CONSTRUCTION INDUSTRY COUNCIL 建造業議會

Construction Industry Council
BIM Certification and Accreditation Schemes

Application Guide for Accreditation of Building Information Modelling (BIM) Coordinator Courses and/or BIM Coordinator Top-up course

1. Background

1.1 This Application Guide sets out the approach and procedures to be adopted in the processing and assessment of applications made by course providers for accreditation of Building Information Modelling (BIM) Coordinator Courses and/or BIM Coordinator Top-up Courses.

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.

1.6 Due to the demand for Continuing Professional Development (CPD) courses for BIM Coordinators in the industry, in order to upkeep quality there is a need for Accreditation of BIM Coordinator Courses.

2. Eligibility Criteria for Accreditation of BIM Coordinator Courses and/or BIM Coordinator Top-up Courses

2.1 Relevant Course/Accredited BIM Course

The accreditation of BIM Coordinator Courses and/or BIM Coordinator Top-up Courses are targeted at course providers who are offering, or plan to offer, BIM Coordinator Courses and/or BIM Coordinator Top-up Courses in Hong Kong with adequate resources and a comprehensive quality assurance mechanism in place.

2.2 Learning Outcomes of an Accredited BIM Coordinator Course

At the end of the course, students will be able to:

(a) describe BIM concept definitions and scope, BIM standards and guidelines in Hong Kong and global contexts. (Level 2)

(b) operate BIM software and the modelling process, and describe current and relevant technologies.[1] (Level 3)

(c) 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) 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)

2.3 Content of an Accredited BIM Coordinator Course

The course content should cover the following:

(a) BIM concept definitions and scope, BIM standards and guidelines in Hong Kong and global contexts. (Level 2)

(b) BIM software and the modelling process, and describe current and relevant technologies. (Level 3)

(c) BIM uses and BIM software applications, execution and administration of the responsible BIM tasks for individual or cross-disciplinary BIM project coordination. (Level 3)

(d) Digital information management, collaboration and integration, including execution and administration of 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)

Core subjects are listed in Annex A of this Application Guide.

2.4 Learning Outcomes of an Accredited BIM Coordinator Top-up Course

At the end of the course, students will be able to:

(a) operate BIM software and the modelling process, and describe current and relevant technologies. (Level 3)

[1] Core BIM Uses and processes defined in (c) should be referred to when teaching BIM software and relevant technologies.

(b) 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)

(c) 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)

2.5 Content of an Accredited BIM Coordinator Top-up Course

The course content should cover the following:

(a) BIM software and the modelling process, and describe current and relevant technologies. (Level 3)

(b) BIM uses and BIM software applications, execution and administration of the responsible BIM tasks for individual or cross-disciplinary BIM project coordination. (Level 3)

(c) Digital information management, collaboration and integration, including execution and administration of 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)

3. Assessment Criteria

3.1 In order to pass the Accreditation of BIM Coordinator Course and/or BIM Coordinator Top-up Course, course providers have to demonstrate with documentary evidence that the standards of the assessment criteria outlined below can be met. Each of the assessment criteria is related to specific section(s) of the application forms PN04-F-01-Part-I and PN04-F-01-Part-II. Course providers have to ensure that all relevant documentary evidence should be attached to the application submission, and to be ready to present and demonstrate all of the relevant documentary evidence during the on-site assessment.

(a) **<u>The Six Assessment Criteria at Organisational Level</u>**

(i) **Governance and Management (Organisational Level)**

Course providers should be able to demonstrate sound organisation structure, governance, processes and quality assurance arrangement to manage their operation.

(ii) **Information and Data Management on Learners/students' Records (Organisational Level)**

Course providers must be able to demonstrate effective policies, administration and management systems and operation procedures at organisational level to ensure that learners/students' records are handled with integrity, security, accuracy and currency.

(iii) **Financial and Other Relevant Resources (Organisational Level)**

Course providers should be able to demonstrate that the organisation is financially sound and sustainable, and has adequate financial and other relevant resources for their BIM courses.

