



建造專業
進修院校

SCHOOL OF
PROFESSIONAL
DEVELOPMENT IN
CONSTRUCTION



CIC ACCREDITED
BIM MANAGER COURSE
建造業議會認證建築信息模擬經理課程



香港
建造
學院
HONG KONG
INSTITUTE
OF
CONSTRUCTION



CITF 建造業
創科基金
CITF Pre-approved Course

BMFZ / BMNZ

Professional Certificate for Building Information Modelling (BIM) Manager

建築信息模擬經理專業證書

To train up the project managers and senior professionals to master necessary BIM knowledge, and to satisfy the requirement of completing a CIC-Accredited BIM Manager Course for applying for certification of BIM Manager.

培訓項目經理和專業人士以掌握建築信息模擬技術，並滿足其申請建造業議會「建築信息模擬經理認可」對完成建造業議會認證之有關課程的要求。

	BMFZ	BMNZ
Lecturer 講師	Professionals 專業人士	
Medium of Instruction 授課語言	Cantonese supplemented with English technical terms 廣東話輔以英文技術用語 Only English version of the course materials and computer software is used for teaching in class 本課堂以英文版本的教材及電腦軟件教學 Only English versions of assignments and examination papers will be used for assessment in class. 本課堂採用英文版本習作及考試卷作評核	
Mode of Attendance 授課形式	Part-time day course 日間部份時間制： 09:00 to 17:30 (Class 1 to 2) (第一至二堂) 09:00 to 18:00 (Class 3 to 5) (第三至五堂)	Part-time evening 夜間部份時間制： 19:00-22:00
Duration 授課期	7.5 hours x 2 sessions and 8 hours x 3 sessions 7.5 小時 x 2堂及8小時 x 3堂	3 hours x 13 sessions 3小時 x 13堂
Award of Certificate 證書頒發	1. Completion Certificate (i) Attended 36 hours or above; (ii) Completed all continuous assessments (iii) Completed and passed final assessments (iv) Obtained 50 marks or above for the programme average. 2. Certificate of Attendance – Attended 36 hours or above. 1. 結業證書 (i) 出席課程36小時或以上； (ii) 完成所有持續評核； (iii) 完成期末評核及取得合格成績； (iv) 取得課程平均分50分或以上。 2. 出席證書 – 出席課程36小時或以上	1. Completion Certificate (i) Attended 36 hours or above; (ii) Completed all continuous assessments (iii) Completed and passed final assessments (iv) Obtained 50 marks or above for the programme average. 2. Certificate of Attendance – Attended 36 hours or above. 1. 結業證書 (i) 出席課程36小時或以上； (ii) 完成所有持續評核； (iii) 完成期末評核及取得合格成績； (iv) 取得課程平均分50分或以上。 2. 出席證書 – 出席課程36小時或以上
Re-Exam 補考	The course offers only one re-exam opportunity. The fee for the re-exam is HK\$100. 課程僅提供一次補考機會，補考費用為港幣\$100元	
Venue 上課地點	HKIC Kowloon Bay Campus, 44 Tai Yip Street, Kowloon Bay, Kowloon 九龍 九龍灣大業街 44 號香港建造學院九龍灣院校	
Admission Requirements 入學條件	1) Holder of a recognised Higher Diploma or above qualification in architecture, engineering, surveying or construction, offered by a post-secondary institution, or equivalent; and 2) Have at least two years' experience in relevant fields of project management in construction industry, such as architecture, engineering, surveying or construction; and 3) Have basic BIM knowledge; and 4) Admission priority will be given to applicants who are eligible for registration as a CIC-certified BIM Manager. 1) 持有由認可專上教育機構頒發的建築(architecture)、工程(engineering)、測量(surveying)或建造(construction)相關高級文憑；或同等學歷；及 2) 具備2年或以上建造業有關範疇的管理工作經驗，如建築、工程、測量或建造等；及 3) 對BIM有基本認識；及 4) 申請人如具備申請註冊為建造業議會認證的建築信息模擬經理的資格，可獲優先考慮。	
Course Fee 課程費用	\$10,000.00	
Enquiry 查詢課程	2100 9000 / 2100 9525	
Recognition 資格承認	Successful completion of this programme is one of the criteria for registration as a CIC-certified BIM Manager. 完成此課程可符合其中一項申請註冊建造業議會認可建築信息模擬課程經理的條件。	
Application Method 報名方法	Please apply online on SPDC portal 請透過建造專業進修院校的 網上報名系統 報名	

