

Construction Industry Council BIM Certification and Accreditation Schemes

<u>Application Guide for</u> Certification of Building Information Modelling (BIM) Coordinators

1. Background

- 1.1 This Application Guide sets out the approach and procedures to be adopted in the processing and assessment of applications for certification of BIM Coordinators.
- 1.2 A "Roadmap for BIM Strategic Implementation in Hong Kong's Construction Industry" was prepared by the Working Group on Roadmap for BIM Implementation under the then Committee on Environment and Technology of the Construction Industry Council (CIC) in 2014. One of the key initiatives in the Roadmap was to expedite the building up of BIM capacity and capability.
- 1.3 In 2017, the HKSAR Government decreed that BIM technology must be used in the design and construction of all major government capital works projects with a project cost estimate of more than HK\$30 million that were scheduled to start during or after 2018, and that the use of this technology in private construction projects should also be promoted. This has generated a surge in demand for BIM personnel and training needs.
- 1.4 To ensure that construction professionals have appropriate skill levels and competency in using BIM technology, and that the scope and quality of BIM courses provided in the market meet the needs of the industry, it was important to establish a certification body for BIM personnel and an accreditation body for BIM courses in Hong Kong.
- 1.5 To facilitate the healthy development of BIM in Hong Kong, CIC has introduced the BIM Certification and Accreditation Schemes to ascertain the competency of BIM personnel and the quality of local BIM training courses.

2. Eligibility Criteria for Certification of BIM Coordinators

- 2.1 The Certification of BIM Coordinator is targeted at BIM practitioners who already have relevant practical experience in BIM projects, meet the relevant academic requirement and have completed a CIC-Accredited BIM Coordinator Course, or a CIC-Accredited BIM Coordinator Top-up Course which is applicable for CIC-Certified BIM Managers (CCBMs).
- 2.2 The targeted BIM practitioners should be able to observe a high standard of professional conduct and ethical behaviour, as all CIC-Certified BIM Coordinators are expected to uphold the standing and reputation of the CIC and the BIM profession.

3. Core Competencies of a BIM Coordinator

The Core Competencies of a BIM Coordinator are:

- (a) BIM Initiation (Ability to describe BIM concept definitions and scope, BIM standards and guidelines in Hong Kong and global contexts). [Level 2]
- (b) BIM Software and Technologies (Ability to operate BIM software¹ and the modelling process, and describe current and relevant technologies). [Level 3]
- (c) BIM Uses and Processes (Ability to understand BIM uses, apply BIM software applications, and to execute and administer the responsible BIM tasks for individual or cross-disciplinary BIM project coordination). [Level 3]
- (d) Digital Information Management, Collaboration and Integration (Ability to execute and administer the operation of a common data environment and data quality control system for effective use and sharing of digital information in a BIM project). [Level 3]
- (e) Communication Skills (Ability to apply interpersonal and communication skills in meetings, report / training material writing, etc.). [Level 3]

Core subjects of a BIM Coordinator Course under the BIM Certification and Accreditation Schemes are listed in Annex B of this Application Guide.

4. Assessment Criteria for Normal Route

4.1 The following assessment criteria will be adopted for Certification of BIM Coordinator:

- (a) Qualification A diploma (or equivalent) in Qualifications Framework (QF) Level 4 or above qualification accredited or recognised by a CIC-recognised professional body² 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).
- (b) 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), that able to demonstrate the applicant possessing the required levels of the Core Competencies as stipulated in the Certification of BIM Coordinators. 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

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¹ Commonly used BIM software could be found from the list of Construction Innovation and Technology Fund (CITF) pre-approved BIM software available on website of CITF (http://www.citf.cic.hk/?route=search).

² List of CIC-recognised professional body is available on website of BIM Department of CIC (http://www.bim.cic.hk/).

related meeting internally or externally, performing BIM data quality control/checking or assurance in BIM projects, etc.. Or refer to Annex B for more examples.