(iv) **Venues, Training Facilities/Equipment, Computers and BIM Software for Conducting BIM Courses (Organisational Level)**

1) Venues

I. Evidence to show that course providers have obtained all approvals and registrations necessary in order to operate BIM Courses in compliance with the terms of all such approvals and registrations, including proof of ownership or a lease agreement for the use of the premises showing details of duration and terms which fully comply with the statutory requirements of the HKSAR Government for teaching purposes.

II. Should be in reasonable size (In terms of admission figure, number of courses and students, course type, etc.) in relation to the BIM training business of course providers.

III. Venues, include but not limited to reception/registration area, classroom, sanitary room, nursery room and furniture (stationary and loose) should be safe, hygienic and ergonomically friendly to the users of the venues. Classrooms should be ergonomically friendly to facilitate learning and teaching experience, effectiveness and efficiency of BIM Courses.

2) Training Facilities/Equipment

I. Should be in adequate quantity, being chosen and installed properly and in good maintenance to facilitate learning and teaching experience, effectiveness and efficiency of BIM Courses.

3) Computers

I. Should be provided in adequate quantity, being chosen and installed properly and in good maintenance to facilitate learning and teaching experience, effectiveness and efficiency of BIM Courses.

II. Hardware specification of computers should be in appropriate level so that respective BIM software can be run efficiently to facilitate learning and teaching experience, effectiveness and efficiency of BIM Courses.

4) BIM Software

I. Should be provided in adequate quantity, being installed properly, and in good maintenance to facilitate learning and teaching experience, effectiveness and efficiency of BIM Courses. Course providers has to ensure that all the computer software must be genuine software.

II. Should be chosen properly to match the course content designed by course providers.

(v) **Staffing (Organisational Level)**

(a) Staff

I. Course providers should have adequate teaching and supporting staff with qualities, competence, qualifications and experience necessary for the effective delivery of their courses/programmes.

(b) Appointment Criteria for Existing Teaching Staff

I. Appointment criteria for teaching staff should be appropriate and relevant to the delivery of their respective courses/programmes.

(vi) **Quality Assurance on Course/Programme Development, Approval and Management (Organisational Level)**

1) Course/Programme Development and Approval

I. Course providers should be able to demonstrate good and effective course development and policy and mechanism. E.g. develop course/programme by addressing the needs of the community, industry, employees and employers.

II. Course/Programme approval procedures at organisational level that guide approval of the courses/programmes to ensure that courses/programmes and course/programme objectives are met.

2) Course/Programme Management

I. Course providers should be able to demonstrate good and effective course management policy and mechanism. E.g. monitor and review the performance of courses/programmes on an ongoing basis to ensure that courses/programmes remain current and valid and that the intended learning outcomes, teaching and learning activities and learners/students' assessments are effective and met with the course/programme objectives.

(b) **<u>The Twelve Assessment Criteria at Course Level</u>**

(i) **Course Name, Qualification Title, Duration and Contact Hour**

1) Course Name and Qualification Title

I. Course name and qualification title of the course should be reasonable and be able to match the course level, course

contact hour and course intended learning outcomes designed by course providers.

2) Duration

I. Duration of the course should be designed in reasonable manner to ensure that the course is running in a steady and consistent progress and intervals.

3) Contact Hour

I. Contact hour of the course should be sufficiently long for all course materials to be adequately covered, so that the course intended learning outcomes can be achieved. The minimum contact hour of the BIM Coordinator Course is 45 hours plus 3 examination hours. (Please refer to Annex A.) The minimum contact hour of the BIM Coordinator Top-up Courses is 19 hours plus 2 examination hours (Please refer to Annex B).

(ii) **Course Management and Administration**

1) Course Management

I. Course providers should be able to demonstrate an appropriate and effective organisation structure at course level in order to maintain and comply with the quality assurance of the course and organisation management.

2) Course Administration

I. Course providers should be able to demonstrate an appropriate and effective course administration of the course to ensure that the course can by delivered effectively and comply with the quality assurance of the course and organisation management.

