# Advance BIM Management & Digital Strategy For Professional

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One To One Live Online Trainin

3 month -150+ Hours

One To One Live Online Training Course

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transformat

# **Course Overview**

## Advance BIM Management & Digital Strategy For Professional

Duration:- 150+ Hours

This course is designed for experienced professionals looking to elevate their expertise in **BIM management and digital transformation strategies.** It covers advanced BIM workflows, BEP planning, Cobie, CDE integration, automation, and data-driven decision-making. Participants will learn to implement BIM standards, optimize collaboration using Autodesk Construction Cloud, and leverage digital twin technologies for project efficiency. The course also focuses on integrating BIM with 4D/5D/6D workflows, clash resolution, and project coordination across multidisciplinary teams. Ideal for BIM Managers, Project Coordinators, and Digital Transformation Leaders aiming to drive innovation in the **AEC industry**.

#### Key Features



We live in a world in which information is integral to every aspect of our lives. In the construction industry, there are countless stakeholders, participants and consumers who need to receive the right information at the right time to make more informed and better decisions. Our experts possess extensive best-practice and leading-edge knowledge of how to specify, procure, deliver, assure, store, present and exploit information, with open standards at the heart of our approach. Applying better information management processes will ensure that information is robust, reliable and reusable for the long term



# **Course Modules**

Industry Focus: BIM Manager, BIM Engineer, BIM Coordinator, Project Managers , Consultant and Working Professionals in AEC

<u>Modules</u>	Table of contents	Duration
Module 1	<b>BIM Foundation and Software Workflow</b>	<u>12 HR</u>
M-1.1	Understanding BIM Fundamentals • Introduction, an essential part of BIM Process, Principles of BIM LOD, dimensions & levels, BIM acronyms & workflows, BIM for owners, designers &engineers, Contractors, operations & maintenance, Investments & ROI, BIM Uses real world examples.	120 Min
м-1.2	<ul> <li>Software types, workflow and uses</li> <li>Range of software tools designed to facilitate the planning, design, construction, and operation of buildings and infrastructure. Modeling &amp; Design Software, Coordination &amp; Collaboration Software, Structural &amp; MEP Engineering Software, Construction &amp; Project Management Software, Facilities Management &amp; Operations Software</li> <li>BIM Workflow Stages and How These Tools Are Used, Planning &amp; Concept Design, Detailed Design &amp; Documentation, Construction Planning &amp; Execution and Operations &amp; Maintenance,</li> </ul>	180 Min
M-1.3	<ul> <li>BIM implementation</li> <li>BIM Implementation approaches in Strategic Definition, Preparation and Briefing, Concept Design, Spatial Coordination, Technical Design, Manufacturing and Construction, Handover &amp; Use stages of project.</li> </ul>	90 Min
M-1.4	<ul> <li>BIM Management Techniques</li> <li>Leadership roles, Self education, planning &amp; align, being part of BIM &amp; Digital Ecosystem, right mentor, change management - internal &amp; external, Client buy-in, taking ownership, open-minded approach, understanding your target audience, co-ordination meetings, BEPs, led by examples and training strategies.</li> </ul>	120 Min
M-1.5	<ul> <li>Global BIM Standards</li> <li>Working with BIM around the world, importance of ISO BIM standards, Information management types, management processes &amp; delivery manual, ISO BIM in project life cycle, Client initiating the process, proposal activity, BIM-kickoff meeting &amp; mobilization, production, delivery &amp; close-out activities.</li> <li>ISO 19650 (International Standard for BIM Management), UK BIM Framework (BS &amp; PAS Standards), US National BIM Standard (NBIMS-US),Open BIM &amp; IFC Standards (Industry Foundation Classes - IFC), Singapore BIM Guide &amp; ISO 19650 Adoption, Australian &amp; New Zealand BIM Standards (ANZ BIM)</li> </ul>	180 Min



