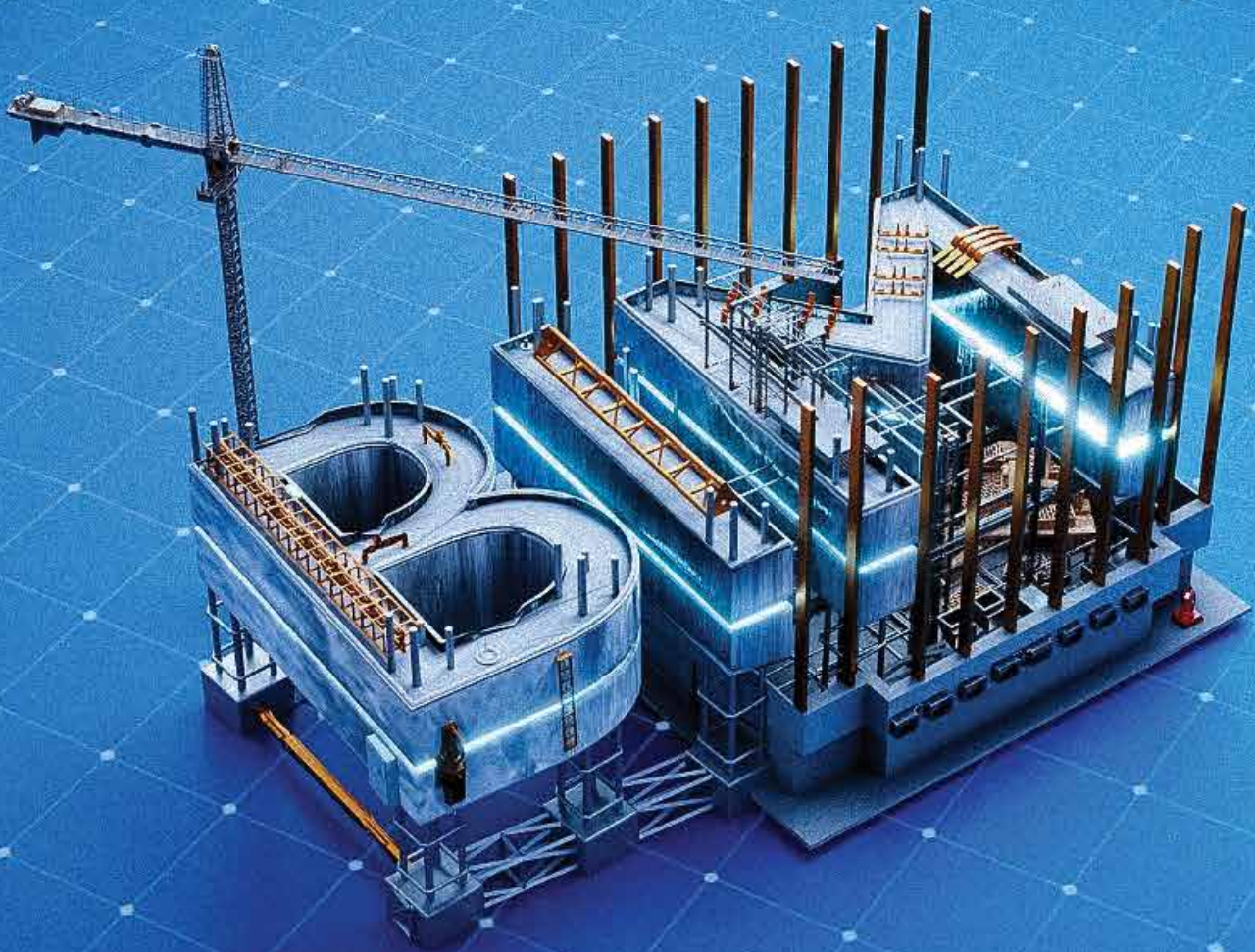# BUILDING INFORMATION MODELING

What is BIM

(Building Information Modeling)?

