BUSINESS STRATEGY FOR BIM & DIGITAL INITIATIVES



ONLINE
150 HOURS . 8 MONTHS
INGLISH PROGRAM

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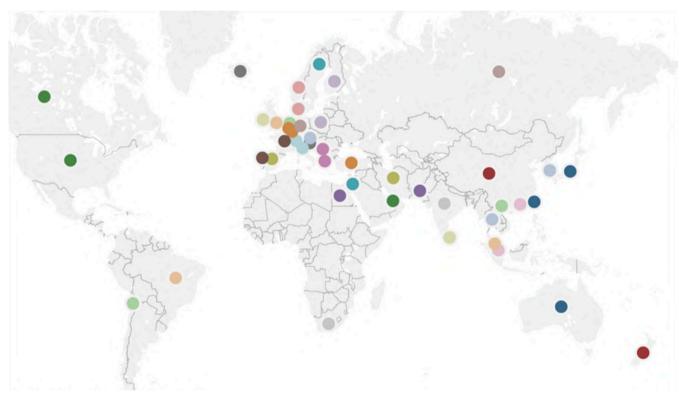




OVERVIEW

Digital Transformation Strategist Executive Programme Duration: 150 hrs

BIM is utilized by numerous professionals in the AECO-Architecture, Engineering, Construction and Operation sector: CAD users, designers, engineers, architects, developers, managers and senior executives, among many others. BIM usage is highest in small companies worldwide (26%), with 18% in medium-sized companies and 19% in large companies. By region, BIM usage is highest in North America with 24%, followed by EMEA (21%) and Asia-Pacific (13%).



Countries like the United States, the United Kingdom, the Netherlands, Singapore, South Korea, Japan, Hong Kong, Australia, and few other countries have mandated the use of BIM in public sector. Several countries in the regions of America, Europe, Asia, and Oceania have a high percentage of BIM users for their AECO projects. Globally, BIM awareness is spreading in a great way for the benefits it is binging to the AECO industry. BIM has been researched in more than 65 countries. **Global trends in BIM research** article provides us with an overview of BIM research. BIM has been adopted in the tertiary education system in more than 25 countries. BIM adoption efforts from the public sector are happening in more than 30 countries. And, several national level organizations support BIM adoption and implementation in more than 31 countries.

In India, AECO industry is the second largest industry after agriculture industry. Indian AECO industry employs more than 35 million people, has the second highest inflow of foreign direct investment after the services sector, and contributes to about 11.1% of India's GDP. Recent initiatives set by the Indian government, such as Make in India, is serving to grow the AECO industry. There are many mega projects undertaken recently, e.g. high-end roadways or expressways, metro train projects, and proposed bullet train project between two cities of India, i.e. Mumbai and Ahmedabad. The initiation of these projects necessitates focussing on various technical and non-technical aspects along with technologies, especially the infrastructure for these initiatives. Regarding technologies and project delivery process within the AECO industry, BIM is one of the most notable ones, with its ability to reduce project time delays, cost overruns and litigations.

Indian AECO industry is inclined towards employing graduates with exposure to BIM tools, techniques and processes. In line with today's AECO industry necessities, universities are running a wide range of BIM courses, for exposing AECO students to this new paradigm shift. However, today's academic BIM education is not completely integrated with other AECO programs in Tertiary Education System.



IBIMA-India Building Information Modeling Association is the leading professional national society for Building Information Modeling and Digitalization in Indian AECO-Architecture, Engineering, Construction and Operation sector. India Building Information Modeling Association is registered as a national level not-for-profit society. We are glad to inform you that India BIM Association is firmly moving ahead in spreading BIM awareness to the Indian AECO industry and academia with IBIMA reaching to roughly forty thousand professionals asper 1st April 2020.

India BIM Association majorly focus on: (1) BIM education and training; (2) Organizing BIM summits & events; (3) BIM policy development; (4) BIM maturity assessments and certifications.

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India BIM Association (R) has signed a strategic partnerships BIM forums and Councils in Taiwan | Canada | Turkey | Brazil | Hong Kong | Singapore | Serbija | Africa | Vietnam | Singapore | Thailand | Nepal | Cambodia | UAE





























Strategic partnerships by India BIM Association (R) with Taiwan BIM Alliance, Canada BIM Council, BIM Forum Brazil, HongKong Alliance of Built Asset & Environment Information Management Association, BuildingSMART Singapore, BIM Serbija, BIM Africa, BIM 4 Turkey, Thailand BIM Association, Nepal BIM Forum, The Vietnam Association of Construction Economics, UAE BIM Forum & Asset Society.