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Professional Certificate for Building Information Modelling (BIM) Manager

建築信息模擬經理專業證書

Course Content 課程內容
1.1. BIM Concept 1.1.1 BIM definitions and terminology 1.1.2 The difference between 2D CAD, 3D CAD and BIM 1.1.3 BIM in the context of whole life cycle of a built asset and smart city 1.1.4 Value and benefits of adopting BIM in the whole life cycle of a built asset 1.1.5 Collaborative working in BIM 1.1.6 Limitation of BIM 1.1.7 How BIM can affect the AECO practice and address the current challenges 1.2. Local & Global Contexts, BIM standards & guidelines 1.2.1 Local BIM standards, publications and available resources 1.2.1.1 CIC BIM standards and other related publications and resources 1.2.1.2 Government BIM & BIM-AM related technical circulars, standards, guidelines and publications 1.2.2 BIM development in Mainland and global context 1.2.3 Mainland and international BIM standards, publications and initiatives 1.2.3.1 Mainland BIM standards GB/T series 1.2.3.2 ISO 19650 series 1.2.3.3 openBIM and other collaborative formats
2.1. BIM Software 2.1.1 Common BIM software and platforms for various trades 2.1.2 Key characteristics, file format & version, strength and limitation of common BIM software and platforms 2.1.3 Interoperability across common BIM software and platforms
2.2. Technologies 2.2.1 Internet & cloud 2.2.2 Laser scanning & photogrammetry 2.2.3 Unmanned Aircraft System (UAS) / Drone 2.2.4 Geographic Information System (GIS) 2.2.5 Common Spatial Data Infrastructure (CSDI), 3D Digital Map and 3D Photo-realistic Model by the HKSAR 2.2.6 Internet of Things (IoT), Radio Frequency Identification (RFID), mobile or smart devices 2.2.7 Virtual reality (VR), Augmented Reality (AR) and Mixed Reality (MR) 2.2.8 Digital Twin 2.2.9 Robotics 2.2.10 Programming, automation and API 2.2.11 MiC, MiMEP and DfMA 2.2.12 Indoor positioning 2.2.13 Artificial Intelligence (AI), Machine Learning and Large Language Model (LLM) 2.2.14 Smart Site Safety System (4S) and Digital Works Supervision System (DWSS)

Course Content

課程內容

3.1. BIM Organisational Strategy and Requirements

3.1.1 Overview of BIM strategy, uses and organisation

3.1.2 Key personnel in relation to BIM and their roles and responsibilities

3.1.3 Establish and lead the development of the BIM Requirements at the organisational level

3.1.3.1 Organisational Information Requirements (OIR)

3.1.3.2 Asset Information Requirements (AIR)

3.1.3.3 Security Information Requirements (SIR)

3.1.4 Develop and lead the implementation of the CDE strategy at the organisational level

3.1.5 Establish and manage the strategies for integrating BIM with broader construction digitalisation technologies at the organisational level (e.g. GIS, Digital Twin, 4S, etc)

3.1.6 Case study

3.2. Project Planning Stage

3.2.1 Define and establish the Appointing Party BIM Requirements and the Project Information Requirements (PIR) at the project level

3.2.2 Develop and manage the Exchange Information Requirements (EIR)

3.2.3 Determine and lead the integration of technologies and system requirements at the project level (e.g. BIM software, platforms, CDE, etc.)