- (c) BIM education successful completion of:
 - (i) A CIC-Accredited BIM Coordinator Course, or a CIC-Accredited BIM Coordinator Top-up Course for CCBMs (Click here to learn more), PLUS;
 - (ii) at least one BIM software/platform training course in operation level as recognised by CIC, <u>OR</u> possession of any certification of BIM software in operation level issued by respective software developers (refer to Section 10) OR any equivalent as accepted by CIC.
- (d) Client³ and Employer⁴ Evaluation Forms submission of at least one set of evaluation forms from both client and employer sides. The Client Evaluation Form is not mandatory but may be provided as a supplementary document. Upon submission of the application, the system will automatically send online evaluation forms for the selected project(s) to the applicant's employer and, if applicable, the client. These forms will be used to verify the BIM experience described in section (b) and to assess the applicant's BIM capabilities based on that experience.
- (e) Professional conduct and integrity demonstrated by the Client and Employer Evaluation Forms, applicant's professional disciplinary history and conviction records (if any) and applicant's interview performance (if any). An applicant who has
 - (i) committed misconduct or neglect in any professional respect,
 - (ii) been disqualified from the BIM Certification and Accreditation Schemes by the CIC BIM Certification and Accreditation Board (BIMCAB) and removed from the CIC-Certified BIM Coordinators Register,
 - (iii) been disqualified from being registered or certified as a BIM personnel by other BIM certification body for disciplinary reasons, or
 - (iv) been convicted of any criminal offence involving bribery, fraud, dishonesty or malfeasance, or any offence which may bring the CIC and the BIM profession into disrepute, will not be considered for certification unless the BIMCAB has other considerations after taking into account of all circumstances.
- 4.2 The "Supplementary Guide on Preparing the Application for Certification as CCBC" has been developed by the CIC to provide guidance to applicants for their preparation of application

³ Client is the owner of the project. Client Side Evaluator must be the employee of the Client or third party directly employed by the Client (e.g. main contractor, lead consultant, etc.) but not at the same organisation with the applicant. (For applicant who is the employee of the Client, the Client Side Evaluator must be the employee of Client organisation). AND the Client Side Evaluator should be Professional (i.e. MHKIA, MHKIE, MHKIS, or above), CIC-Certified BIM Manager (CCBM), Project Manager, Assistant Project Manager, BIM Manager or Facility Manager of the project team and in a supervisory level but not the direct supervisor in the same company/organisation of the applicant.

⁴ Employer could be direct manager or supervisor of the project team.

submissions and interview assessments. Helpful tips and information are included in the guide for reference. Applicants are required to read through the supplementary guide. *Click this to learn more*

5. Assessment Criteria for Adept Route

- 5.1 Applicants who do not have the required academic qualification under the Normal Route, can consider applying through Adept Route. The assessment criteria of Adept Route are as follows:
 - (a) Qualification No need to possess a CIC-recognised diploma (or equivalent) in Qualifications Framework (QF) Level 4 accredited or recognised by a CIC-recognised professional body in architecture, engineering, surveying, building or construction, or equivalent, as recognised by CIC, but need to possess 6 years of full-time relevant work experience (with at least 2 years stationed in Hong Kong).
 - (b) Practical experience in BIM project coordination and related tasks at least 2 years full-time relevant BIM experience in BIM projects in the latest five years (with at least 1 year stationed in Hong Kong), that able to demonstrate the applicant possessing the required levels of the Core Competencies as stipulated in the Certification of BIM Coordinators. 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.. Or refer to Annex B for more examples.
 - (c) BIM education successful completion of:
 - (i) A CIC-Accredited BIM Coordinator Course, or a CIC-Accredited BIM Coordinator Top-up Course for CCBMs (Click here to learn more), PLUS;
 - (ii) at least one BIM software/platform training course in operation level as recognised by CIC, <u>OR</u> possession of any certification of BIM software in operation level issued by respective software developers (refer to Section 10), OR any equivalents accepted by CIC.
 - (d) Client and Employer Evaluation Forms submission of at least one set of evaluation forms from both client and employer sides. The Client Evaluation Form is not mandatory but may be provided as a supplementary document. Upon submission of the application, the system will automatically send online evaluation forms for the selected project(s) to the applicant's employer and, if applicable, the client. These forms will be used to verify the BIM experience described in section (b) and to assess the applicant's BIM capabilities based on that experience.
 - (e) Professional conduct and integrity demonstrated by the Client and Employer Evaluation Forms, applicant's professional disciplinary history and conviction records

(if any) and applicant's interview performance (if any). An applicant who has

- (i) committed misconduct or neglect in any professional respect,
- (ii) been disqualified from the BIM Certification and Accreditation Schemes by the CIC BIM Certification and Accreditation Board (BIMCAB) and removed from the CIC-Certified BIM Coordinators Register,
- (iii) been disqualified from being registered or certified as a BIM personnel by other BIM certification body for disciplinary reasons, or
- (iv) been convicted of any criminal offence involving bribery, fraud, dishonesty or malfeasance, or any offence which may bring the CIC and the BIM profession into disrepute, will not be considered for certification unless the BIMCAB has other considerations after taking into account of all circumstances.