CERTIFICATION

Certified by:



Digital Transformation Strategist Executive Programme will be certified by IBIMA- India BIM Association (R) after candidates successfully complete 150 CPD points.

IBIMA will organize a certification examination for the executives who successfully complete 150 CPD points in this strategy programme. The candidates of executive program have to go through the online examination once the course is successfully completed.

Certificates will be issued by IBIMA after successfully completing the certification exam. Candidates are proposed to join professional Membership of India BIM Association to serve as Strategic and auditing consultants to IBIMA clients. Contact info@ibima.co.in for enrollment information

Continuing Professional Development Program

Points: 150



Continuing Professional Development (CPD) is the learning activities, professionals engage in to develop and enhance their abilities. It enables learning to become conscious and proactive, rather than passive and reactive.

There is an increasing expectation for professionals to undertake Continuing Professional Development regardless of industry sector, career level, job role and responsibilities. The CPD Certification Service helps organizations formalize knowledge into a structured and recognized approach to meet those expectations. This means that your formally certified CPD materials are more likely to become accepted and welcomed by your audiences.

Engaging in Continuing Professional Development ensures that both academic and practical qualifications do not become out-dated or obsolete; allowing individuals to continually 'up skill' or 're-skill' themselves, regardless of occupation, age or educational level.



BIM SKILLS & COMPETENCIES

Digital Transformation Strategist Executive Programme Duration: 150 hrs

This Executive program will guide you on how to establish organization and project BIM strategies as a whole. Immersive training on BIM implementation strategy through-out Project cycle right from survey to handover. Know how BIM technology, process and policies together work for successful delivery of AECO projects. Clear understanding on Employer information requirement, High strategy Plan, BIM execution plan development. Detailed discussion on seventy BIM Uses in the project life cycle and its related technologies, process maps, deliverables, stakeholders, LOD etc.

In terms of BIM for project management: Impact of BIM on Design (Scope, Collaboration management), Information (Data management, Stakeholder management, Interoperability management), Construction (Site management, Procurement, Asset & Facility management) & Performance management (Risk management, Quality & Safety management, Time & Cost management).

The list of Knowledge, skills and competencies that AECO discipline professionals must posses are pictorially represented here.



KEY POINTS



Digital Transformation Strategist Certification program is a mix of the key factors needed to succeed as a BIM Strategist, which no other program can offer. Participation in this program will become the next step in your career bringing you to the heights of Establishing Organization and Project BIM Strategies. This way you will be learning to serve as Agent for Digital Transformation of AECO Organization. The job roles you will fit in vary based on your experience and some of them are Digital Director, Head BIM Strategy, BIM Strategy Manager, BIM Strategy co-ordinator, BIM Strategy consultant to drive AECO organization towards digital transformation.

TEAMWORK



Simulated team work in establishing Organization and project BIM Strategies on how to work on establishing BIM Strategies from anywhere, giving them experience in a collaborative environment. This is an In-house team Building programme. We are building the troop of Agents for Digital Transformation who can serve as Strategic BIM Consultants in the AECO Organizations. Participants are able to see a list of all of the other participants in the program and their specialties, fostering an environment for global networking.

ONLINE FLEXIBILITY



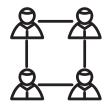
Our participants are professionals with 5-25 years experience working in the Global AECO Sector. Candidates in previous edition s are from India, UK, Italy, Dubai, Oman, Qatar, AbuDhabi, Morocco, Taiwan, Korea and Yemen. This program is developed taking working professionals into consideration. This gives our participants to learn and and get the certification along with their work. Our professors (Industry Professionals) are always ready to entertain the queries related to the program and solving your doubts in the best way possible.

FACULTY BOARD



All the mentors are AECO Industry Professionals working in the real world projects and been very successful doing that. We know how and exactly the how the Digital Transformation happens in AECO Organizations. This gives them the unique perspective to know what is needed for participants to successfully enter AECO market as Digital Transformation Agents/Leaders.

GLOBAL EXECUTIVES NETWORK



This executive BIM Strategy program encourages and fosters interaction between strategic leaders from various backgrounds and disciplines. Collaborative way provide the platform for executives to network and deliver Integrated BIM projects successfully. After completing this strategy program, participants will be comfortable supporting AECO organizations in Digital Transformation process.

LEARNING METHODOLOGY



BIMCrew employ online platform for your learning and sharing the best study material for your Executive Program. This gives you an opportunity to easily connect & interact with other participants and tutors. Our tutors are responsible for helping you every time anyway possible. In addition to this, sessions will be held online through Zoom platform.



