



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 廣東話	
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
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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Course Content 課程內容
<p>1.1. BIM Concept</p> <p>1.1.1 BIM definitions and terminology</p> <p>1.1.2 The difference between 2D CAD, 3D CAD and BIM</p> <p>1.1.3 Concept of BIM in the whole life cycle of a built asset</p> <p>1.1.4 Value and benefits of adopting BIM</p> <p>1.1.5 Value of BIM for AM & FM</p> <p>1.1.6 Collaborative working in BIM</p> <p>1.1.7 Limitation of BIM</p> <p>1.1.8 Challenges within existing working practices & how BIM addresses</p> <p>1.1.9 How BIM affect the current practice in AECO industry</p> <p>1.2. Local & Global Contexts, BIM standards & guidelines</p> <p>1.2.1 Local BIM standards and resources</p> <p>1.2.1.1 CIC BIM standards</p> <p>1.2.1.2 Government BIM standards & resources</p> <p>1.2.2 Global context in BIM development</p> <p>1.2.3 Global BIM standards & resources</p> <p>1.2.3.1 ISO 19650</p> <p>1.2.3.2 BIM FORUM LOD Specification</p> <p>1.2.3.3 openBIM and collaborative formats</p>
<p>2.1. BIM Software</p> <p>2.1.1 Overview of common BIM software</p> <p>2.1.2 Characteristic, file format & version, strength and limitation of common BIM software and platform</p> <p>2.1.3 Interoperability across industry leading common BIM authoring software</p>
<p>2.2. Technologies</p> <p>2.2.1. Internet & cloud</p> <p>2.2.2 Laser scanning & photogrammetry</p> <p>2.2.3 Unmanned Aircraft System (UAS) / Drone</p> <p>2.2.4 GIS</p> <p>2.2.5 Internet of Things (IoT), mobile or smart devices</p> <p>2.2.6 VR/AR/MR</p> <p>2.2.7 RFID</p> <p>2.2.8 VDC</p> <p>2.2.9 Robotics</p> <p>2.2.10 Programming, automation and API</p> <p>2.2.11 MiC, DfMA and MiMEP</p> <p>2.2.12 Indoor positioning</p> <p>2.2.13 Upcoming trend of technology</p>

Course Content

課程內容

3.1. Client BIM Strategic Stage

- 3.1.1. BIM strategy, BIM uses, BIM processes
- 3.1.2. Key personnels in relation to BIM and their roles and responsibilities
- 3.1.3. Determine the information management & CDE strategy
- 3.1.4. Determine the BIM / AIM / GIS strategy
- 3.1.5. Determine level of development in the context of graphics and information under LOIN
- 3.1.6. Determine level of integration of digital information into asset & facility management
- 3.1.7. Case study

3.2. Client Pre-tender Project Stage

- 3.2.1 Determine & oversee the development of Appointing Party requirements
 - 3.2.1.1 Organisational Information Requirements (OIRs)
 - 3.2.1.2 Asset Information Requirements (AIRs)
 - 3.2.1.3 Project Information Requirements (PIRs)
 - 3.2.1.4 Security Information Requirements (SIRs)
- 3.2.2 Employers Information Requirements (EIRs)
- 3.2.3 Determine project technology & systems requirement & integration
- 3.2.4 Determine project delivery requirements and identify appropriate BIM Uses
- 3.2.5 Contract & consultancy requirement
- 3.2.6 Assessment on supply chain capability & capacity (Tender Assessment)
- 3.2.7 Case study

3.3. Definition & Design Stage

- 3.3.1 BIM Execution Plan developed by supply chain
 - 3.3.1.1 Pre-appointment BIM Project Execution Plan
 - 3.3.1.2 Post-appointment BIM Project Execution Plan
- 3.3.2 Supervision in fulfilling BIM uses in planning & design stages listed in CIC BIM Standards
- 3.3.3 Project Information Model (PIM) data exchanges and validation
- 3.3.4 BIM PIM file setup
 - BIM origin point & orientation setup
 - Model division
 - Modelling methodology
 - Project-based industry and BIM standards
- 3.3.5 Direct BIM related meetings
 - Meeting with Appointing Party and Appointed Parties
 - Meeting for multidiscipline design collaboration
 - Internal steering and coordination meeting
 - Meeting with or giving presentation to external stakeholders
- 3.3.6 Case Study

