



Application for Listing under HKIA BIM Accreditation Programme

Please read the Notes to Applicant in Part H before completing this form.

A. APPLICATION TYPE

Please tick as appropriate:

BIM Pro (HKIA) / BIM Pro

- I DO NOT wish to apply for Construction Industry Council - Certified BIM Manager ('CCBM') under the streamlining processing.

Remark: Without checking the box, BIM Co applicant gives his/her consent on applying for both HKIA BIMpro and CIC Certified BIM Manager (CCBM) qualifications under streamlining processing automatically.

- I am currently a Construction Industry Council - Certified BIM Manager (CCBM).

BIM Co (HKIA) / BIM Co

- I DO NOT wish to apply for Construction Industry Council - Certified BIM Coordinator ('CCBC') under the streamlining processing.

Remark: Without checking the box, BIM Co applicant gives his/her consent on applying for both HKIA BIM Co and CIC Certified BIM Coordinator (CCBC) qualifications under streamlining processing automatically.

- I am currently a Construction Industry Council - Certified BIM Coordinator (CCBC).

B. APPLICANT PARTICULARS

Name : (English) _____
Surname Given Name

(Chinese) (if any) _____

HKIA Membership No.: _____ Gender : _____

HKIA Membership Category:
(Please tick as appropriate.)

- Fellow
- Member
- Graduate Member
- Affiliate
- Referred by RP, please fill in referee information below:

Name of RP: _____

Name of Referee: _____

(include HKIA Membership No.)

Signature of Referee

(with company chop)

Office Name : _____

Office Address : _____

Office Tel. : _____ Mobile : _____ Fax : _____

Email Address : _____

C. BIM WORKING EXPERIENCE

Please present your working experience in chronological order starting from the latest practical experience. Separate sheet may be attached to the application form if space is insufficient.

1.	BIM										
Project Name :		_____									
Your Position :		_____									
Project Duration involved :		dd	mm	yyyy	to	dd	mm	yyyy	(mths	days)
Duration involved in Hong Kong :		dd	mm	yyyy	to	dd	mm	yyyy	(mths	days)
Certifier Name (Employer) :		_____									
		HKIA Registered Practice <input type="checkbox"/> Y <input type="checkbox"/> N <i>(Please tick as appropriate.)</i>									
Certifier Signature :		_____									
		Date :									
Certifier Name (HKIA Member) :		_____									
		<input type="checkbox"/> Fellow <input type="checkbox"/> Member <i>(Please tick as appropriate.)</i>									
		HKIA Membership No. : _____									
Certifier Signature :		_____									
		Date :									

2.	BIM										
Project Name :		_____									
Your Position :		_____									
Project Duration involved :		dd	mm	yyyy	to	dd	mm	yyyy	(mths	days)
Duration involved in Hong Kong :		dd	mm	yyyy	to	dd	mm	yyyy	(mths	days)
Certifier Name (Employer) :		_____									
		HKIA Registered Practice <input type="checkbox"/> Y <input type="checkbox"/> N <i>(Please tick as appropriate.)</i>									
Certifier Signature :		_____									
		Date :									
Certifier Name (HKIA Member) :		_____									
		<input type="checkbox"/> Fellow <input type="checkbox"/> Member <i>(Please tick as appropriate.)</i>									
		HKIA Membership No. : _____									
Certifier Signature :		_____									
		Date :									

C. BIM WORKING EXPERIENCE

Please present your working experience in chronological order starting from the latest practical experience. Separate sheet may be attached to the application form if space is insufficient.

3.	BIM					
	Project Name :	_____				
	Your Position :	_____				
	Project Duration involved :	dd	mm	yyyy	to	dd mm yyyy (mths days)
	Duration involved in Hong Kong :	dd	mm	yyyy	to	dd mm yyyy (mths days)
	Certifier Name (Employer) :	_____				
		HKIA Registered Practice <input type="checkbox"/> Y <input type="checkbox"/> N				(Please tick as appropriate.)
	Certifier Signature :	_____				Date :
	Certifier Name (HKIA Member) :	_____				
		<input type="checkbox"/> Fellow <input type="checkbox"/> Member				(Please tick as appropriate.)
		HKIA Membership No. : _____				
	Certifier Signature :	_____				Date :