(iii) **Course Objectives and Learning Outcomes**

1) Course Objectives

I. Course objectives should be aligned with intended learning outcomes of the course.

2) Course Learning Outcomes

I. “” For the BIM Coordinator Course, please refer to Section 2.2 and Annex . For BIM Coordinator Top-up Course, please refer to Section 2.4 and Annex B.

II. Reference of the intended learning outcomes to external reference points (e.g. relevant discipline benchmarks, requirements of employers and accreditation bodies, etc.)

(iv) **Course Content, Structure and Materials**

1) Course Content and Structure

I. Course content of the course should cover all the Core Subjects with all the required Level of Learning Outcomes as stipulated in the Schemes. (Please refer to Annex A and B respectively.)

II. Content and Structure of the course should be up-to-date, and should be coherent, balanced and integrated to facilitate progression, to enable learners/students to achieve the stated intended learning outcomes and the required standards of the course.

2) Course materials

I. All course materials, include but not limited to handouts, lecture notes, presentation slides, reference readings, assignments, test papers, examination papers, should be of adequate quality, up-to-date and align with the course objectives and intended learning outcomes of the course.

(v) **Admission Requirements**

1) Minimum Admission Requirements

I. The minimum admission requirements for the course should be clearly outlined for learners/students and staff. These requirements and the learners/students' selection processes should ensure that learners/students enrolling in the course have the knowledge and skills to be able to undertake the learning activities proposed in the course.

2) Admission Priority

I. Admission priority should be given to those who are eligible to apply for certification as CIC-Certified BIM Coordinators, and then to project coordinators or professionals, who possess a Higher Diploma or Associate Degree in architecture, engineering, surveying, building or construction or are working on construction projects.

(vi) **Learning and Teaching Activities**

1) The learning and teaching activities designed for the course should be effective in delivering the course intended learning outcomes and course content. A range of appropriate teaching methods (e.g. lecture, tutorial, workshop, etc.) should be adopted to effectively engage and simulate learners/students' participation in the classroom and enhance learning experience, effectiveness and efficiency of the course. The learning and teaching activities should be designed in adequate quality, up-to-date and align with the course objectives, intended learning outcomes of the course, and be able to cover all the Core Subjects with

all the required Level of Learning Outcomes as stipulated in the Schemes. (Please refer to Annex A and B respectively.)

2) Maximum Instructor-Student Ratio of 1:30

(vii) **Course Assessment**

1) Assessment

I. Assessments should be designed to support effective learning and to ensure that the assessment processes overall and particular assessment instruments used enable learners/students to demonstrate achievement of the intended learning outcomes and the required Level of Learning Outcomes of each Core Subject as stipulated in the Schemes.

2) Assessment Methods, Techniques and Marking

I. The assessment methods and techniques used for the course must be valid, reliable, fair and sufficient to reflect the intended learning outcomes of the course.

II. Course providers should ensure that the marking of the assessments, assignments and papers should be carried out to an adequate standard, with relevant documentary evidence as support. E.g. Marking Scheme, Rubrics, Marking Matrix, etc.

3) External Examiner, Reviewer and Moderator

I. Course providers should be able to demonstrate policies and methods to externally exam, review and moderate learners/students' assessment.

(viii) **Course Staffing and Development**

1) Supporting Staff

I. Course providers should have adequate supporting staff with qualities, competence, qualifications and experience necessary for the effective delivery of /the course.

II. There should be adequate staff development scheme and activities to ensure that the supporting staff are kept updated for the quality delivery of the course.

2) Teaching Staff

I. Course providers should have adequate teaching staff with qualities, competence, qualifications and experience necessary for the effective course management, planning, delivery and monitoring of the course.

II. A CIC-Certified BIM Coordinator or a CIC-Certified BIM Manager; and

III. documentary evidence which can prove that the staff has at least 5 years of practical experience in BIM, such as in development

of BIM standards: planning, design, contract administration and execution of BIM projects in the areas of quantity surveying, construction management, project management, cost and programme management, design management and specification, and property management; BIM education; quality assurance, etc.; and

IV. There should be adequate staff development scheme and activities to ensure that the teaching staff are kept updated, to maintain and enhance quality of teaching (e.g. effective staff development, peer review, induction and mentoring).

