaid is an architect, academic researcher and professional in computation applications related to the AEC discipline. Zaid has tangible experience in research concerned with the urban, architecture and construction. His scope of research focuses on integrating advanced technology applications in enhancing and developing the setting, infrastructure, and performance of the AEC industry.

Zaid has more than 5 years experience in utilizing, teaching, and training Autodesk Software. His approach focuses on upgrading the AEC industry to a smarter, integrated and professional industry through the implementation of inter-connected systems such as the BIM system.



COURSE DIRECTORATE

Directorate of Skills Development and Innovation (DSDI) is a part of the hierarchy of the research center in the DPU. It supports Duhok Polytechnic University and its holistic vision through underpinning research and teaching skills. The focus of the DSDI is to provide certified short and long-term courses, workshops as well as seminars for employees, academic staff, students, and external participants for the purposes of the capacity building. DSDI was able to conduct successful courses and continue to deliver their course online. Currently, Mr. Kawar Salih is the director of DSDI. He is a practitioner architect, and researcher in the field of Sustainable Buildings and Environment and has a master's degree from Newcastle University in the UK.

This course is accredited by Duhok Polytechnic University
Students will be awarded an official certificate after a successful completion of the course