4.	BIM					
	Project Name :	_____				
	Your Position :	_____				
	Project Duration involved :	dd	mm	yyyy	to	dd mm yyyy (mths days)
	Duration involved in Hong Kong :	dd	mm	yyyy	to	dd mm yyyy (mths days)
	Certifier Name (Employer) :	_____				
		HKIA Registered Practice <input type="checkbox"/> Y <input type="checkbox"/> N				(Please tick as appropriate.)
	Certifier Signature :	_____				Date :
	Certifier Name (HKIA Member) :	_____				
		<input type="checkbox"/> Fellow <input type="checkbox"/> Member				(Please tick as appropriate.)
		HKIA Membership No. : _____				
	Certifier Signature :	_____				Date :

Total BIM Project Duration involved:	mths	days
Total BIM Project Duration involved in Hong Kong :	mths	days

D. BIM TRAINING

Please state your BIM training in chronological order starting from the latest training.

No.	Name of University / Professional Body / Registration Body / Course Provider	Programme Period (dd.mm.yyyy – dd.mm.yyyy) and contact hours	Mode of Study (Part-time, Full-time, Distance Learning)	Programme Title <i>(in full)</i> / Professional Qualification
1.				
2.				
3.				
4.				
5.				
6.				

E1. SUPPORTING DOCUMENTS (for BIM Pro)

Please check your documents to be submitted to support your application.

- Completed Application Form
- Portfolio of BIM working experience including key project information, applicant's role and BIM tasks accomplished
- Curriculum vitae
- Reasonable proof of successful completion of BIM training course(s)
- Statement on core competencies
- Cheque for application fee OR *Proof of CIC-Certified BIM Manager
(*applicable to applicants of BIM Pro(HKIA) / BIM Pro only)

E2. SUPPORTING DOCUMENTS (for BIM Co)

Please check your documents (in this table) to be submitted to support your application

Normal Route	Grandfathering Route	Documents
<input type="checkbox"/>	<input type="checkbox"/>	Completed and signed application form for certification of BIM (App A).
<input type="checkbox"/>	N/A	<p>Certified true copies of academic qualification certificates related to a diploma (or equivalent) in Qualifications Framework (QF) Level 4 or above qualification accredited or recognised by a CIC-recognised professional body in architecture, engineering, surveying, building or construction, or equivalent, as recognised by CIC, plus proof of 3 years of full-time relevant experience e.g., employment letter (stationed in Hong Kong for at least 6 months).</p> <p>(Submitted copies of documents to HKIA must be certified as true copies of the originals by:</p> <ul style="list-style-type: none"> - CIC designated staff; or - HR/authorised staff of current employer; or - A recognised certified public accountant/solicitor/notary public; or - "Registered Architect", "Registered Professional Engineer" or "Registered Professional Surveyor" in Hong Kong. <p>The Certifier must sign and date the copy document (printing his/her name clearly in capitals underneath) and clearly indicate his/her position/professional qualification and membership number on it. The Certifier must state that it is a true copy of the original (or words to similar effect)).</p> <p><i>Remark: Grandfathering route applicants should submit proof of 6 years of full-time relevant work experience in the industry (stationed in Hong Kong for at least 2 years).</i></p>

Normal Route	Grandfathering Route	Documents
<input type="checkbox"/>	<input type="checkbox"/>	<p>Filled-in Part C – Provide practical experience in BIM project coordination and related tasks that able to demonstrate you possess the required levels of the Core Competencies as stipulated in the Certification of BIM Coordinators.</p> <p><i>*Grandfathering route applicants should have at least 6 years of full-time work experience in the industry (stationed in Hong Kong for at least 2 years) and at least two years of full-time experience in BIM project coordination and related tasks (stationed in Hong Kong for at least 1 year)</i></p>
<input type="checkbox"/>	<input type="checkbox"/>	<p>Completed and signed Client and Employer evaluation forms, with duplicate of respective selected BIM project in Part C, either in hardcopy (in a sealed envelope) or softcopy via email from the Client and Employer directly.</p>
<input type="checkbox"/>	N/A	<p>Evidence of completing a CIC-Accredited BIM Coordinator Course. (e.g., completion certificate) (Refer to Section 2.2 – BIM related Education/ Training, and submit the relevant certificate.)</p> <p><i>Remark: A grace period is allowed before new applicants are required to submit a completion certificate for a CIC-accredited BIM Coordinator Course in support of their applications. (Refer to Section 2.2 BIM Training_note)</i></p>
<input type="checkbox"/>	<input type="checkbox"/>	<p>Evidence of completing at least one BIM software/platform training course in operation level as recognised by CIC or possession of any certification of BIM software in operation level issued by respective software developers e.g. Course related to Revit, Dynamo, Fuzor (Refer to Section 2.2 – BIM related Education, and submit the relevant certificate.)</p>
<input type="checkbox"/>	<input type="checkbox"/>	<p>Portfolio of BIM working experience with statement of not exceeding 2000 words on all core competencies, and including key project information, the applicant's role and BIM tasks accomplished.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<p>Curriculum vitae.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<p>Payment or evidence of payment enclosed (cheque).</p>