WHO IS THE CERTIFICATION PROGRAM?



This program is aimed at all AECO sector professionals – who want to specialize or expand their BIM Skills and Competencies to drive digital transformation in AECO Organizations. Executives who complete the Strategy program will be able to set Organizational and Project BIM Strategies. At the same time, the participant will obtain broader understanding towards implementation and management of BIM in Small, Mid and Large scale Design, Construction, Facilities management, Project Management Consulting and owner organizations.

DIGITAL LEARNING ADVANTAGES

- Learning is Executives-centered
- Personalised learning
- Expanded networking opportunities
- Abundance of information
- Learning happens on Digital Transformation topics
- Collaborative learning with Global Professionals
- Effective forms of professional development.





WHY TO JOIN DIGITAL TRANSFORMATION STRATEGY CERTIFICATION?

BIMCrew helps participants develop a variety of skills through the Digital Transformation Strategist Executive program:

- Strong foundations in BIM with respect to BIM technology, process and policies
- Advanced knowledge on appropriate BIM Uses in the Project life cycle
- BIM Skillsets relevant to BIM Strategist for setting organization BIM strategy, align organizational team, performance monitoring and hand-holding and design BIM roadmaps.
- Better understanding on the **Global Trends in BIM Education**
- Training for better collaboration on Integrated BIM Projects
- Better understanding on Global BIM Adoption



































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BIM FOUNDATION



Duration: 25.0 hrs | CPD: 25.0 points

BIM Foundation will give foundational knowledge by first exploring the principles of BIM, implementation approach in built environment projects, Realising the importance of virtually designing and then constructing using VDC techniques, gaining management techniques to handle BIM in projects, creating a BIM execution plans, Understanding the Global standards and career opportunities.

Module 1	Table of Contents	Duration
M 1.1	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 Usses real world examples.	4.0
M 1.2	BIM implementation BIM Implementation approaches in Strategic Definition, Preparation and Briefing, Concept Design, Spatial Coordination, Technical Design, Manufacturing and Construction, Handover & Use stages of project.	3.0
M 1.3	Virtual Design & Construction Bringing the project to life, winning your proposal, pre-construction, standard documentation, software & hardware strategy, Level of Development & Authoring content, establishing BIM plan, BIM Kick-offs, Coordinating models, bidding & negotiations, 4D modeling, safety & risk assessments, team coordination, document management & error resolution, data capture using laser scanners, drones & 360 camera, Immersive experience with VR & MR, Facility management post occupancy evaluation	4.0
M 1.4	Management Techniques Leadership roles, Self education, planning & align, being part of BIM & Digital Ecosystem, right mentor, change management - internal & external, Client buy-in, taking ownership, open-minded approach, understanding your target audience, co-ordination meetings, BEPs, lead by examples and training strategies.	3.0
M 1.5	Creating BIM Execution Plan Introduction, basic project information, team contacts, milestones, BIM Goals & Uses, team collaboration approach, Clash detection & resolution, BIM Usage in conceptual, schematic, design development, construction, handover and asset management, defining the LOD requirements, software to be used, file naming conventions, defining milestones, coordination meeting schedules & process, references for creating BEP.	4.0
М 1.6	Global BIM Standards Working with BIM around the world, importance of ISO BIM standards, Information management types, management processes & delivery manual, ISO BIM in project life cycle, Client initiating the process, proposal activity, BIM kickoff meeting & mobilization, production, delivery & close-out activities.	3.0
M 1.7	Career Opportunities in BIM & Digitalization Obtaining a diploma/degree in BIM, Certification, Industry Expectations, BIM Software learning, Career plans in BIM production, coordination, management and leadership roles, AEC Sector organizations, financial impact, People skills, team management, driving organisational BIM leadership, BIM Forums, building your resume and portfolio, being part of BIM & Digital ecosystem.	4.0

BIM IMPLEMENTATION



Duration: 16.0 hrs | CPD: 16.0 points

BIM Implementation will give foundational knowledge by first exploring the principles of BIM and the role it plays in modern architectural, engineering, and construction (AEC) projects. It will cover the important concepts like Integrated Project Delivery(IPD), Common Data Environment(CDE), Level of Details, COBie, BIM Maturity, ISO 19650 Part-1, 2, 3 & 5, Soft landings and more that plays a key role in delivering BIM projects