6. Assessment Criteria for BIM Mentorship Route (Exclusively for CIC-Certified BIM Coordinator (Associate) [CCBC(A)])

- 6.1 In late 2022, CIC conducted a review on the supply and demand model of BIM personnel and a White Paper was then compiled to report the findings and to develop strategic plans on BIM personnel development. One of the key recommendations of the White Paper is to add a new tier of practitioner in association with CCBC called CCBC(Associate) (CCBC(A)). It was launched on 22 March 2023 and CCBC(A) can be certified as CCBC through a simplified procedure. Either apply the CCBC(A) via the normal route or the adept route, the applicant needs to fulfil the entry requirements of CCBC on academic qualification, work experience, practical experience in BIM coordination, completion of a CIC-Accredited BIM coordinator course plus at least one BIM software/platform.
- 6.2 For a registered (CCBC(A)) to be eligible for applying the certification as CCBC through BIM Mentorship Route, he/she has to perform the BIM coordination work under the direct supervision of a BIM Mentor⁵ (either a CCBM or a CCBC) for not less than two years.
- 6.3 Upon the end of the two years' period, the CCBC(A) can apply for certification as CCBC through BIM Mentorship Route in the CIC BIM Portal. The CCBC(A) needs to attach the completed training logbooks of whole mentorship period and the BIM Mentor's recommendation⁶ in his/her application.

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⁵ BIM Mentor: The CCBM or CCBC working in the same company of the CCBC(A), otherwise, approval by CIC is required. The BIM Mentor is required to hold one-to-one meetings with the CCBC(A) to monitor and review his/her progress in acquiring BIM knowledge and BIM experience as a BIM coordinator at least once per half year or before a change of mentor. The BIM Mentor has to comment, sign and date the CCBC(A)'s Training Logbook, and provide guidance and advices to the CCBC(A) on any improvement need. A copy of each signed Training Logbook should be submitted to CIC promptly after each review meeting.

⁶ CIC has designed a template for the BIM Mentor's recommendation. <u>Click here to learn more</u>

- 6.4 To assist eligible CCBC(A) in completing the application form of BIM Mentorship Route, a document "Tips for Preparing Application Form of Certification of BIM Coordinators via BIM Mentorship Route" has been developed and is available online. Applicants are strongly encouraged to read and follow the instructions provided in the sample application form when preparing their applications on the CIC BIM Portal. Click here to learn more
- 6.5 CIC will check the submissions and invite those applicants with proper submissions to sit for a test with multiple-choice questions only the Multiple Choice (MC) Test. Applicants must achieve a score of 60% or higher to pass the test. The MC Test is one of the assessment criteria for the BIM Mentorship Route.
- 6.6 For the possessing and assessment of applications of BIM Mentorship Route, please refer to Section 9 of this application guide.
- 6.7 The assessment criteria of BIM Mentorship Route are as follows:
 - (a) Qualification a registered CCBC(A);
 - (b) Practical experience in BIM project coordination and related tasks at least two years of post-CCBC(A) BIM coordination work experience under the supervision of a BIM Mentor⁵. This BIM coordination work experience should be thoroughly documented in the "Training Logbook of CIC-Certified BIM Coordinator (Associate) [CCBC(A)]", including the appropriate signatures of the BIM Mentor(s). In addition, a completed "Recommendation Form of BIM Mentor", with the necessary signatures, is required.
 - (c) Completion of the MC Test organised by CIC specifically for BIM Mentorship Route. (Refer to Section 9.2)
 - (d) BIM education Waived:
 - (e) Client and Employer Evaluation Forms Waived;
 - (f) Professional conduct and integrity demonstrated by the Client and Employer Evaluation Forms, applicant's professional disciplinary history and conviction records (if any) and applicant's interview performance (if any). An applicant who has
 - (i) committed misconduct or neglect in any professional respect,
 - been disqualified from the BIM Certification and Accreditation Schemes by the CIC BIM Certification and Accreditation Board (BIMCAB) and removed from the CIC-Certified BIM Coordinators Register,
 - (iii) been disqualified from being registered or certified as a BIM personnel by other BIM certification body for disciplinary reasons, or
 - (iv) been convicted of any criminal offence involving bribery, fraud, dishonesty or malfeasance, or any offence which may bring the CIC and the BIM profession into disrepute, will not be considered for certification unless the BIMCAB has other considerations after taking into account of all circumstances.

In addition, a CCBC(A) can at any time apply for certification as CCBC via the current normal route or adept route without the need to wait till the end of the aforesaid two years' supervision under a BIM Mentor. In such scenario, the CCBC(A) does not need to attach any recommendation letter from the BIM Mentor.