F. DECLARATIONS BY APPLICANT

1. I (name in full) _____ being an applicant for listing under HKIA BIM Accreditation Programme by The Hong Kong Institute of Architects do hereby DECLARE that the above is a TRUE STATEMENT OF ALL MY PARTICULARS. I also hereby authorize The Hong Kong Institute of Architects to make any reasonable enquiries into the information given above.
2. I declare that the portfolio I submit is a true record of my own experience.
3. My personal particulars can be released to third parties for confirmation of my qualification and experience.
4. I have read the listing requirements and procedures detailed in the HKIA BIM Accreditation Programme Application Handbook and relevant circulars. I shall abide by the rules therein.
5. I hereby authorize The Hong Kong Institute of Architects to submit a copy of this application form and portfolio to Construction Industry Council for streamline processing of application for CIC - Certified BIM Manager upon accepted as BIM Pro (HKIA) / BIM Pro. (not applicable to BIM Co (HKIA) / BIM Co applicants)

Signature of Applicant

Date

G. OFFICIAL USE ONLY

Application Process Check			
Event	By	Signature	Date
Application received			
Application fee received			
Application documents checked			
Membership no. checked			
Application result <input type="checkbox"/> Accepted <input type="checkbox"/> Rejected			
Applicant notified			

H. NOTES TO APPLICANT

1. Eligibility

1.1 BIM Pro (HKIA) / BIM Pro

	BIM Pro (HKIA) / BIM Pro
Qualifications	<p>BIM Pro (HKIA): Fellow Member or Full Member of HKIA;</p> <p>BIM Pro: Graduate Member of HKIA with more than <u>FIVE YEARS</u> of relevant post-degree experience in architecture</p>
Recognized Practical BIM Experience	<p>Candidates should have no less than <u>TWO YEARS</u> BIM working experience in the past five years (including at least six months in Hong Kong) in the execution and management of BIM projects, such as in development of BIM standards, planning, design, contract administration etc. plus execution of BIM projects, counting up to the application form submission date.</p>
BIM Training	<p>Successful completion of 1) BIM Pro Course organized by HKIA and 2) BIM Manager Course accredited by CIC.</p> <p><i>Remark: The requirement of BIM Manager Course accredited by CIC can be waived if Applicants have already got CIC Certified BIM Manager qualification.</i></p>
Submission of Supporting Document	<ol style="list-style-type: none"> 1. Completed Application Form (App A); 2. Reasonable proof of successful completion of BIM training course(s); 3. Portfolio of BIM working experience with statement of between 1,500 and 2,500 words on all core competencies, and including key project information, the applicant's role and BIM tasks accomplished. Each BIM project experience to be certified by <ol style="list-style-type: none"> (i) Authorized Signature of Employer which is a HKIA Registered Practice; OR (ii) Authorized Signature of Employer which is not a HKIA Registered Practice AND HKIA Fellow / Full Member who is a project participant 4. Curriculum Vitae
Acceptance Requirements	<ol style="list-style-type: none"> 1. Submitted document accepted by the Vetting Panel; and 2. Passing a Panel Interview arranged by HKIA to assess whether the applicant possesses the core competencies as stated in 1.3 and required practical experience.
Application Fee	<p>\$500</p> <p>Note: Application fee of CIC - Certified BIM Manager as BIM Pro (HKIA) / BIM Pro will be waived up to 31 Jul 2021</p>