Module 2	Table of Contents	Duration
M 2.1	Global trends in BIM education, mandates and implementations An awareness on global trends with respect to BIM mandates, BIM skill	1.0
	development programs, BIM Implementation and BIM R&D in 70+ countries.	
M 2.2	BIM Uses - How each Project stakeholder Uses BIM	8.0
	Includes detailed discussions on 74 BIM Uses, BIM tools & equipments related to each BIM Use, Responsible stakeholders for each BIM Use, BIM Use Process map, BIM Use deliverables.	
M 2.3	BIM implementation in Project Life cycle - RIBA PoW	1.0
	The RIBA Plan of Work organises 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.	
M 2.4	EIR-Employers Information Requirement	1.0
	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	
M 2.5	BEP-BIM Execution Plan	2.0
	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	
M 2.6	IPD-Integrated Project Delivery	2.0
	Integrated Project Delivery (IPD) is a contractual relationship with a 'more equitable' approach to distributing risks and benefits amongst main Project Participants. IPD is based on several key principles including: shared risk/reward, early involvement of key participants, and open communications. IPD encourages the use of 'appropriate technology' but does not necessarily require the use of BIModels. Please note that the term IPD has changed in meaning over time and some Noteworthy BIM Publications still refer to the old definition	
M 2.7	Benefits of BIM for Construction project stakeholders	1.0
	It is very much essential to make the project stakeholders realize the benefits of diffusing BIM in their workflows across the project life cycle and understand the return on investments.	

Continued....

BIM IMPLEMENTATION



Duration: 11.0 hrs | CPD: 11.0 points

BIM Implementation will give foundational knowledge by first exploring the principles of BIM and the role it plays in modern architectural, engineering, and construction (AEC) projects. It will cover the important concepts like Integrated Project Delivery(IPD), Common Data Environment(CDE), Level of Details, COBie, BIM Maturity, ISO 19650 Part-1, 2, 3 & 5, Soft landings and more that plays a key role in delivering BIM projects

Module 2	Table of Contents	Duration
M 2.8	LOIN - Level of Information Need A BIM metric to identify what information to include in a model during the design and construction process (also refer to Model Progression Specifications). BS EN 17412-1:2020 part 1 focusing concepts and principles will be also discussed.	1.0
M 2.9	CDE-Common Data Environment A single source of information which collects, manages and disseminates relevant, approved project documents for multi-disciplinary teams in a managed process. A Common Data Environment (CDE) is served by a Model Server and/or a Document Management System that facilitates the sharing of data/information among Project Participants. Information within a CDE need to carry one of four labels (or reside within one of four areas): Work In Progress Area, Shared Area, Published Area, and Archive Area	1.0
M 2.10	COBie-Construction Building Information Exchange COBie (Construction Operations Building Information Exchange) is a specification for the capture and delivery of design/construction information to facility managers. COBie specifications can be viewed as a simple spreadsheet or embedded into design, construction, and operation BIModels. Please note that COBie may have different uses in US, UK and other countries	1.0
M 2.11	Softlandings of BIM projects The term soft landings refers to a strategy designed to make an easy transition from the construction to occupation phases of a project with the overriding aim of realising optimal operational performance. It's all about narrowing the performance gap between design intent and operational outcomes that can emerge at any stage in a construction project.	1.0
M 2.12	ROI-Return on Investment analysis tool discussion The Return on Investment (ROI) BIM tool estimates the benefits and the level of return that the adoption of BIM Level 2 will bring to a project. The tool supports the procurer/client assess the benefits of adopting BIM Level 2 against a predefined list of benefits. The tool provides both a quantative and qualitative assessment and this is reported within an easy to understand dashboard.	1.0
M 2.13	BIM Standards overview & National Initiatives BIM Standards provides details of the standards and processes that should be adopted to enable consistent, structured, efficient and accurate information exchange.	1.0
M 2.14	ISO19650 Part 1, 2, 3, 4 & 5 Part 1 focus on concepts and principles. Part 2 focus on Delivery phase of assets. Part 3 focus on operational phase of assets. Part 4 focus on information exchange. Part 5 focus on Security-minded approach to information management.	4.0
M 2.15	Claims, Disputes and litigations in BIM Projects This is to realize the possible claims, disputes and litigations that may occur when BIM is implemented in AECO Projects	1.0

SOFTWARE & HARDWARE STRATEGY



Software strategy is a key for any AEC sector organisation during there transformation journey. You will start realizing which BIM tools are workable for different type of projects. There are hundreds of solutions in the AEC market. BIM software can be strategically identified considering factors such as interoperability, affordability, applicability, skilled manpower availability, & other factors.





