7. Processing and Assessment of Applications for Certification of BIM Coordinators through Normal Route and Adept Route

- 7.1 An applicant for certification as a BIM Coordinator through Normal Route and Adept Route must submit the following to the Construction Digitalisation Department of CIC for assessment:
 - (a) completed an online application form through "MyPortal" in CIC BIM Portal (www.bim.cic.hk);
 - (b) application fee (HK\$500);
 - (c) Normal Route: 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 work experience (with at least 6 months stationed in Hong Kong)); Or
 - (d) Adept Route: 6 years of full-time relevant work experience (with at least 2 years stationed in Hong Kong) with proof.
 - Submission of at least one set of evaluation forms from both client and employer sides that prove the applicant has sufficient in the past 5 years gained at least 1 year full-time relevant practical experience in BIM project coordination and related tasks (For Normal Route, it should be in the past 5 years gained at least 1 year full-time experience, with at least 6 months stationed in Hong Kong; for Adept Route, it should be in the past 5 years gained at least 2 year full-time experience, with at least 1 year stationed in Hong Kong). Standardised evaluation forms for client and employer sides will be provided by CIC. The applicant should ask his/her client and employer to fill in the standardised evaluation forms and return to CIC separately. In case Client Evaluation Form cannot be submitted or cannot cover the required period of the applicant's practical experience in BIM coordination and related tasks, the applicant's application will have to be assessed based on the available details. The submission of full Client Evaluation Form will have an edge in the application as the BIM Assessment Panel (BIMAP) can have a more thorough understanding of the applicant's experience and capability in BIM coordination works;
 - (e) evidence of completing
 - (i) A CIC-Accredited BIM Coordinator Course, or a CIC-Accredited BIM Coordinator Top-up Course which is applicable for CCBMs (e.g. completion certificate) (Click here to learn more); AND
 - (ii) Evidence of completing at least one BIM software/platform training course in operation level as recognised by CIC <u>OR</u> possession of any certification of BIM

software in operation level issued by respective software developers; (Refer to Section 10):

- (f) A curriculum vita; and
- (g) A portfolio of BIM work examples (for the selected project(s)).

Upon receipt of an application, the Construction Digitalisation Department of CIC will assess the completeness of the documents submitted and will request the applicant to provide further details to substantiate the application, if needed. The application will be regarded as withdrawn if the applicant fails to provide the necessary details within 3 months from the date of request made by CIC.

- 7.2 The CIC BIM Assessment Panel (BIMAP) will review and assess the submitted documents. If the submission is deemed complete and demonstrates that the applicant possesses the required Core Competencies of a BIM Coordinator, the BIMAP may recommend "Approve without interview" to the BIM Certification and Accreditation Board (BIMCAB).
- 7.3 If the submission does not fully meet the requirements, the BIMAP may recommend an interview assessment. The purpose of the interview is to assess whether the applicant possesses the necessary core competencies and practical experience required for a BIM Coordinator.
- 7.4 An application may be rejected without an interview if it is incomplete, lacks relevant or clearly described BIM experience, or contains unresolvable issues that cannot be addressed within a reasonable timeframe.
- 7.5 Upon completion of the assessment, BIMAP will make a recommendation to BIMCAB for final decision.
- 7.6 The certification status of a BIM Coordinator shall be valid from the date of granting the certification status up to the end of that calendar year, and the names of the CIC-Certified BIM Coordinator will be placed on the CIC-Certified BIM Coordinator Register.
- 7.7 It is expected that the application process will take, after receiving all necessary documents, around 4 to 6 months in normal circumstances. The application process mainly consists of 3 stages:
 - (a) documents verified by Construction Digitalisation Department of CIC.
 - (b) assessment or interview assessment performed by BIMAP.
 - (c) final decision by BIMCAB.

8. Mechanism of Re-sitting Interview Assessment [Applicable to the applicant of Normal route and Adept route only]

- 8.1 The BIMCAB approved the setting up the re-sitting mechanism for certification assessments under the BIMCAS in late February 2023.
- 8.2 The BIMAP will have a discretion to grant the applicant, who <u>failed</u> in only one Core Competency (CC), an opportunity to re-sit interview assessment on the failed CC.
- 8.3 The CIC Secretariat will notify the applicant on the re-sitting arrangement with the date and time. The re-sitting will be held within 3 months from the previous interview date.
- 8.4 The applicant cannot attend the re-sitting interview within 3 months, unless otherwise agreed by the BIMCAB Secretariat, his/her application would be disapproved.
- 8.5 The applicant has to <u>re-apply</u> for the certification and be assessed on all the CCs if the re-sitting interview assessment is also failed.