<u>Modules</u>	Table of contents	<u>Duration</u>
<u>Module 2</u>	<b>BIM Implementation and processes</b>	<u>11HR</u>
M-2.1	<ul> <li>Global trends in BIM education, mandates and implementations</li> <li>An awareness on global trends with respect to BIM mandates, BIM skill development programs, BIM Implementation and BIM R&amp;D in 70+ countries.</li> </ul>	90Min
M-2.2	<ul> <li>BIM Uses - How each Project stakeholder Uses BIM</li> <li>Includes detailed discussions on BIM Uses, BIM tools &amp; equipment related to each BIM Use, Responsible stakeholders for each BIM Use, BIM Use Process map, BIM Use deliverables.</li> </ul>	90Min
M-2.3	<ul> <li>BIM implementation in Project Life cycle</li> <li>The RIBA Plan of Work organizes the process of briefing, designing, constructing and operating building projects into eight stages and explains the stage outcomes, core tasks and information exchanges required at each stage.</li> </ul>	120Min
M-2.3	<ul> <li>EIR-Employers Information Requirement</li> <li>A document/s clarifying the employer's requirements during services' procurement. Employer's Information Requirements (EIR)s may include levels of modelling detail, training/competence requirements, ordinance systems, exchange formats or other employer-mandated processes, standards or protocols.</li> </ul>	90Min
M-2.4	<ul> <li>LOIN - Level of Information Need</li> <li>A document/s clarifying the employer's requirements during services' procurement. Employer's Information Requirements (EIR)s may include levels of modelling detail, training/competence requirements, ordinance systems, exchange formats or other employer-mandated processes, standards or protocols.</li> </ul>	90Min
M-2.5	<ul> <li>Facility Management (FM)</li> <li>A document/s clarifying the employer's requirements during services' procurement. Employer's Information Requirements (EIR)s may include levels of modelling detail, training/competence requirements, ordinance systems, exchange formats or other employer-mandated processes, standards or protocols.</li> </ul>	90Min
M-2.6	<ul> <li>Information Management &amp; Exchange in BIM</li> <li>Information Management in BIM ensures structured data handling, while Information Exchange enables seamless collaboration via CDE, IFC, and ISO 19650. Standardized workflows, LOD, and quality control improve efficiency, reduce errors, and enhance decision-making for better project execution and asset management.</li> </ul>	90Min



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<u>Module 3</u>	<b>BEP-BIM Execution Plan and how to Create</b>	<u>13HR</u>
M-3.1	<ul> <li>BEP-BIM Execution Plan and how to Create</li> <li>The BIM Execution Plan (BEP) is developed by suppliers - typically pre-contract to address the Employer's Information Requirements (EIR) - and defines how the information modelling aspects of a project will be carried out. A BEP clarifies roles and their responsibilities, standards to be applied and procedures to be followed. A BEP collates/references a number of other documents including the Master Information Delivery Plan (MIDP) and the Project Implementation Plan (PIP). The BEP may be updated after the contract has been awarded.</li> </ul>	180Min
M-3.2	<ul> <li>Types of BEPs and BIM Standards &amp; Guidelines</li> <li>Pre-contract BEP</li> <li>Post-contract BEP</li> <li>Differences and Key Considerations</li> <li>ISO 19650 Framework</li> <li>BS 1192 &amp; PAS 1192</li> <li>Other Regional and Project-Specific Standards</li> </ul>	120Min
M-3.3	<ul> <li>BEP Development Process and BIM Roles and Responsibilities</li> <li>BIM Manager, BIM Coordinator and BIM Modelers</li> <li>Discipline-Specific Responsibilities.</li> <li>Understanding Employer's Information Requirements (EIR)</li> <li>Defining BIM Goals and Objectives</li> <li>Establishing BIM Uses (3D, 4D, 5D, 6D, 7D)</li> <li>Information Exchange &amp; Deliverables</li> </ul>	120Min
M-3.4	<ul> <li>BIM Execution Strategies and BEP Documentation Components</li> <li>Model Development and LOD Requirements</li> <li>Coordination and Clash Detection Procedures</li> <li>Common Data Environment (CDE) Management</li> <li>Data Integration and Interoperability.</li> <li>Project BIM Objectives, Quality Control &amp; Assurance</li> <li>BIM Uses &amp; Workflows, Risk Management Strategies</li> <li>Model Exchange &amp; Data Management</li> </ul>	180Min
M-3.5	<ul> <li>Collaboration &amp; Communication Protocols and Technology &amp; Software Integration</li> <li>File Naming &amp; Model Structuring Standards</li> <li>Communication &amp; Issue Resolution Processes</li> <li>Roles in Model Coordination Meetings</li> <li>BIM Authoring Tools (Revit, Civil 3D, ArchiCAD, etc.)</li> <li>BIM Coordination Tools (Navisworks, Solibri, ACC, etc.)</li> <li>Digital Twin &amp; Automation Technologies</li> </ul>	180min