3) Appointment Criteria for Teaching Staff

I. Appointment criteria for teaching staff of the course should be appropriate and relevant, with qualities, competence, qualifications and experience necessary for the effective delivery of the Course.

II. Appointment criteria for teaching staff of the course should meet the minimum requirements of teaching staff as stipulated in the Schemes. (Please refer to Section 3.1 (b) (viii) 2).)

(ix) **Financial and Other Relevant Resources for the Course**

1) Course providers should be able to demonstrate adequate financial and other relevant resources for the course, to show that the course is financially sound and sustainable. (Course providers should be able to demonstrate that the course itself is financially sustainable, regardless of the financial status at the organisation level.)

(x) **Training Facilities, Venues and Equipment for the Course (course providers can skip this part if the information is the same as Section 3.1 (a) (iv).)**

1) Venues

I. Evidence to show that course providers have obtained all approvals and registrations necessary in order to operate the course in compliance with the terms of all such approvals and registrations, including proof of ownership or a lease agreement for the use of the premises showing details of duration and terms which fully comply with the statutory requirements of the HKSAR Government for teaching purposes.

II. Should be in reasonable size (in terms of admission figure, no. of courses and students, course type) in relation to the training business of course providers.

III. Venues, include but not limited to reception/registration area, classroom, sanitary room, nursery room and furniture (stationary

and loose) should be safe, hygienic and ergonomically friendly to the users of the venues. Classrooms should be ergonomically friendly to facilitate learning and teaching experience, effectiveness and efficiency of the course.

2) Training Facilities/Equipment
    I. Should be in adequate quantity, being chosen and installed properly and in good maintenance to facilitate learning and teaching experience, effectiveness and efficiency of the course.
3) Computers
    I. Should be provided in adequate quantity, being chosen and installed properly and in good maintenance to facilitate learning and teaching experience, effectiveness and efficiency of the course.
    II. Hardware specifications of computers should be able to run respective BIM software efficiently to facilitate learning and teaching experience, effectiveness and efficiency of the course.
4) BIM Software
    I. Should be provided in adequate quantity, being installed properly and in good maintenance to facilitate learning and teaching experience, effectiveness and efficiency of the Course. course providers have to ensure that all the computer software must be genuine software.
    II. Should be chosen properly to match the course content of the course.

(xi) **Support to Learners/Students of the Course**

1) Course providers should be able to demonstrate appropriate and effective communication channels for learners/students include but not limited to receive training and teaching information from course providers, provide feedback to course providers, learning supports to learners/students, academic support including student handbooks and other written documents to learners/students.

(xii) **Quality Assurance on the Course Development, Approval and Management (course providers can skip this part if the information is the same as Section 3.1 (a) (vi).)**

1) Course Development and Approval
    I. Course providers should be able to demonstrate good and effective course development and policy and mechanism. E.g.

develop course by addressing the needs of the community, industry, employees and employers and be able to **meet the scope of BIM industry development as stated in the Schemes.**

II. Course approval procedures that guide approval of the Course to ensure that the course and course objective are met.

2) Course Management

I. Course providers should be able to demonstrate good and effective course management policy and mechanism. E.g. monitor and review the performance of the course on an ongoing basis to ensure that the course remain current and valid and that the intended learning outcomes, teaching and learning activities and learner/student assessments are effective and met with the course objectives.

4. Processing and Assessment of Applications for Accreditation of BIM Coordinator Course and/or BIM Coordinator Top-up Course

4.1 The following documents must be provided to the Construction Digitalisation Department of CIC for assessment:

(a) completed online Application Forms through "My Portal" in CIC BIM Portal (www.bim.cic.hk) for Accreditation of BIM Coordinator Courses (Forms PN04-F-01-Part I and PN04-F-01-Part II). For Accreditation of BIM Coordinator Top-up Courses, please refer to Section 12 of the same application form.