1.2 BIM Co (HKIA) / BIM Co

BIM Co (HKIA) / BIM Co	
Qualifications	<p>BIM Co (HKIA): Fellow Member or Full Member of HKIA;</p> <p>BIM Co: Graduate Member, Affiliate Member of HKIA or Experienced architectural technicians or project coordinators referred by HKIA Corporate Members, HKIA Full Members and Fellows</p>
Academic qualification and Working experience	<p>Candidates should have a diploma (or equivalent) in Qualifications Framework (QF) level 4 or above qualification accredited or recognized by a CIC-recognised professional body in architecture, engineering, surveying, building or construction or equivalent, as recognised by CIC, plus 3 years of full-time relevant work experience (with at least 6 months stationed in Hong Kong)</p>
Recognized Practical BIM Experience	<p>Practical experience in BIM project coordination and related tasks – at least one year full-time relevant BIM experience in BIM projects in the latest five years (with at least 6 months stationed in Hong Kong). Examples of BIM project coordination and related task such as implementation of BIM Execution Plan on a BIM project, BIM modelling production and collaborate information exchange amongst related stakeholders, maintain a Task Information delivery plan, performing BIM-related coordination (internally or externally) with the stakeholders, administration and maintenance of data exchange to the project Common Data Environment (CDE), assist in holding or facilitating various BIM related meeting internally or externally, performing BIM data quality control/checking or assurance in BIM projects, etc.</p>
BIM Training	<p>BIM education – successful completion of:</p> <ol style="list-style-type: none"> 1) A CIC-Accredited BIM Coordinator Course, AND 2) At least one BIM software/platform training course in operation level as recognised by CIC, OR possession of any certification of BIM software in operation level issued by respective software developers <p>Note: During the 10 months grace period, effective from 1 February 2022 to 31 December 2022, the requirement of 1) A CIC-Accredited BIM Coordinator Course is waived.</p>

<p>Submission of Supporting Document</p>	<ol style="list-style-type: none"> 1. Completed Application Form (App A); 2. Reasonable proof of successful completion of tertiary education and BIM training course(s); 3. Submission of Evaluation forms from employer a) Employer Evaluation Form and client b) Client Evaluation Form (if any) sides that can prove at least one year of practical experience in BIM. If the one-year BIM experience covers more than one project, the evaluation from relevant employers and clients are then required. Standardised evaluation forms for employer and client sides will be provided by the HKIA. The applicant should ask his/her employer and client to fill in the standardised evaluation forms and return by the client and employer directly to the HKIA separately. The forms will be used to verify the applicant's BIM experience and BIM capability obtained. 4. Professional conduct and integrity demonstrated by the Employer and Client Evaluation Forms, applicant's professional disciplinary history and conviction records (if any) and applicant's interview performance (if any). An applicant who has <ol style="list-style-type: none"> a) committed misconduct or neglect in any professional respect, b) been disqualified from the BIM Certification and Accreditation Schemes by the HKIA or CIC and removed from the HKIA BIM Pro, HKIA BIM Co, CIC-Certified BIM Managers or CIC-Certified BIM Coordinators Register, c) been disqualified from being registered or certified as a BIM personnel by other BIM certification body for disciplinary reasons, or d) been convicted of any criminal offence involving bribery, fraud, dishonesty or malfeasance, or any offence which may bring the HKIA and the BIM profession into disrepute, will not be considered for certification. 5. Portfolio of BIM working experience with statement of not exceeding 2000 words on all core competencies, and including key project information, the applicant's role and BIM tasks accomplished. Each BIM project experience to be certified by <ol style="list-style-type: none"> a. Authorized Signature of Employer which is a HKIA Registered Practice; OR b. Authorized Signature of Employer which is not a HKIA Registered Practice AND HKIA Fellow / Full Member who is a project participant 6. Curriculum Vitae.
<p>Acceptance Requirements</p>	<ol style="list-style-type: none"> 1. Submitted document accepted by the Vetting Panel; and 2. Passing a Panel Interview arranged by HKIA to assess whether the applicant possesses the core competencies as stated in 1.4 and required practical experience.
<p>Application Fee</p>	<p>\$300</p>

2. Review of Interview / Assessment Results and Handling of Appeal

A candidate who fails Interview/Assessment may apply in writing to BIM Accreditation Committee (BAC) for a review of his/her result within 14 calendar days from the date of announcement of results (but excluding the day of announcement) with an application fee of \$300 giving the brief grounds for review for justification. Late appeals will not be considered.

The grounds for such application shall be confined to material administrative error in the Assessment process only.