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### **Duration**

Module 4	<u>CDE-Common Data Environment</u>	<u>15HR</u>
M-4.1	<ul> <li>Introduction to Common Data Environment (CDE).</li> <li>Definition of CDE in the BIM process</li> <li>Importance of CDE in digital construction</li> <li>Standards &amp; guidelines (ISO 19650, PAS 1192, BS 1192)</li> <li>Key benefits of a well-implemented CDE</li> </ul>	120 Min
M-4.2	<ul> <li>Understanding CDE Components</li> <li>Data Storage &amp; Hosting: Cloud-based vs. on-premise</li> <li>Roles &amp; Permissions: Defining access control &amp; responsibilities</li> <li>Workflow Management: Approval processes, versioning, and status tracking</li> <li>Document Management: Naming conventions, metadata, and folder structures</li> <li>Collaboration &amp; Communication: RFIs, issues, markups, and real-time coordination</li> </ul>	180 Min
M-4.3	<ul> <li>CDE Standards &amp; ISO 19650 Compliance</li> <li>Key principles of ISO 19650</li> <li>Information Management roles and responsibilities</li> <li>Common workflows in compliance with ISO 19650</li> <li>Classification &amp; naming conventions in CDE</li> </ul>	120Min
M-4.4	<ul> <li>CDE Platforms Overview</li> <li>Autodesk Construction Cloud (ACC) / BIM 360</li> <li>Bentley ProjectWise</li> <li>Trimble Connect</li> <li>Asite</li> <li>Aconex</li> <li>Feature comparison of different CDE solutions</li> </ul>	180Min
M-4.5	<ul> <li>Setting Up a CDE</li> <li>Folder structure best practices</li> <li>Setting up permissions and roles</li> <li>File naming conventions &amp; metadata application</li> <li>Establishing workflows and approval processes</li> <li>Automating notifications and document tracking</li> </ul>	120Min
M-4.6	<ul> <li>Managing Information Exchange in CDE</li> <li>Uploading, sharing, and versioning files</li> <li>Creating and managing transmittals</li> <li>Handling RFIs and issues within CDE</li> <li>Managing deliverables &amp; approval processes Archive Area.</li> </ul>	180 Min