9. Processing and Assessment of Applications for Certification of BIM Coordinators through BIM Mentorship Route

- 9.1 An applicant for certification as a BIM Coordinator through BIM Mentorship Route must submit the following to the Construction Digitalisation Department of CIC for assessment:
 - (a) completed an online application form through "MyPortal" in CIC BIM Portal (www.bim.cic.hk);
 - (b) application fee (HK\$500);
 - (c) Since BIM Mentorship Route was developed exclusively for an eligible CCBC(A) to apply for certification as CCBC, applicant only needs to provide certified true copies of any updated academic qualification certificates and/or proofs of relevant work experience, if these were never included in his/her previous CCBC(A) application. If there are no updates in these areas, the previous CCBC(A) records will suffice for the CCBC application;
 - (d) A completed training logbooks of the whole mentorship period with BIM Mentors' signatures;
 - (e) A completed BIM Mentor's recommendation form with appropriate signatures:
 - (f) A curriculum vita; and
 - (g) Completion of the MC Test.
 - (h) Documents below are **WAIVED** for BIM Mentorship Route:
 - (i) Client and Employer Evaluation Forms;
 - (ii) Portfolio of BIM;
 - (iii) Competency Statement; and
 - (iv) Evidence of completing the BIM Education for the CCBC certification

Upon receipt of an application, the Construction Digitalisation Department of CIC will assess the completeness of the documents submitted and will request the applicant to provide further details to substantiate the application, if needed. The application will be regarded as withdrawn if the applicant fails to provide the necessary details within 3 months from the date of request made by CIC.

9.2 The Multiple Choice (MC) Test for BIM Mentorship Route

Once the submission is found to be completed, applicant will be invited to sit for the MC Test organised by CIC specifically for BIM Mentorship Route. Applicants must achieve a score of 60% or higher to pass the test. This is one of the assessment criteria for BIM Mentorship Route.

The MC Test will be conducted at the CIC premises in Kowloon once per month. CIC will arrange the venue, date and time of the MC Test and notify candidates in due course. Candidates are allowed to change their MC Test date up to three times, provided they have reasonable justifications accepted by CIC. Candidates who cannot attend the MC Test consecutively three times will be considered to have withdrawn from the test and the CCBC application, unless CIC has other considerations. Candidates should plan ahead and manage their schedules to prepare for and sit for the MC Test, as a commitment to applying for the CCBC certification.

Candidates should arrive at the MC Test venue on time and follow all relevant instructions and housekeeping rules set up by CIC. Failing to follow or any act against the instructions and housekeeping rules may lead to penalties or failure of the MC Test, subject to CIC's decision. Should you have any questions, please contact the case officer beforehand or the invigilator of the MC Test during the test.

The MC Test will be conducted on a tablet/computer in a closed-book format. The duration of the MC Test will be 1.5 hours, and there will be 40 MC questions. Candidates are required to achieve a score of 60% or higher to pass the test. The test result will be known immediately after finishing the MC Test. For candidates who fail the MC Test, CIC can arrange a retake in the next available MC Test session and will notify the candidates about the details in due course. If a candidate fails the MC Test three times, the application will be considered failed unless CIC has other considerations. After that, the candidate will need to submit a new application and pay the application fee if they wish to apply for certification as CCBC again.

9.3 After passing the MC Test, a BIMAP will be formed to review and assess the submissions of the application. If necessary, the BIMAP may make inquiries regarding the submissions and may request to meet the applicant to clarify the submitted materials. If the applicant cannot

provide a reasonable justification to the inquires or if irregularities are found by the BIMAP during the review process, the application will not be recommended. Generally, no interview assessment is required for BIM Mentorship Route.

- 9.4 Upon completion of the assessment, BIMAP will make a recommendation to BIMCAB for final decision.
- 9.5 The certification status of a BIM Coordinator shall be valid from the date of granting the certification status up to the end of that calendar year, and the names of the CIC-Certified BIM Coordinator will be placed on the CIC-Certified BIM Coordinator Register.
- 9.6 It is expected that the application process will take, after receiving all necessary documents, around 4 to 6 months in normal circumstances. The application process consists of 4 stages:
 - (a) documents verified by Construction Digitalisation Department of CIC.
 - (b) attend and pass the MC Test
 - (c) assessment performed by BIMAP.
 - (d) final decision by BIMCAB.

vetting as below:

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10. **Guideline on BIM Education in Operation Level**