In the rapidly evolving fields of architecture, engineering, and construction (AEC), the demand for highly accurate and collaborative design processes has never been greater. Building Information Modeling (BIM) is an innovative approach that transforms the planning, design, construction, and management of buildings and infrastructure. By creating detailed digital representations of both the architectural and functional aspects of a project, BIM allows architects, engineering consultants (such as structural designers), and contractors to collaborate seamlessly at every stage. One of BIM's greatest advantages is its ability t o consolidate designs from architects and various consultants into a single, unified model, significantly enhancing visualization and coordination. With 3D modelling, data-rich visuals, and cloud-based tools, BIM optimizes workflows, improves accuracy, and reduces project risks.

Career after BIM Course

BIM Engineers are highly sought after by Engineering firms including consultants and BIM outsourcing firms, architecture studios, and construction companies.

Course Features

- Guidance from 7+ years experienced professionals
- Live Projects from the Middle East
- Recorded Classes
- Assignments
- 6 Month Mentorship
- Placement Assistance
- Live doubt-clearing sessions
- Industry Interactions
- HR interview preparation sessions
- CV preparation sessions
- Course completion certificate

Module 1: Introduction to BIM

- What is BIM
- BIM in the construction industry
- Benefits of BIM
- Software used in BIM

Module 2: Introduction to Revit Architecture

- Projects
- Project Templates
- Default Project Template
- Revit File Types
- Exploring the User Interface
- Building Elements
- Revit Elements and Families

Module 3: Starting a Project

- Project Units

- Levels

- Grid setting

- Wall

    o Types of walls (Basic wall, Curtain wall, Stacked wall)
    o Type and Instance properties
    o Creating wall-type
    o Drawing a plan as per dimension

Module 4: Modifying Commands

- Clipboard

- Geometry

- Modify

Module 5: Doors and Windows

- Loading Door and Window families

- Placing Door and window families

- Type and Instance properties

Module 6: Roof and Floor

- Creating Roof using footprint and extrusion
- Soffit, Gutter and Fascia
- Ridge capping
- Creating an architectural floor

Module 7: Stair, Ramp, Railing & Opening

- Types of stair modelling using default type and stair by sketch
- Ramp modeling
- Railing modeling using sketch path and place on stair/ramp
- Explaining instance and type properties of each
- Shaft opening, Opening by face, Wall opening, Vertical opening and Dormer opening

Module 8: Curtain wall

- Grids
- Mullions
- Curtain system

Module 9: Materials and paint

- Creating and adding materials
- Adding and removing paint
- Split face

Module 10: Components and Model in Place

- Placing and inserting components
- Different types of components
- Explaining the model in place using extrusion, blend, revolve, sweep, sweep blend, and Void forms

Module 11: Family Creation

- Door Family
- Window family
- Generic family
- Profile Creation

Module 12: Introduction to Revit Structure

- Structural Template
- Beams and Columns
- Structural Floor and Structural Wall
- Foundation
- Truss and Braces
- Basics of reinforcement

