Updated on 14/09/2023

Sign up

BIM training with Autodesk Revit
5 days (35 hours)

Presentation

BIM, an acronym for Building Information Model, is the geometric representation of a building in 3D, created on a computer with a view to analyzing, controlling and simulating certain behaviors. The BIM is therefore a structured set of information on an existing or planned building. It contains the objects making up the building, their characteristics and the relationships between these objects. This information complements the purely geometric description of the building's shape produced by certain software programs.

Revit is CAD and multi-trade software for BIM technology in the construction industry. Its powerful tools make it possible to use the intelligent model-based process to plan, design, construct and manage buildings and infrastructures. Revit supports a multidisciplinary design process for team design.

Published by the American company Autodesk, it is currently available in version 2018.

The course will use the latest stable version of the project (Revit 2021).

Objectives

- Understand and implement B.I.M. requirementshttps://www.autodesk.com/support/technical/product/revit
- Master the main functions of architectural design software based on a concrete project
- Be proficient in Revit software functionalities.

Target audience

Professionals, salaried or self-employed: Design office managers, technicians, engineers, draughtsmen, architects, project managers, architects' assistants or any other type of professional.

people responsible for or involved in an architectural project incorporating BIM.

Prerequisites

Good knowledge of architecture.

BIM training program

MODULE 1

Understanding B.I.M.

- Definition
- Origins
- Philosophy...

Economic aspects

- Costs and economic estimates by player and by phase.
- B.I.M. and energy performance.
- Examples of RT2012 Operations integrating BIM

(advantages...) The BIM version of coordination

- Internal coordination
- External coordination ... Data

sharing and exchange

- Interoperability
- Flow management
- Design methods
- Time and cost management...

MODULE 2

Software production

- 2d productions
- 3d productions
- Focus on software with B.I.M. integration

- IFC files
- Digital file exchange
- Overview of BIM software Architectural

impact

- The contractual aspect
- Regulatory texts
- Responsibilities

MODULE 3

Managing BIM in practice

- Comparison of current and B.I.M.-based processes
- Case studies and case studies

Preparatory studies and project management in general

- Terminology: deadlines, , load
- Organization
- Difficulties encountered
- Project mission definition
- Study of project and customer expectations
- Program definition
- Review of different design approaches
- Needs expression methodology
- Mission formalization and validation
- Identifying objectives
- Formalization of these objectives and validation by managers

MODULE 4

Project players

- Definition of internal / external tasks
- Roles and commitments
- Communication

Project implementation, management and monitoring

- Adjusting the digital model
- Ensure personal and collective follow-up points
- Measure and analyze discrepancies with the team
- Frequency of inspections and meetings

- Receipt of project data
- Progress analysis: quality, deadlines, loads and costs
- Project dashboards
- Proposal of solutions to the steering committee.
- Implementing the decision
- Project closing review and analysis
- Presentation of plans and final renderings
- Preparing the work specification
- Interpretation of municipal and departmental codes and by-laws
- Preparation of tender documents

MODULE 5

The B.I.M manager

- Role of the B.I.M manager
- In-house or outsourcing
- Responsibilities

End of training

- Conclusions
- Level test

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.