Disagreement with the decision of the assessors, illness or medical-related circumstances shall not be accepted as grounds for review. The applicant in his/her application shall demonstrate to the satisfaction of BAC that there is sufficient evidence to support such an application before it can be accepted.

Appeal result normally will be released 4 weeks after the close of appeal application period. Successful appeal will be refundable in full.

Appendix B - Detailed List of Core Competencies of BIM Pro (HKIA) / BIM Pro

Minimum Level of Competency:

Level 1 (L1): General appreciation of the subject and an understanding of how the subject may affect, or integrate with other subjects.

Level 2 (L2): Knowledge and understanding of the subject and its application.

Level 3 (L3): Ability to perform the subject independently or under supervision.

Level 4 (L4): Ability to perform the subject without supervision and advise others.

-	Core Subject	L1	L2	L3	L4
1. BIM Initiation	<i>1.1. BIM Concept</i>				
	1.1.1 Promote architectural excellence through adoption of BIM				✓
	1.1.2 BIM definitions and terminology	✓			
	1.1.3 The difference between 2D CAD, 3D CAD and BIM	✓			
	1.1.4 Concept of BIM as whole project & whole estate perspective	✓			
	1.1.5 Value and benefits of adopting BIM	✓			
	1.1.6 Value of BIM for AM & FM	✓			
	1.1.7 Collaborative working in BIM	✓			
	1.1.8 Limitation of BIM	✓			
	1.1.9 Challenges within existing working practices & how BIM addresses these		✓		
	1.1.10 How BIM affect the current practice in AECO industry		✓		
	1.1.11 Uphold Architects' leading role in AEC industry				✓
	<i>1.2. Local & Global Contexts, BIM standards and guidelines</i>				
	1.2.1 Local BIM standards & resources		✓		
	1.2.1.1 CIC BIM Standards		✓		
	1.2.1.2 Government BIM standards & resources		✓		
	1.2.2 Global context in BIM development	✓			
	1.2.3 Global BIM standards & resources		✓		
	1.2.3.1 ISO 19650		✓		
	1.2.3.2 BIM FORUM LOD Specification		✓		
	1.2.3.3 OpenBIM		✓		
	1.2.3.4 ISO 16739-1:2018: Industry Foundation Class IFC		✓		

-	Core Subject	L1	L2	L3	L4
2. BIM Software and Technologies	<i>2.1. BIM Software</i>				
	2.1.1 Overview of industry leading BIM software/applications		✓		
	2.1.2 Characteristic, strength and limitation of industry leading BIM software		✓		
	2.1.3 Versions and file formats		✓		
	2.1.4 Interoperability across industry leading BIM software * to carry out open BIM workflow where necessary and to encourage open BIM inter-operability workflow where appropriate				✓
	<i>2.2. Technologies</i>				
	2.2.1 Cloud platform		✓		
	2.2.2 Laser scanning		✓		
	2.2.3 Photogrammetry		✓		
	2.2.4 GIS		✓		
	2.2.5 Application of smart devices		✓		
	2.2.6 VR/AR/MR		✓		
	2.2.7 VDC	✓			
	2.2.8 RFID		✓		
	2.2.9 Gaming technology in BIM	✓			
	2.2.10 Robotics	✓			
	2.2.11 Automation	✓			
	2.2.12 API	✓			
	2.2.13 MiC		✓		
	2.2.14 Indoor positioning	✓			
2.2.15 Upcoming Trend	✓				

	Core Subject	L1	L2	L3	L4
3. BIM Uses and Processes	<i>3.1. – Client BIM Strategic Stage</i>				
	3.1.1 BIM strategy, BIM uses, BIM processes	✓			
	3.1.2 Key personnel in relation to BIM				✓
	3.1.3 Determine the info 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				✓
	3.1.6 Determine level of integration of digital information into asset & facility management				✓
	3.1.7 Case study		✓		
	<i>3.2. – Client Pre-tender Project Stage</i>				
	3.2.1 Determine & oversee the development of Client Information Model (CIM)				✓
	3.2.1.1 Organisational Information Requirements (OIRs)				✓
	3.2.1.2 Asset Information Requirements (AIRs)				✓
	3.2.2 Employers Information Requirements (EIR) * coordinate with consultant team and future asset / facility management team and advise client on Employer Information Requirement (EIRs)				✓
	3.2.3 Determine project technology & systems requirement & integration				✓
	3.2.4 Determine project delivery requirements				✓
	3.2.5 Determine the soft landings approach				✓
	3.2.6 Contract & consultancy requirement * be able to lead, draft, comment BIM specifications for all sub-consultancy agreements and understand the contractual impact on respective traditional professional practices, e.g., Level of Development and Clash Analysis * be able to define BIM scope and information deliverables for Architectural Discipline				✓
	3.2.7 Assessment on supply chain capability & capacity (Tender Assessment)				✓
	3.2.8 Case study		✓		
	<i>3.3. – Definition & Design Stage</i>				
	3.3.1 BIM Execution Plan developed by supply chain				✓
	3.3.1.1 Pre-contract BIM Project Execution Plan				✓
	3.3.1.2 Post-contract BIM Project Execution Plan				✓
	3.3.2 Supervision in fulfilling BIM uses in planning & design stages listed in CIC BIM Standards				✓