Module 13: View Management

- Plan, section, ceiling plan, and elevation

- View Control Bar

- Callout and Drafting view

- Scope box

- Legends

Module 14: Annotation, sheet creation and exporting

- Annotation

    o Dimension category

    o Detail category

    o Text category

    o Tag by category

    o Material tag

    o Room & Area

- Sheet Creation and placing views

- Exporting views to CAD, pdf etc

Module 15: Massing and Site

- Massing

    o Conceptual mass

    o Model by face

- Site

    o Model Site

    o Modify site

- Label Contours

- Project base point and Survey point

Module 16: Schedule

- Introduction

- Quantity schedule

- Material takeoff schedule

- Column Schedule

Module 17: BIM using Naviswork

- Exporting Revit
- Appending and merging files
- The Navisworks interface
- Overriding & finding items
- Creating Sets
- Creating, Importing construction schedules
- Using Clash detective
- Batch
- Rules
- Select
- Results
- Report
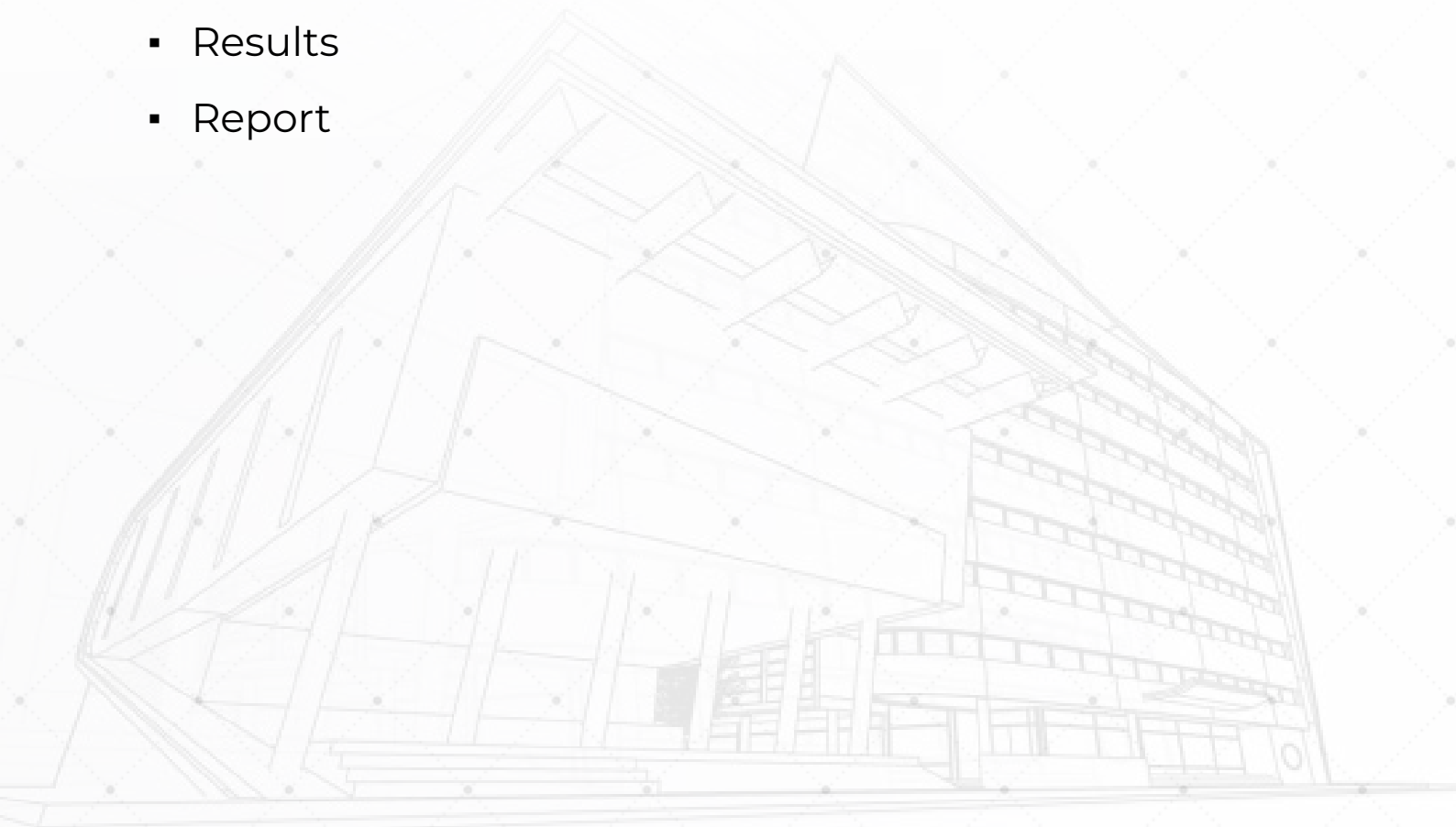
Our Expert Faculties

Abdul Rahman

BIM Lead of Carbon Blue Global Qatar. Over the last 8+ years, Abdul Rahman has led BIM projects from the USA, UK, Middle East & Australia. He has also delivered organization-wide BIM transformation initiatives for clients from Qatar.

Sajith N

Sajith is a Senior BIM Engineering Lead at Carbon Blue Global Qatar. He has 8+ years of experience with proven expertise in BIM Modelling, MEP Coordination & Workflow Optimization. He has delivered complex BIM projects from the USA, Middle East & Ireland.

Uvais

Uvais is a Senior BIM Engineer at Carbon Blue Global Qatar, with 5 years of experience delivering complex BIM projects aligned with USA and UK standards

Fayiz MK

Fayiz is a Senior BIM Engineer at Carbon Blue Global Qatar. He has 5 years of experience delivering high-quality BIM projects following USA and UK standards

Thank You