AMBIENT-IT

+33 (0)1 48 10 09 46
formation@ambient-it.net
140 Avenue Jean Lolive 93500 Pantin - France

Updated on 29/07/2025

Sign up

Google Web Toolkit Training

3 days (21 hours)

Training on demand

Overview

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 packages.

Revit is a CAD and multi-trade software package designed 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 US company Autodesk, it is currently available in version 2018.

The course will use the latest stable version of the project (Revit 2018 to date, released in October 2017).

Objectives

- Understand and implement B.I.M. requirements
- Master the main functions of the architectural design software around a concrete project
- Master the functionalities of Revit software.

Target audience

Professionals, salaried or self-employed: Design office managers, technicians, engineers, draughtsmen, architects, project managers, architects' assistants or anyone responsible for or involved in an architectural project incorporating BIM.

Prerequisites

Good knowledge of architecture

Program

MODULE 1

Understanding BIM

- Definition
- Origins
- Philosophy...

Economic aspects

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

(advantages...) B.I.M. version coordination

- Internal coordination
- External coordination ...

Sharing and exchanging data

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

MODULE 2

Software productions

- 2d productions
- 3d productions
- Focus on software integrating B.I.M.
- IFC files
- Digital file exchange
- Overview of B.I.M. software Architectural

impact

- Contractual aspects
- Regulatory texts
- Responsibilities

MODULE 3

Managing BIM in practice

- Comparison of current and BIM-based processes
- Practical case studies

Preparatory studies and project management in general

- Terminology: deadlines, duration, workload
- Organization
- Difficulties encountered
- Project mission definition
- Study of project and customer expectations
- Program definition
- Examination of different design approaches
- Methodology for expressing requirements
- Mission formalization and validation
- Identification of objectives
- Formalization of objectives and validation by managers

MODULE 4

Project players

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

Project execution, management and monitoring

- Adjustment of the digital model
- Ensure personal and collective follow-up points
- Measure and analyze deviations with the team
- Periodicity of checks and meetings
- Receive project data
- Progress analysis: quality, deadlines, workloads and costs
- Project dashboards
- Propose solutions to the steering committee.
- Decision implementation
- Project closing review and analysis
- Presentation of final drawings and renderings
- Preparation of work specifications
- Interpretation of municipal and departmental codes and regulations
- Preparation of tender documents

MODULE 5

The B.I.M manager

- Role of the B.I.M manager
- Internalization 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 IT technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical training: 60% hands-on, 40% theory. Training material distributed in digital format

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.

Certification

A certificate will be awarded to each trainee who has completed the entire course.