-	Core Subject	L1	L2	L3	L4	
3. BIM Uses and Processes	3.3.3	Set up conceptual modeling in BIM Platform and spatial programming and be able to direct the coordination with others to carry out the task				✓
	3.3.4	Determine modelling methodology for architectural schedules and drawing production				✓
	3.3.5	Project Information Model (PIM) data exchanges and validation				✓
	3.3.6	BIM PIM file setup				✓
		3.3.6.1 BIM origin point & orientation setup				✓
		3.3.6.2 Model division				✓
		3.3.6.3 Modelling methodology				✓
		3.3.6.4 Project-based industry and BIM standards				✓
	3.3.7	Direct BIM related meetings				✓
		3.3.7.1 Meeting with high level				✓
		3.3.7.2 Meeting with supply chain level				✓
		3.3.7.3 Internal meeting				✓
		3.3.7.4 Multidiscipline collaboration meeting				✓
	3.3.8	Case Study		✓		
	3.3.9	Basic understanding of parametric design tools		✓		
	3.3.10	Supervise open BIM workflow and open BIM inter-operability				✓
	3.3.11	Determine Modelling Methodology for GBP production and statutory compliance checking				✓
	3.3.12	Determine Modelling Methodology for production of tender drawings and documentation				✓
	3.3.13	Basic understanding of environmental plug-in and performance analysis software		✓		
	3.3.14	Understand the limitation of clash detection and adequately utilize the same to assist consultant team on design coordination				✓
		<i>3.4. – Construction Stage</i>				
	3.4.1	BIM Execution Plan developed by supply chain				✓
		3.4.1.1 Pre-contract BIM Project Execution Plan				✓
		3.4.1.2 Post-contract BIM Project Execution Plan				✓
	3.4.2	Supervision in fulfilling BIM uses in construction & handover stage listed in CIC BIM Standards				✓
	3.4.3	Project Information Model (PIM) data exchanges and validation				✓
	3.4.4	Direct BIM related meetings				✓
	3.4.5	Case study		✓		
3.4.6	Adequately request and utilize contractor's 4D simulation from BIM model for programme planning, progress verification and record		✓			
3.4.7	Verify contractor's submitted drawings generated from BIM models				✓	

-	Core Subject	L1	L2	L3	L4
3. BIM Uses and Processes	3.5. – <i>Handover Stage</i>				
	3.5.1 As-built information verification				✓
	3.5.2 Oversee data transfer from PIM to Asset Information Model (AIM)				✓
	3.5.3 Supervision in fulfilling BIM uses in handover stage listed in CIC BIM Standards				✓
	3.5.4 Case study		✓		
	3.6. – <i>Operation & Maintenance Stage</i>				
	3.6.1 Update Assets Information Model (AIM)		✓		
	3.6.2 Roles, responsibilities and authorities for maintaining the AIM		✓		
	3.6.3 Post occupancy evaluation		✓		
	3.6.4 Case Study		✓		