3.2.4 Develop and oversee project delivery requirements and appropriate BIM Uses at the project level

3.2.5 Develop and manage the Level of Information Need (LOIN) to be adopted at the project level

3.2.6 Establish and manage the BIM & information standards, methods and procedures at the project level

3.2.7 Coordinate and manage the shared resources with the Lead Consultant / Lead Contractor at the project level

3.2.8 Assess and validate the capability and capacity of the delivery team

3.2.9 Case study

3.3. Project Design Stage

3.3.1 Pre-appointment and Post-appointment BIM Implementation Plan (BIMIP)

3.3.2 Pre-appointment and Post-appointment BIM Execution Plan (BEP)

3.3.3 Information Management Assignment Matrix

3.3.4 Detailed modelling methodology and requirements

3.3.5 Production and delivery of the BIM Uses in the planning and design stages

3.3.6 BIM-related meetings, reporting and documentations

3.3.7 Case Study



Course Content

課程內容

3.4. Project Construction & Handover Stage

- 3.4.1 Pre-appointment and Post-appointment BIM Implementation Plan (BIMIP)
- 3.4.2 Pre-appointment and Post-appointment BIM Execution Plan (BEP)
- 3.4.3 Information Management Assignment Matrix
- 3.4.4 Detailed modelling methodology and requirements
- 3.4.5 Production and delivery of the BIM Uses in the construction and handover stages
- 3.4.6 BIM-related meetings, reporting and documentations
- 3.4.7 Case Study

3.5. Building/Asset Operation & Maintenance Stage

- 3.5.1 Technologies for BIM asset management and integration with the building / asset management system
- 3.5.2 Production and delivery of the Asset Information Model (AIM) and associated data for operation and maintenance (O&M) stage
- 3.5.3 Information exchange from the AIM to the building / asset management system
- 3.5.4 Maintenance of Asset Information Model (AIM) throughout the O&M stage
- 3.5.5 Multi-disciplinary coordination on BIM-based asset management with asset management, facility management, and operation teams
- 3.5.6 Case Study

4.1. Digital Information Management

- 4.1.1 Information management workflow for various work stages
- 4.1.2 BIM information and model exchange for multi-disciplinary collaboration
- 4.1.3 Details of the Level of Information Need (LOIN) in terms of graphical, non-graphical, and documentation requirements for various work stages
- 4.1.4 Integration, archiving, and handover of BIM model and associated data across the work stages
- 4.1.5 Maintenance of various BIM related coding systems and classifications for various work stages
- 4.1.6 Plan and manage the process of information exchange across various open / proprietary file formats (e.g. BCF, IFC, IDM, bsDD, COBie, MVD, IDS, etc.)

4.2. Common Data Environment (CDE)

- 4.2.1 CDE and the workflow as per ISO 19650
- 4.2.2 Common CDE solutions in the market
- 4.2.3 Establish and manage a CDE
- 4.2.4 Assess and select an appropriate CDE based on project requirements
- 4.2.5 Information exchange process of CDE
- 4.2.6 Limitation of CDE
- 4.2.5 Management of CDE
- 4.2.6 Limitation of CDE

Course Content

課程內容

4.3. Data Quality Control & Assurance across various stages

4.3.1 Plan and develop BIM quality assurance and audit processes, methodologies and checking systems for various work stages

4.3.2 Manage the production of BIM quality assurance, audit and model checking for various work stages

4.3.3 Define and oversee the production of BIM quality assurance and audit reporting for various work stages

5.1 Commercial Issue

5.1.1 Foster BIM literacy across organisation and stakeholders

5.1.2 Define and manage the requirements of hardware, software and IT infrastructure for BIM

5.1.3 Lead human resource management, competency and training for BIM

5.1.4 Lead the procurement and supply chain management for BIM

5.1.5 Establish and oversee risk management for BIM strategies for BIM implementation

5.2 Contractual and Liabilities Issues

5.2.1 Potential risks associated with model sharing, data accuracy and reliance on digital deliverables

5.2.2 Contractual provisions related to BIM, such as roles and responsibilities, ownership of models, intellectual property rights, and protocols for data exchange etc.

5.2.3 How BEPs, information requirements and standards integrate with contractual frameworks to define deliverables and the rights and liabilities of the parties involved