Course Content 課程內容
<p>3.4. Construction Stage</p> <p>3.4.1 BIM Execution Plan developed by supply chain</p> <ul style="list-style-type: none"> - Pre-appointment BIM Project Execution Plan - Post-appointment BIM Project Execution Plan <p>3.4.2 Supervision in fulfilling BIM uses in construction listed in CIC BIM Standards</p> <p>3.4.3 Project Information Model (PIM) data exchanges and validation</p> <p>3.4.4 Direct BIM related meetings</p> <p>3.4.5 Case Study</p>
<p>3.5. Handover Stage</p> <p>3.5.1 As-built information verification</p> <p>3.5.2 Oversee data transfer from PIM to As-built Information Model (ABIM) and then to Asset Information Model (AIM)</p> <p>3.5.3 Supervision in fulfilling BIM uses in handover stage listed in CIC BIM Standards</p> <p>3.5.4 Case study</p>
<p>3.6. Operation & Maintenance Stage</p> <p>3.6.1 Update Assets Information Model (AIM)</p> <p>3.6.2 Roles, responsibilities and authorities for maintaining the AIM</p> <p>3.6.3 Post occupancy evaluation</p> <p>3.6.4 Case Study</p>
<p>4.1. Digital Information Management</p> <p>4.1.1. Value of data & how it should be managed</p> <p>4.1.2. Interoperate data/information to facilitate cross-disciplinary and cross-BIM platform collaboration</p> <p>4.1.3. Limitation of BIM software in relation to information management</p> <p>4.1.4. Determine level of development in the context of graphics and information in different stages under LOIN</p> <p>4.1.5. Determine level of integration of digital information into asset & facility management</p> <p>4.1.6. Oversee the process and quality of information exchange in different formats (BCF, IFC, IDM, bsDD, COBie, MVD, etc.)</p>
<p>4.2. Common Data Environment (CDE)</p> <p>4.2.1 CDE solution and workflow</p> <p>4.2.2 Overview of CDE solutions in the market</p> <p>4.2.3 Setup of CDE</p> <p>4.2.4 Assessment and selection of CDE</p> <p>4.2.5 Management of CDE</p> <p>4.2.6 Limitation of CDE</p>

Course Content

課程內容

4.3. Data Quality Control & Assurance across various stages

- 4.3.1. System checking (including software and hardware)
- 4.3.2. Model audit
- 4.3.3. Model checking
- 4.3.4. Audit reporting

5.1 Commercial Issue

- 5.1.1. Establish BIM ready environment to support the corporate
 - 5.1.1.1 BIM strategy in organization level
 - 5.1.1.2 Challenges in BIM implementation
 - 5.1.1.3 Phases in BIM implementation
 - 5.1.1.4 Hardware requirement for BIM
 - 5.1.1.5 Software requirement for BIM
 - 5.1.1.6 Manpower management for BIM
 - 5.1.1.6.1 Staff plan
 - 5.1.1.6.2 Staff recruitment
 - 5.1.1.6.3 Staff training
- 5.1.2. Promotion of adopting BIM in office / to appointing party
 - 5.1.2.1 Value and benefit of adopting BIM
 - 5.1.2.2 Value and benefit of data and information from BIM
 - 5.1.2.3 Evaluating Return on Investments (ROI) of adopting BIM

5.2 Contract Issue

- 5.2.1 Ownership of data
- 5.2.2 Intellectual property right
- 5.2.3 Legal implication and potential liability
- 5.2.4 Professional indemnity
- 5.2.5 Introducing NEC4 and Option X10 for BIM
- 5.2.6 Commercial implications for contracts & insurances in relation to BIM