	Core Subject	L1	L2	L3	L4
4. Digital Information Management, Collaboration and Integration	<i>4.1. Digital Information Management</i>				
	4.1.1 Value of data & how it should be managed		✓		
	4.1.2 Interoperate data/information to facilitate cross- disciplinary and cross-BIM platform collaboration		✓		
	4.1.3 Limitation of BIM software in relation to information management		✓		
	4.1.4 Determine level of development in the context of graphics and information in different stages				✓
	4.1.5 Determine level of integration of digital information into asset & facility management				✓
	4.1.6 Oversee the process and quality of information exchange				✓
	4.1.6.1 IFC/BCF/XML...etc.		✓		
	4.1.6.2 COBie		✓		
	<i>4.2. Common Data Environment (CDE)</i>				
	4.2.1 Overview of CDE		✓		
	4.2.2 Overview of various CDE platform		✓		
	4.2.3 Setup of CDE			✓	
	4.2.4 Assessment of CDE			✓	
	4.2.5 Management of CDE				✓
	4.2.6 Limitation of CDE		✓		
	<i>4.3 Data Quality Control & Assurance across various stages</i>				
	4.3.1 System checking				✓
	4.3.2 Model audit				✓
	4.3.3 Model checking				✓
	4.3.4 Audit reporting				✓

-	Core Subject	L1	L2	L3	L4
5. Commercial and Contract	<i>5.1 Commercial Issue</i>				
	5.1.1 Establishing BIM ready Environment to support the corporate			✓	
	5.1.1.1 BIM strategy in organisation 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 clients		✓		
	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		✓		
	<i>5.2. Contract Issue</i>				
	5.2.1 Ownership of data * e.g. demarcate modelling and information responsibilities among disciplines and control federated models		✓		
	5.2.2 Intellectual property right		✓		
	5.2.3 Legal implication and potential liability		✓		
	5.2.4 Professional indemnity				✓
	5.2.5 Introducing NEC	✓			
5.2.6 Commercial implications for contracts & insurances in relation to BIM		✓			

Appendix C - Detailed List of Core Competencies of BIM Co (HKIA) / BIM Co

Minimum Level of Competency:

Level 1(L1) : General appreciation of the subject and an understanding of how the subject may affect, or integrate with other subjects.

Level 2 (L2): Knowledge and understanding of the subject and its application.

Level 3 (L3): Ability to perform the subject independently or under supervision.

Level 4 (L4): Ability to perform the subject without supervision and advise others.

-	Core Subject	L1	L2	L3	L4
1. BIM Initiation	<i>1.1. BIM Concept</i>				
	1.1.1 BIM definitions and terminology	✓			
	1.1.2 The difference between 2D CAD, 3D CAD and BIM	✓			
	1.1.3 Concept of BIM as whole project & whole estate perspective	✓			
	1.1.4 Value and benefits of adopting BIM	✓			
	1.1.5 Value of BIM for AM & FM	✓			
	1.1.6 Collaborative working in BIM	✓			
	1.1.7 Limitation of BIM	✓			
	1.1.8 Challenges within existing working practices & how BIM addresses these		✓		
	1.1.9 How BIM affect the current practice in AECOindustry		✓		
	<i>1.2. Local & Global Contexts, BIM standards and guidelines</i>				
	1.2.1 Local BIM standards & resources		✓		
	1.2.1.1 CIC BIM Standards		✓		
	1.2.1.2 Government BIM standards & resources		✓		
	1.2.2 Global context in BIM development	✓			
	1.2.3 Global BIM standards & resources		✓		
	1.2.3.1 ISO 19650		✓		
	1.2.3.2 BIM FORUM LOD Specification		✓		
	1.2.3.3 OpenBIM		✓		

-	Core Subject	L1	L2	L3	L4
2. BIM Software and Technologies	<i>2.1. BIM Software</i>				
	2.1.1 Overview of industry leading BIM software/applications		✓		
	2.1.2 Characteristic, strength and limitation of industry leading BIM software		✓		
	2.1.3 Versions and file formats			✓	
	2.1.4 Interoperability across industry leading BIM software			✓	
	<i>2.2. Technologies</i>				
	2.2.1 Cloud platform		✓		
	2.2.2 Laser scanning		✓		
	2.2.3 Photogrammetry		✓		
	2.2.4 GIS		✓		
	2.2.5 Application of smart devices		✓		
	2.2.6 VR/AR/MR		✓		
	2.2.7 VDC	✓			
	2.2.8 RFID	✓			
	2.2.9 Gaming technology in BIM	✓			
	2.2.10 Robotics	✓			
	2.2.11 Automation	✓			
	2.2.12 API	✓			
	2.2.13 MiC	✓			
	2.2.14 Indoor positioning	✓			
2.2.15 Upcoming Trend	✓				