Hardware/Equipment strategy is a key for any AEC sector organisation during there transformation journey. This s helps you understand the different set of hardware available in the AEC sector. Further to this, you will start understanding which hardware are workable for different type of projects. Hardware requirements needed for BIM, including high-performance workstations, mobile devices, Experience /control centre, Jaibot, Jaser scanner, drone, 360 camera, total station, VR & AR devices, Cyber dog, 3D printer & plotter.









































SOFTWARE STRATEGY



Duration: 8.0 hrs | CPD: 8.0 points

Software strategy is a key for any AEC sector organisation during there transformation journey. This module helps you understand the different set of BIM technologies available in the AEC sector. Further to this, you will start understanding which BIM tools are workable for different type of projects. There are hundreds of BIM solutions available in the AEC market. BIM software can be strategically identified based on factors such as interoperability, affordability, applicability, skilled manpower availability, and many other factors.

Module 3	Table of Contents	Duration
M 3.1	Plannerly - The BIM Management Platform Digital platform designed to streamline and optimise BIM management and collaboration in the AECO industry. It provides a structured and user-friendly environment to simplify the planning, execution, and management of BIM projects. Key features include BEP, standards & templates, scope & task management, collaboration & communication, validation & approval, integration & interoperability & cloud based platform.	1.0
M 3.2	Autodesk - Plan, Design, Construct & Operate Offers a wide range of applications for planning, designing, visualising, and managing building and infrastructure projects. Design authoring, better visualisation & simulation, Generative design & automation, Analysis & optimisation, Collaboration & cloud integration.	1.0
М 3.3	Drone Deploy - mapping, Data analysis, & management Drone deploy supports automating site inspections, track construction projects and centralise visual data - all in one platform. Key features include Aerial Mapping and Modeling, Construction Project Management, Inspection and Asset Management, Real-Time Data Capture, Advanced Analytics, Cloud- Based Collaboration, & Integration and Interoperability.	1.0
M 3.4	Bexel Manager - Project Controls Advanced software platform designed to streamline BIM workflows for project management, Comprehensive BIM data management, 4D Construction planning & scheduling, 5D cost estimation, clash detection & coordination, facility & asset management, customisable dashboards & reporting, cloud integration & collaboration, support for standards & regulations	1.0
M 3.5	Kalloc Studios Fuzor - Virtual Design & Construction Fuzor is capable of combining large 3D models, point cloud data and the schedule to simulate the construction methodology and produces detailed method statements. Designed to create training material to better prepare your logistics & field workers for the job-site. Effective project control with planned and actual schedule, cost tracking and model-based quantity take-offs in 4D construction sequence simulations and reports.	1.0
М 3.6	Matterport - Immersive & interactive environments Digital twins captured with matterport are widely used in real estate, construction, retail, travel, and facilities management to enhance visualisation, collaboration, and decision-making. Key features include 3D Digital Twin Creation, Virtual tours, Measurement and Annotation Tools, Cloud-Based Platform, Al-Powered processing, & Time-Lapse and Change Detection.	1.0
М 3.7	ACCA - Design, manage, and Analyse Projects These solutions are widely recognised for their focus on usability and affordability, enabling AEC professionals to adopt BIM practices effectively. Whether for design, safety, cost management, or cloud collaboration, ACCA BIM provides a robust ecosystem for managing projects end-to-end.	1.0
М 3.8	Revizto - Collaboration & Issue Management It enables multidisciplinary teams to work together in real time, helping to streamline communication, enhance transparency, and improve project outcomes. Focus on Centralized Issue Management, 3D Model and 2D Document Integration, Clash Detection and Resolution, Cross-Platform Access, Real-Time Collaboration, Integration with BIM Tools, VR and AR Support & Cloud-Based and Secured.	1.0

SOFTWARE STRATEGY



Duration: 10.0 hrs | CPD: 10.0 points

Software strategy is a key for any AEC sector organisation during there transformation journey. This module helps you understand the different set of BIM technologies available in the AEC sector. Further to this, you will start understanding which BIM tools are workable for different type of projects. There are hundreds of BIM solutions available in the AEC market. BIM software can be strategically identified based on factors such as interoperability, affordability, applicability, skilled manpower availability, and many other factors.