BIM software/platform training course in operation level as/to be recognised by CIC In general, for any BIM software/platform training course to be recognised by CIC, it should be able to provide adequate lecture session AND hands-on session for the participants to acquire essential knowledge and skills on general operation of the respective BIM software/platform (Plugin, Add-on and non-BIM related software would not considered). A certificate of successful completion of the course (or equivalent) should be submitted by the applicant to the CIC Construction Digitalisation Department. For courses that are not on the list of CITF Preapproved BIM Training Courses, they will be considered on a case-by-case basis. Please note that applicant may be required to submit supplementary information about the course for CIC's

- (a) Proof of participation and completion of the course. (For course such as company internal training or subjects/modules in an academic programme.)
- (b) Course information such as course start/completion date, course duration, course outline, course learning outcome. course content, course assignment, name of instructor/tutor/lecturer, etc...
- (c) School information such as name, address or website of the school/teaching premises. etc..

For CITF Pre-approved BIM Training Courses that are recognised by CIC: Skill Level: 2 to 3 is expected (except for accredited BIM Coordinator Courses in the list).

Click here to learn more

10.2 Certification of BIM software in operation level issued by respective software developers

Alternatively, applicants can submit any Certification of BIM software/platform in operation level officially issued by respective software developers. Such as Autodesk Certified User, Autodesk Certified Professional, Certified ARCHICAD User, Tekla's Professional Certification, etc. Plugin, add-on and non-BIM related software would not be considered.

Remarks: Please note that the possession of such certificate (or equivalent) is only one of the assessment criteria of the Certification of the BIM Coordinators but does not indicate that the applicant possesses the required minimum competency level of Core Competency 2 (Level 3) as stipulated in this Certification.

11. Notification of Assessment Result

11.1 Applicants will be recommended for the CIC-Certified BIM Coordinator qualification if the assessment is favourable. Applicants will be informed of the result by mail.

12. Payment

12.1 Fee payable

A non-refundable application fee of HK\$500 is required for the application.

12.2 Payment Method

Online payment should be made for online applications. Alternatively, applicants could pay the required application fee by cheque, which should be made payable to "Construction Industry Council". All payments received are non-refundable, non-endorsable and non-transferable.

13. Certification Validity

13.1 The certification status of a BIM Coordinator shall be valid from the date of granting the certification status up to the end of that calendar year, and the names of the CIC-Certified BIM Coordinator will be placed on the CIC-Certified BIM Coordinator Register.

14. Renewal of Registration

14.1 The Construction Digitalisation Department of CIC will send a renewal application form to the CIC-Certified BIM Coordinators on a yearly basis at least 3 months prior to the date of expiry of their existing certification.

- 14.2 Upon receipt of the renewal application form, the CIC-Certified BIM Coordinators should submit the following to the Construction Digitalisation Department of CIC for renewal at least 1 month prior to the date of expiry of the existing certification:
 - (a) submit renewal application form in "MyPortal" (www.bim.cic.hk), confirming that they
 have undertaken at least 12 hours of BIM-related Continuing Professional Development
 (CPD) in the past year, and associated documents if applicable; and
 - (b) renewal fee (HK\$250).
- 14.3 Once a renewal application is found to be in order, the Construction Digitalisation Department of CIC will pass it to BIMAP for assessment if required. On completion of the assessment, BIMAP will make a recommendation to BIMCAB.
- 14.4 There would be a remark column indicating "Expired" status in the CIC-Certified BIM Coordinator Register three months after expiry of their existing certification, if they fail to return the signed renewal application form and associated documents, together with the renewal fee, by that time. The use of the CCBC title and logo would be prohibited after the date of expiry of their certification.

15. Application for reinstatement

- 15.1 A person, whose CIC-Certified BIM Coordinator status is expired, can apply for reinstatement of the certification within 2 years of the date of expiry of the last certification. Applications for reinstatement should be made in "MyPortal" (http://bim.cic.hk) following the procedure described in Section 14.2. The applicant is required to pay any other outstanding subscription since the date of expiry of the certification and /or registration, and submit associated documents, if requested.
- 15.2 A person whose name has been removed from the CIC-Certified BIM Coordinators Register for more than 2 years from the date of expiry of the last certification/registration, will need to submit afresh application for certification as a BIM Coordinator and the procedure given in Section 4 applies.

16. Appeal Cases

- An applicant for certification as a BIM Coordinator, including renewal/ reinstatement of registration, who is dissatisfied with a decision of BIMCAB may appeal to the CIC BIM Appeal Board (BIMAB). An applicant exercising the right of appeal should submit the following to the Construction Digitalisation Department of CIC, no later than 21 calendar days after the issue date of the result notification letter:
 - (a) a completed application form for appeal (Form PN03-F-03); and
 - (b) an application fee (HK\$1,500).