-	Core Subject	L1	L2	L3	L4
3. BIM Uses and Processes	<i>3.1. – Client Pre-tender Project Stage</i>				
	3.1.1 Client Information Model (CIM)		✓		
	3.1.1.1 Organisational Information Requirements (OIRs)		✓		
	3.1.1.2 Asset Information Requirements (AIRs)		✓		
	3.1.2 Employers Information Requirements (EIR)		✓		
	3.1.3 Coordinate project technology & systems requirement & integration		✓		
	3.1.4 Understand BIM scope and information deliverables for Architectural Discipline		✓		
	3.1.5 Understand contract & consultancy requirement	✓			
	<i>3.2. – Definition & Design Stage</i>				
	3.2.1 BIM Execution Plan developed by supply chain		✓		
	3.2.1.1 Understand Pre-contract BIM Project Execution Plan		✓		
	3.2.1.2 Understand Post-contract BIM Project Execution Plan		✓		
	3.2.2 Coordination in fulfilling BIM uses in planning & design stages listed in CIC BIM Standards			✓	
	3.2.3 Skill on conceptual modeling in BIM Platform and spatial programming and be able to coordinate with others to carry out the task			✓	
	3.2.4 Skill on modelling methodology for architectural schedules and drawing production			✓	
	3.2.5 Project Information Model (PIM) data exchanges and validation			✓	
	3.2.6 BIM PIM file setup				✓
	3.2.6.1 BIM origin point & orientation setup				✓
	3.2.6.2 Model division				✓
	3.2.6.3 Modelling methodology				✓
	3.2.6.4 Project-based industry and BIM standards				✓
	3.2.7 Direct BIM related meetings			✓	
	3.2.7.1 Internal meeting			✓	
	3.2.8 Basic understanding of parametric design tools		✓		
	3.2.9 Carry out open BIM workflow and open BIM inter-operability				✓
	3.2.10 Modelling for GBP production and statutory compliance checking				✓
	3.2.11 Modelling for production of tender drawings and documentation				✓
	3.2.12 Basic understanding of environmental plug-in and performance analysis software		✓		
	3.2.13 Understand the limitation of clash detection and adequately utilize the same to assist design coordination				✓

-	Core Subject	L1	L2	L3	L4
3. BIM Uses and Processes	<i>3.3. – Construction Stage</i>				
	3.3.1 BIM Execution Plan developed by supply chain		✓		
	3.4.1.1 Pre-contract BIM Project Execution Plan		✓		
	3.4.1.2 Post-contract BIM Project Execution Plan		✓		
	3.3.2 Coordination in fulfilling BIM uses in construction & handover stage listed in CIC BIM Standards			✓	
	3.3.3 Adequately request and utilize contractor's 4D simulation from BIM model for programme planning, progress verification and record			✓	
	3.3.4 Verify contractor's submitted drawings generated from BIM models			✓	
	<i>3.4. – Handover Stage</i>				
	3.4.1 As-built information verification			✓	
	3.4.2 Manage data transfer from PIM to Asset Information Model (AIM)			✓	
	<i>3.5. – Operation & Maintenance Stage</i>				
	3.5.1 Update Assets Information Model (AIM)			✓	
	3.5.2 Roles, responsibilities and authorities for maintaining the AIM		✓		

Core Subject	L1	L2	L3	L4
	<i>4.1. Digital Information Management</i>			
4.1.1 Value of data & how it should be managed		✓		
4.1.2 Interoperate data/information to facilitate cross- disciplinary and cross-BIM platform collaboration			✓	
4.1.3 Limitation of BIM software in relation to information management		✓		
4.1.4 Coordinate level of development in the context of graphics and information in different stages		✓		
4.1.5 Coordinate level of integration of digital information into asset & facility management		✓		
4.1.6 Coordinate the process and quality of information exchange			✓	
4.1.6.1 IFC/BCF/XML... etc.			✓	
4.1.6.2 COBie			✓	
<i>4.2. Common Data Environment (CDE)</i>				
4.2.1 Overview of CDE		✓		
4.2.2 Overview of various CDE platform		✓		
4.2.3 Setup of CDE			✓	
4.2.4 Assessment of CDE			✓	
4.2.5 Management of CDE		✓		
4.2.6 Limitation of CDE	✓			
<i>4.3 – Data Quality Control & Assurance across various stages</i>				
4.3.1 System checking			✓	
4.3.2 Model audit			✓	
4.3.3 Model checking			✓	
4.3.4 Audit reporting			✓	