Module 3	Table of Contents	Duration
М 3.9	Visilean - Lean Principles with BIM cloud-based construction management platform that integrates lean principles with BIM to improve project planning, execution, & delivery. Focus on lean Planning, Real-Time Collaboration, BIM Integration, Task Management and Tracking, Visual Dashboards & Analytics, & Issue management.	1.0
M 3.10	Nemetschek - design, construction & Operation Innovative solutions that span the entire building lifecycle, from design and construction to operation and management. Key features include design authoring, model quality assurance & BIM Validation, data management, Collaboration & Issue tracking, Digital Twins & Facility management.	1.0
M 3.11	Bentley - Infrastructure Engineering Bentley offers solutions to design, construct, and manage infrastructure projects, including roads, bridges, buildings, industrial plants, railways, utilities, & more. Key features include design & modeling, construction management, asset performance, digital twin, & infrastructure sustainability.	1.0
M 3.12	Trimble - Construction Lifecycle Trimble offers end-to-end tools for the construction lifecycle. Focus on design & modeling, field solutions, project management, machine control & automation, Geospatial solutions, IOT, cloud computing and AI to connect teams & assets, cloud & mobile accessibility.	1.0
M 3.13	Esri - mapping & spatial analytics To leverage spatial data for decision-making, planning, and problem-solving. Key features include create-manage-analyse-share geospatial data, spatial analytics, data visualization, Al & ML, IOT Integration, Geo-BIM, & Digital Twins.	1.0
M 3.14	Invicara - BIM & Digital Twin focuses on empowering owners, designers, and constructors with better insights into building data, enabling improved decision-making and more efficient processes. Features include BIM data management, digital twin soln., Asset information modeling, cloud based & IOT enabled.	1.0
M 3.15	Bricsys - 2D, 3D & BIM innovative, interoperable solutions that enhance productivity and collaboration across industries. Key features include design & modeling of all disciplines, AI tools, Cloud collaboration, AI powered productivity.	1.0
М 3.16	Dassault Systems - 3D design, digital mock-up, & PLM Tools for BIM, urban planning, and infrastructure development. Key features include 3D Experience platform, modeling, social collaboration, simulation and information intelligence & cloud collaboration.	1.0
M 3.17	Isetia - Comprehensive project management integrates project scheduling, document management, task tracking, and analytics into a unified environment, enabling teams to enhance productivity and transparency throughout the project lifecycle.	1.0
М 3.18	Graphisoft - design, construct, & operate buildings comprehensive suite of tools for architects, urban planners, and designers to plan, design, and manage building projects. Key features include modeling, drawing, documentation, BIM collaboration, Open-BIM, design & visualization, sustainability & energy modeling.	1.0

HARDWARE STRATEGY



Duration: 12.0 hrs | CPD: 12.0 points

Hardware/Equipment strategy is a key for any AEC sector organisation during there transformation journey. This s helps you understand the different set of hardware available in the AEC sector. Further to this, you will start understanding which hardware are workable for different type of projects. Hardware requirements needed for BIM, including high-performance workstations, mobile devices, Experience /control centre, Jaibot, laser scanner, drone, 360 camera, total station, VR & AR devices, Cyber dog, 3D printer & plotter.

Module 4	Table of Contents	Duration
M 4.1	Work-station, Laptop, Tablet & Mobile devices Discussions on the device processor, RAM, hard disk, Graphics card, browser, connectivity, operating system, compatibility, pricing, and data exchange formats. Basic understanding on brands available in market for easy sync with BIM ecosystem.	2.0
M 4.2	Experience Center & Control Rooms Enables projects of all sizes to be realised in an immersive, interactive and collaborative virtual environment. It provides 1:1 experience of the projects and its related data. The cutting edge VR devices allows team to work together rather than alone via a headset. BIM Experience Centre can be set up for enabling experience and coordination meetings.	3.0
M 4.3	BIM to Field, Reality capture & Visualisation Discussions on BIM to field equipment like Jai-bot & total station for semi- automated over head drilling for MEP works, reality capture device like laser scanner for progress monitoring and creation of accurate as-built models, and visualisation equipments like virtual reality for immersive experience of project, Augmented reality device for site trainings, site co-ordination, quality control and progress monitoring, Total station for BIM guided site survey and updating as-built models.	2.0
M 4.4	Reality Capture Device - Drone, 360 camera & Cyber dog Drone usage for aerial mapping and construction management, 360 degree camera for reality capture and site progress monitoring, Cyber dog for scanning, quality control and site progress monitoring, Indoor scanner for scanning interior spaces in high details to enable visualisation, measurements, snag lists & reporting.	3.0
	Reality capture data can enable pre-site survey, enhanced site logistics, earth work, quantification, capture critical milestones, site document control, progress documentation, Quality assurance and control and to compare BIM models.	
M 4.5	3D Printer, Plotter, Presenter, Holo-table, wall & room 3D Printer for automating the construction process by using large-scale 3D printers capable of creating entire buildings or structural components. Plotter for producing high-quality, large-format drawings, plans, and graphics. Holographic indoor presenter. Holo table / wall / room for immersive experience. The Holo-Table is a 2x2m device that provides a bird's eye view of realistic 3D data. The table is best for visualizing landscapes and tracking real-time developments. The Holo-Wall creates a 2x3.5m screen which visualizes 3D information and acts as an interface between the real and virtual world. Holograms can extend out into the room up to 4m. The Holo-Room is a 4x5m fully immersive room, suitable for lifelike and life-size experiences and realistic simulations. All 3D filetypes can be displayed and interacted with.	2.0

