

€ TRAINING

Building Information Modelling BIM





Building Information Modelling BIM

Introduction:

This training program offers participants the opportunity to learn how to utilize advanced digital tools and methodologies for enhanced construction project management. It empowers individuals with the skills needed to optimize project efficiency, collaboration, and decision-making within the construction industry.

Program Objectives:

At the end of this program, participants will be able to:

- Gain a comprehensive understanding of Building Information Modelling BIM principles and practices.
- Develop the knowledge and skills necessary to implement BIM processes effectively in their projects.
- Proficiently utilize BIM tools and software to enhance project workflows.
- Foster collaboration and communication among project stakeholders through the application of BIM methodologies.
- Improve project efficiency, accuracy, and sustainability through the effective implementation of BIM.

Targeted Audience:

- Architects.
- Civil Engineers.
- Structural Engineers.
- MEP Mechanical, Electrical, Plumbing Engineers.
- Construction Managers.
- Project Managers.
- Building Owners and Operators.
- Quantity Surveyors
- Facilities Managers.

Program Outline:

Unit 1:

Introduction to BIM:

- Understanding the fundamentals of Building Information Modelling BIM.
- Evolution and benefits of BIM in the construction industry.
- Overview of BIM software and tools.
- Introduction to BIM standards and protocols.
- Navigating BIM software interface.

Unit 2:

BIM Implementation Strategies:

- Planning and implementing BIM workflows.
- BIM execution planning BEP and project setup.
- Coordination and collaboration in BIM projects.
- Managing BIM data and information exchange.
- Case studies and best practices in BIM implementation.

Unit 3:

BIM Modeling Techniques:

- Creating 3D models using BIM software.
- Parametric modeling and family creation.
- Detailing and documentation in BIM.
- Clash detection and resolution.
- Advanced modeling techniques for complex geometries.

Unit 4:

BIM for Construction Management:

- BIM for construction sequencing and scheduling.
- Quantity takeoff and cost estimation using BIM.

- 4D BIM: Integrating time with 3D models.
- BIM for construction coordination and site logistics.
- Construction-oriented BIM applications.

Unit 5:

BIM for Facility Management and Lifecycle Analysis:

- Introduction to Facility Management FM and Asset Information Models AIM.
- Utilizing BIM for facility operations and maintenance.
- BIM for energy analysis and sustainability assessment.
- BIM in renovation and retrofit projects.
- Strategies for BIM integration across project lifecycle.