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Module <u>5</u>	Core ISO Standards for BIM Management	<u>13HR</u>
M-5.1	<ul> <li>ISO 19650 Series - Information Management</li> <li>ISO 19650-1: Concepts &amp; Principles</li> <li>ISO 19650-2: Delivery Phase of Assets</li> <li>ISO 19650-3: Operational Phase of Assets</li> <li>ISO 19650-4: Information Exchange</li> <li>ISO 19650-5: Security &amp; Risk Management</li> </ul>	300 Min
M-5.2	<ul> <li>Information Exchange &amp; Interoperability Standards</li> <li>ISO 16739 (Industry Foundation Classes - IFC)</li> <li>ISO 12006-2 (Classification Systems in BIM)</li> <li>ISO 29481 (Information Delivery Manual - IDM)</li> <li>ISO 21597 (Information Container for Linked Document Delivery - ICDD)</li> </ul>	180 Min
M-5.3	<ul> <li>Information Management Framework in ISO 19650</li> <li>Common Data Environment (CDE) Implementation</li> <li>Levels of Information Need (LOD, LOI, LOA)</li> <li>Information Exchange Workflows</li> </ul>	180Min
M-5.4	<ul> <li>ISO-Based Quality Control &amp; Validation</li> <li>Model Validation &amp; Clash Detection</li> <li>Data Compliance &amp; Audit Trails</li> <li>Advanced BIM Lifecycle &amp; Asset Management (ISO 55000)</li> </ul>	120Min
Module 6	<b>COBie Implementation &amp; Workflow in BIM Projects</b>	<u>17HR</u>
M-6.1	<ul> <li>COBie Implementation Workflow</li> <li>COBie Workflow Overview</li> <li>Importance of COBie in the AEC industry</li> <li>COBie vs. Traditional Documentation</li> <li>Role of COBie in Digital Handover and Facility Management</li> <li>COBie Implementation Workflow Diagram</li> </ul>	180 Min
M-6.2	<ul> <li>Detailed COBie Implementation Plan</li> <li>Define COBie Requirements</li> <li>BIM Design Phase – Assigning COBie Data</li> <li>Construction Phase – Enriching COBie Data</li> <li>COBie Data Validation &amp; Quality Control</li> <li>COBie Handover &amp; FM System Integration</li> </ul>	180 Min
M-6.3	<ul> <li>COBie Data Structure &amp; Components</li> <li>Overview of COBie Worksheets</li> <li>Facility, Floor, Space, Zone</li> <li>Type, Component, Systems</li> <li>Attributes, Spares, Resources, Jobs, Documents</li> <li>Understanding Required vs. Optional Data Fields</li> <li>Common Data Exchange Formats (Excel, IFC, XML)</li> </ul>	240 Min
M-6.4	<ul> <li>COBie Workflow in BIM Projects</li> <li>COBie fits into the BIM Execution Plan (BEP)</li> <li>COBie in Autodesk Revit, Navisworks, and Autodesk Construction Cloud (ACC)</li> <li>COBie Requirements in ISO 19650</li> <li>Extract COBie data from a Revit model and validate it in Excel.</li> </ul>	180 Min
M-6.5	<ul> <li>COBie Data Extraction &amp; Validation</li> <li>COBie Data Extraction from Revit using &amp; Revit COBie Extension</li> <li>Dynamo Scripts for COBie Extraction and Common Errors in COBie Data &amp; How to Fix Them</li> <li>COBie Data Validation using and Navisworks Manage</li> </ul>	240 Min
	BIM Interoperability Tools and Solibri Model Checker	www.castallio.com