BIM ROLES STRATEGY



Duration: 15.0 hrs | CPD: 15.0 points

BIM & Digitalization roles are broadly classified into production, management and leadership roles. Client, General Contractor, Sub-Contractors, Consulting firms, Asset Operations and government agencies all of them need BIM team. The BIM roles required in each type of organisation varies. Broader set of BIM roles are discussed in this module. Skill & capacity building for each BIM roles at production, management & leadership level varies.

Module 5	Table of Contents	Duration
M 5.1	BIM Production Roles BIM Production roles focus on modelling, documentation, coordination & collaboration, quality control & delivery.	9.0
	BIM Modellers for Architectural, Landscape, Interior design, Civil, Structural, Mechanical, Electrical, Plumbing, Fire protection, Electrical Alarm System, IT, Security & AV. BIM Engineer for object / family / library creation.	
	BIM Experts for 4D BIM - Construction planning & monitoring, 5D BIM - for cost planning & monitoring.	
	BIM Specialist for Immersive Experience , VDC simulations, Reality capture, Lean & Green, Geo-BIM, smart contracts, ROI, Safety & Risk, Procurement & Logistics, Digital Twin & Building Automation.	
M 5.2	BIM Co-ordinator & Management Roles	3.0
	BIM Co-ordination & Management roles focus on project planning, coordination & collaboration, implementation & planning, standards & guidelines, model management & quality control.	
	BIM Coordinators for Design, Construction & Asset Management, trainings, partnerships & CDE, modular strategies.	
	BIM Manager for information management in design, construction & Asset management.	
M 5.2	BIM Advisory & leadership Roles	3.0
	BIM Advisory & leadership roles focus on strategy / roadmap development, standards & guidelines, implementation planning, training & support, coordination & collaboration, partnerships, Investments & ROI.	
	BIM Advisory is an expert role who understands market level digital transformation & deeply connected in BIM ecosystem. Can advice AEC sector organisations in organisation and business strategies, support in critical decision making in-terms of software, hardware, team building, partnerships, trainings and workflow strategies, support in activating BIM & digital departments in organizations and handhold during the transformation journey.	
	BIM Leadership is a senior role in AECO sector organizations. They understand the pain-points and change management approach to support the BIM adoption. He will have good understanding on project strategies which deep dives on understanding customer requirements and building the team that support the customers expectation. BIM production & management roles report to leadership role. he is responsible to get the BIM workflow aligned to procure Org BIM certification.	

PARTNERSHIP STRATEGY



Duration: 15.0 hrs | CPD: 15.0 points

Geospatial, BIM (design authoring), Engineering analysis, Digital Twin, Project controls, VDC, Reality capture, Immersive experience, Building management system, trainings and hand-holding services are available from BIM & digitalization service provers. These services are available in siloed approach. This module will support in understanding how to enable one-stop solution to your clients.