16.2 Upon receipt of an appeal case, BIMAB will review the case upon receipt of all necessary

documentation about the case. BIMAB's decision is final, BIMAB will inform BIMCAB of its

decision. The application fee will be refunded to the applicant if the appeal is found to be

valid.

16.3 Applicants will be informed of the result by mail.

17. **Application**

Email is the primary communication channel between CIC and the applicants. 17.1

Applicants are recommended to regularly check the mailbox of their email address(es)

provided to CIC in their application forms.

17.2 The completed Application Form with all necessary supporting documents should be

submitted through "MyPortal" in CIC BIM Portal (www.bim.cic.hk).

17.3 The CIC is a scheduled public body under the Prevention of Bribery Ordinance (POBO) (Cap.

201) and prohibits its employees, members and appointed BIMCAS assessors from soliciting

or accepting advantages from applicants when processing applications of BIMCAS.

Applicants are reminded that it is an offence under POBO to offer any advantages (e.g.

money, gift, etc.) to an employee or a member of CIC or an appointed BIMCAS assessor as

an inducement to or a reward for facilitating or expediting the processing of applications.

18. **Enquiry**

Construction Digitalisation Department - Construction Industry Council

38/F, COS Centre

56 Tsun Yip Street

Kwun Tong, Kowloon

Tel: 2100 9000

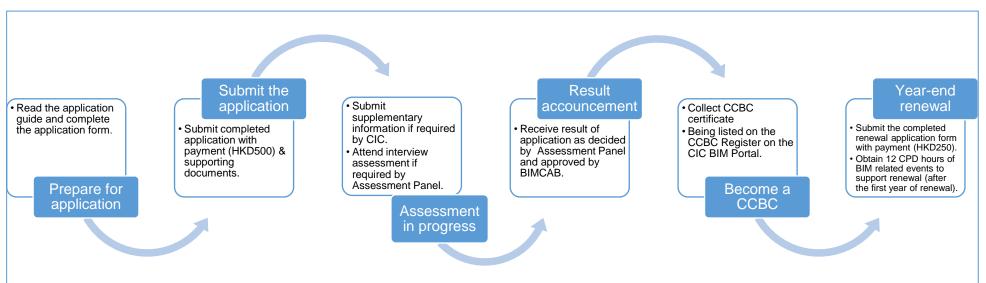
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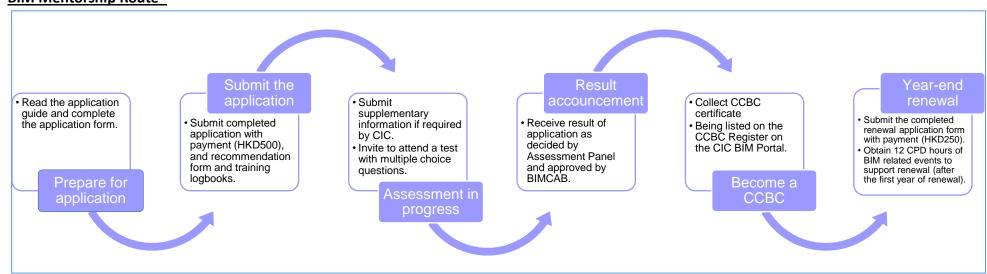
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How to become a CIC-Certified BIM Coordinator?

Normal Route and Adept Route



BIM Mentorship Route



<u>List of Core Subjects of a BIM Coordinator Course under the Building Information Modelling</u> (BIM) Certification and Accreditation Schemes (the "Schemes")

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
	1.1. BIM Concept					
	1.1.1	BIM definitions and terminology		✓		
	1.1.2	The difference between 2D CAD, 3D CAD and BIM	✓			
	1.1.3	Concept of BIM in the whole life cycle of a built asset	✓			
	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	✓			
iation	1.1.8	Challenges within existing working practices & how BIM addresses them		✓		
1. BIM Initiation	1.1.9	How BIM affects the current practice in AECO industry		✓		
——————————————————————————————————————	1.2. Loca	al & Global Contexts, BIM standards and guidelines				
	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 and collaborative formats		✓		