Module 7	Information Exchange, Handover & As-Built Model	<u>9 HR</u>
M-7.1	<ul> <li>Information Exchange in BIM</li> <li>What is Information Exchange?</li> <li>Key Standards &amp; Formats for Information Exchange</li> <li>Common Information Exchange Formats in BIM</li> <li>OpenBIM &amp; Interoperability (IFC, COBie, BCF)</li> <li>Data Validation &amp; Model Checking for Consistency</li> <li>File Formats for BIM Data Exchange (IFC, RVT, NWD, DWG, XML)</li> </ul>	180 Min
M-7.2	<ul> <li>BIM Handover Process</li> <li>Components of a BIM Handover Package</li> <li>What is Digital Handover &amp; Why is it Critical?</li> <li>Asset Information Requirements &amp; COBie for FM</li> <li>Client &amp; Stakeholder Requirements for BIM Handover</li> <li>BIM Handover Workflow</li> <li>Data Preparation for Facilities Management (FM) Systems</li> </ul>	180 Min
м-7.3	As-Built Model in BIM • What is an As-Built Model? • Workflow for Creating an As-Built Model • Key Elements of an As-Built BIM Model • Purpose of an As-Built Model • Compare Design vs. As-Built Model • Validate & Approve As-Built Model • Handover & Digital Twin Integration	180Min
Module 8	Power BI & BIM Integration	<u>8 HR</u>
M-8.1	<ul> <li>Introduction Power BI &amp; BIM</li> <li>The integration of Power BI with BIM</li> <li>Understanding BIM Data</li> <li>BIM Data Sources (Revit, Navisworks, Excel, IFC, ACC, BEXEL, etc.)</li> <li>Key Technologies &amp; Plugins for BIM &amp; Power BI Integration</li> <li>Real-time BIM data extraction using plugins like Speckle, Autodesk Data Connector, and COBie.</li> </ul>	240 Min
M-8.2	<ul> <li>Power BI &amp; BIM Workflow Integration with Speckle</li> <li>Key Technologies for Integration</li> <li>Power BI &amp; BIM Workflow with Speckle</li> <li>Extract Data from BIM Model.</li> <li>Transform Data for Power BI</li> <li>Create Power BI Dashboards for BIM Analytics</li> <li>Data Visualization &amp; Dashboards</li> <li>Automate Reporting &amp; Alerts</li> </ul>	240Min
Module 9	<u>Digital Twin &amp; BIM</u>	<u>10 HR</u>
M-9.1	<ul> <li>Introduction of Digital Twin and BIM</li> <li>What is a Digital Twin?</li> <li>How Digital Twin and BIM Work Together</li> <li>Key Differences Between BIM and Digital Twin</li> <li>Benefits of Digital Twin and BIM Integration</li> </ul>	300Min
M-9.2	<ul> <li>Digital Twin Framework &amp; Components</li> <li>Physical Asset &amp; Virtual Model</li> <li>Digital Twin for Design Optimization</li> <li>Real-time Construction Monitoring &amp; Clash Detection</li> <li>4D/5D Simulation for Scheduling &amp; Cost Management</li> <li>Integration with Common Data Environments (CDEs)</li> </ul>	300 Min



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<u>Module 10</u>	<b>BIM Coordination and Autodesk Construction cloud</b>	<u>20 HR</u>
M-10.1	<ul> <li>Introduction to BIM Coordination</li> <li>Definition and Importance of BIM Coordination</li> <li>Role of a BIM Coordinator vs. BIM Manager</li> <li>Common BIM Standards (ISO 19650, PAS 1192)</li> <li>BIM Execution Plan (BEP) Overview</li> </ul>	300 Min
M-10.2	<ul> <li>BIM Software &amp; Tools for Coordination</li> <li>Autodesk Navisworks</li> <li>Autodesk BIM 360 / ACC</li> <li>Solibri Model Checker</li> <li>Revizto, Dalux, and Other Tools</li> <li>Model Federation and Aggregation</li> <li>Clash Detection &amp; Issue Tracking</li> </ul>	300 Min
M-10.3	<ul> <li>BIM Model Coordination Process and Collaboration &amp; Communication</li> <li>Model Quality Control and Validation</li> <li>Common Data Environment (CDE) in BIM</li> <li>Coordination Meeting Workflows</li> <li>Model Linking and File Formats (IFC, RVT, NWD, DWG)</li> <li>OpenBIM &amp; IFC Standards</li> <li>Communication Protocols in BIM Coordination</li> <li>Best Practices for Coordination Meetings</li> </ul>	300Min
м-10.4	<ul> <li>BIM Documentation &amp; Handover</li> <li>As-built Models and Documentation</li> <li>COBie (Construction-Operations Building Information Exchange)</li> <li>Facility Management Integration</li> <li>Legal &amp; Contractual Considerations in BIM</li> </ul>	300Min
Module 11	Live Work Final Model, Portfolio & Interview Preparation	<u>20 HR</u>
M-11.1	<ul> <li>Final Model Practices – Real-World BIM Workflow</li> <li>Live Work Final Model (Project Completion)</li> <li>Software Workflow, uses and Implementation.</li> <li>Portfolio Development &amp; Project Showcase</li> <li>Job Interview Preparation &amp; Placement Assistance</li> <li>Resume Building for BIM &amp; AEC Industry.</li> </ul>	1200 Min

• 100% Placement Assistance for Successful Candidates.







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**ENROLLMENT PROCEDURE** 



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