Module 6	Table of Contents	Duration
M 6.1	Design & Engineering Analsyis	2.0
	It is a critical phases where concepts are transformed into detailed, practical, and efficient plans. This process ensures the project meets technical, aesthetic, functional, and safety requirements while aligning with budget and timeline constraints.	
M 6.2	GIS - Geographical Information Systems	1.0
	GIS services involve collecting, managing, analyzing, and visualizing spatial or geographic data to support decision-making across various sectors. Focus on data collection & management, mapping & visualisation, spatial analysis, geocoding & address matching, remote sensing, 3D modeling & visualization	
M 6.3	BIM - Building Information Modeling	2.0
	BIM is digital process that uses intelligent 3D models to support the design, construction, and management of buildings and infrastructure throughout their lifecycle. It is all about building the BIM Model of all disciplines (ASMEPF) with LOD levels of 100, 200, 300, 350, 400 & 500. Includes generation of design, construction, fabrication and as-built drawings.	
M 6.4	Project Controls	2.0
	It enhance efficiency, accuracy, and decision-making across the lifecycle of a construction project. By leveraging the data-rich BIM environment, project controls help in monitoring, managing, and optimising time, cost, quality, and performance. Focus on time, cost, resource, quality, risk, change and performance management.	
M 6.5	VDC - Virtual Design & Construction	2.0
	It enables stakeholders to visualize, analyze, and optimize project processes in a virtual environment before physical execution. Focus on construction sequencing, cost analysis, logistics & site planning, risk analysis, energy & sustainability analysis, training & safety areas.	
M 6.6	Reality capture	2.0
	Enables creation of accurate digital representations of physical spaces using technologies like laser scanners, drones, and 360-degree cameras. Enables capturing geometric, spatial, and visual data to inform design, construction, and facility management processes. Focus on As-built documentation, site surveys, construction monitoring, facility management, & Historic preservation.	
M 6.7	Immersive Experience - VR / AR /MR	2.0
	Construction professionals visualize, design, and manage projects with immersive experience. Enhances collaboration, improve decision-making, and reduce errors by enabling users to interact with digital models in realistic or augmented environments. Focus on design visualization, planning & monitoring, clash detection & coordination meetings, safety trainings & asset operations.	
M 6.8	Building Automation - BIM+IOT	2.0
	BIM & IOT are revolutionizing smart asset management by enabling real-time monitoring, analysis, and optimization of building systems and infrastructure. This synergy combines the data-rich environment of BIM with IoT's ability to gather and transmit real-time information, facilitating smarter decision-making throughout the asset lifecycle. Focus on predictive maintenance, energy management, space utilization, safety & security, & smart facility operations.	

BUSINESS STRATEGY



Duration: 23.0 hrs | CPD: 23.0 points

Organizational BIM Strategy module covers topics that are relevant to support Digital Transformation of AECO organizations. Establish organization / Project BIM Strategy, Performance monitoring, organization/project staffing, design BIM Skill development programs, Maturity assessments and certifications, Networking techniques, A-Z BIM Service planning, setting up Center of Excellence, etc.

Module 7	Table of Contents	Duration
M 7.1	Establishing Organization BIM Strategy Realizing the process of defining Organizational BIM Strategies which involves defining BIM Vision, Mission, Goals, Objectives, Sub-objectives, Expected outcomes, Identifying critical success factors, defining performance measures, developing performance measurement dashboards, design BIM road-maps, progress monitoring, aligning team towards organization Vision & Mission, upskilling the organizational team, hand-holding the team as and when needed.	12.0
M 7.2	Realizing the process of defining Project BIM Strategies which involves understanding the client requirements, formulating EIR-Employers Information Requirement (OIR+PIR+AIR), Developing HSP-High Strategy Plan and BEP-BIM Execution Plan (pre and post contract) from contractor side, aligning AECO organizations participating in delivering BIM project, performing quality audits and hand-holding project teams as and when needed to successfully delivery BIM project as planned.	2.0
M 7.3	Organisational BIM Maturity Assessments / BIM Audit Assessing the maturity of BIM adoption on a project or within your organization can provide insight to ways to improve processes and better take advantage of the benefits of BIM. The BIM Maturity Measurement tool is an Excel-based tool designed to help measure your understanding of BIM and help guide you towards BIM Level 2. It is a discipline-agnostic tool that seeks to measure just how much a project has used BIM and how successful this has been. It will also provide highlights on areas for improvement.	2.0
M 7.4	Getting ready for ISO BIM Certification Basic understanding on how to serve as BIM auditor for guiding AECO Organizations to achieve ISO BIM Certification. Deeper understanding on different phases of auditing, understanding factors in ISO 19650 assessment matrix, documentation involved for getting an organization ISO BIM Certified.	2.0
M 7.5	Delivering BIM in Built Environment Projects One of the UK BIM Levels. Level 2 BIM refers to collaborative work practices where parties generate their own 3D models and share information through the Common Data Environment using common file formats. Project data is typically managed using enterprise resource planning software, and integrated by proprietary interfaces or bespoke middleware. In general, the progression from lower to higher levels of BIM Maturity indicates (i) better control through minimizing variations between targets and actual results, (ii) better predictability and forecasting by lowering variability in competency, performance and costs and (iii) greater effectiveness in reaching defined goals and setting new more ambitious ones.	3.0
М 7.6	Activating BIM Services at your organization Basic understanding on twelve BIM research directions, identifying the research direction that is of your interest. Support in developing the BIM business to plan a start-up or support your organization in activating new BIM services.	2.0













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