-		Core Subject	L1	L2	L3	L4
	2.1. BIM Software					
	2.1.1	Overview of common BIM software		√		
	2.1.2	Characteristics, file format & version, strength and limitation of common BIM software and platform		√		
	2.1.3	General hardware and software requirements for common BIM software		√		
	2.1.4	Operation of relevant BIM authoring software			✓	
gies	2.1.5	Technical advice on the operation of relevant BIM software			✓	
olou						
ech	2.2. Te	chnologies				
ا کر آ	2.2.1	Internet & cloud	✓			
e e	2.2.2	Laser scanning & photogrammetry		√		
2. BIM Software and Technologies	2.2.3	Unmanned Aircraft System (UAS) / Drone		✓		
	2.2.4	GIS		✓		
	2.2.5	Internet of Things (IoT), mobile or smart devices		√		
	2.2.6	VR/AR/MR		✓		
	2.2.7	RFID		✓		
	2.2.8	VDC	✓			
	2.2.9	Robotics	✓			
	2.2.10	Programming, automation and API	✓			
	2.2.11	MiC, DfMA and MiMEP		√		
	2.2.12	Indoor positioning	✓			
	2.2.13	Upcoming trend of technology	√			

-		Core Subject	L1	L2	L3	L4
	3.1. – BIM Uses and Processes					
	3.1.1	General understanding of the workflows in local	,			
	3.1.1	construction projects	✓			
	3.1.2	BIM strategy, BIM uses, BIM processes		√		
	3.1.3	Key personnels in relation to BIM and their roles and	,			
		responsibilities	>			
		BIM related documents such as Exchange Information				
	3.1.4	Requirements (EIRs), Asset Information Requirements				
	3.1.4	(AIRs), BIM Execution Plan (BEP) throughout the full			√	
		project life-cycle				
	3.1.5	Applications of various technologies to achieve BIM uses		✓		
	3.2. – Administ	ration of the BIM projects as a project BIM coordinator				
	3.2.1	Project implementation following the BEP			✓	
ω.	3.2.2	Setup, creation and publishing of BIM models following BIM			√	
SSe		related documents such as BEP or BIM standards			•	
e20.	3.2.3	Establish and maintain data structures or links throughout			√	
d Pr	3.2.3	the BIM processes			V	
BIM Uses and Processes	3.2.4	Administration and maintenance of BIM models in BIM				
Jses		project				
M		3.2.4.1 Monitor overall BIM models work progress			✓	
3. B		3.2.4.2 Coordination of BIM models with internal or other			√	
		disciplines			V	
		3.2.4.3 Maintain the BIM models appropriately and compile			y	
		with BIM documents such as BEP or BIM standards			V	
		n of BIM Uses for single and multi-disciplinary coordination in				
	BIM project					
	3.3.1	Spatial Coordination and 3D Construction Coordination (As			√	
	<u> </u>	stated in CIC BIM Standards General)				
	3.3.2	Phase Planning (4D Modelling) (As stated in CIC BIM			√	
		Standards General)				
	3.3.3	Design Reviews (As stated in CIC BIM Standards General)			√	
	3.3.4	Drawing Production directly from BIM software / platform			✓	
		BIM related meetings				
	3.4.1	Meeting with appointing party			✓	

-		Core Subject	L1	L2	L3	L4
	3.4.2	Meeting with Lead Appointed Party and/or Appointed			y	
	0.4.2	Parties			V	
	3.4.3	Internal meeting			✓	
	3.4.4	Multidiscipline collaboration meeting			✓	
	3.4.5	Site co-ordination meeting			✓	

_		Core Subject	L1	L2	L3	L4
4. Digital Information Management, Collaboration and Integration	4.1. Digital Information Management					
	4.1.1	Value of data & how it should be managed		✓		
	4.1.2	Common data formats and open formats for BIM (BCF, IFC, IDM, bsDD, COBie, MVD, etc.)		√		
	4.1.3	Data exchange of relevant BIM software for single/multiple discipline(s) collaboration			>	
	4.1.4	Limitation of BIM software in relation to information management		√		
	4.1.5	Maintain proper Level of Development (graphics and information) of the dataset			✓	
	4.1.6	Establish and maintain data structures or links within the BIM software/platform protocol			\	
	4.1.7	Maintain accurate data set such as templates, standards, libraries, project files, drawings, design specifications and project schedules			✓	
	4.2.	Common Data Environment (CDE)				
	4.2.1	CDE solution and workflow		√		
	4.2.2	Overview of CDE solutions in the market		✓		
	4.2.3	Administration and maintenance of CDE including relevant project information standards and project information management methods and procedures			>	
	4.2.4	Limitation of CDE		√		
	4.3 – I	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 including Clash avoidance strategies and Clash detection resolution methodologies			✓	
	4.3.4	Audit reporting			✓	