(b) an application fee (HK$9,000)

(c) details of the course providers and its organisation to cover:

(i) name of holding company/parent organisation and name of course providers;

(ii) If the course provider is a registered school in Hong Kong, the certificate of registration of the school under the Education Ordinance (Cap 279) should be provided, or evidence that the course providers have obtained all approvals and registrations necessary in order to operate the course in compliance with the terms of all such approvals and registrations;

(iii) organisation chart to indicate details of the organisational structure, including the major academic and administrative components;

(iv) business registration and ownership documents/lease agreement.

(d) Details of the BIM Coordinator Course, to cover:

(i) course content and learning outcomes (please see Section 2.2. and 2.3)

(ii) course materials, assignments, test papers, examination papers, etc.: these should be of adequate quality and align with the course objectives

and learning outcomes, and the marking of assignments and papers should be carried out to an adequate standard;

(iii) course duration: this should be long enough to cover all course materials and achieve the minimum level of learning outcomes stated. The lecture hours and workshop hours should not be less than 18 and 27 hours respectively;

(iv) mode of delivery of course subjects and their mapping to learning outcomes;

(v) student assessment methods, including lecture attendance records, marked assignments, test papers, examination papers, etc. And their mapping to the learning outcomes;

(vi) external examiners/moderators/reviewers (if any); and

(vii) departments/supporting units that provide support to the course.

(e) Details of the BIM Coordinator Top-up Course, to cover:

(i) course contents and learning outcomes, including:

1) BIM software and the modelling process, and describe current and relevant technologies;

2) BIM uses and BIM software applications, execution and administration of the responsible BIM tasks for individual or cross-disciplinary BIM project coordination; and

3) Digital information management, collaboration and integration, including execution and administration of the operation of a common data environment and data quality control system for effective use and sharing of digital information in a BIM project;

(ii) Admission priority given to CIC-Certified BIM Managers;

(iii) the course provider is running a valid CIC-Accredited BIM Coordinator Course;

(iv) course duration: this should be long enough to cover all course materials and achieve the minimum level of learning outcomes stated. The lecture hours and workshop hours should not be less than 5 and 14 hours respectively; and

(v) same as 4.1 (d) (ii), (iv) to (vii).

(f) staff details, to cover:

(i) teaching staff – please refer to Section 3.1 (b) (viii) 2)

(ii) technical staff – number of technical staff supporting the course and their duties

(iii) maximum Instructor-Student Ratio of 1:30.

(g) student details, to cover:

(i) admission requirements/policy – priority should be given to project coordinators or professionals, who possess a Higher Diploma or Associate Degree in architecture, engineering, surveying, building or construction or are working on construction projects.

(h) details of other resources, to cover:

(i) lecture rooms, BIM hardware and software, library facilities; and

(ii) financial statements and/or a financial budget should be provided to show that the parent organisation of the course providers are financially sound and sustainable.

4.2 Upon receipt of the application, the Construction Digitalisation Department of CIC will assess the completeness of the documents submitted within 1 month and will request the applicant to provide further details to substantiate the application, if needed.

Once an application is found to be in order, the Construction Digitalisation Department of CIC will pass it to the Chairperson of the CIC BIM Assessment Panel (BIMAP) for assessment. The Chairperson of BIMAP will convene a BIMAP to process and assess the applications.

BIMAP will review the content of the submitted documents and, if considered to be satisfactory, will conduct an on-site assessment. The purpose of the on-site assessment is to allow BIMAP to check and confirm that the applicant has the capacity and capability to deliver the course. For BIM Coordinator Top-up Course, on-site assessment is optional subject to the decision of the BIMAP.

4.3 Upon completion of the assessment, BIMAP will make a recommendation to the CIC BIM Certification and Accreditation Board (BIMCAB) for approval. BIMCAB will consider the applications in batches.

4.4 It is expected that the application process will take around 4 to 6 months in normal circumstances. The application process consists of 3 stages:

(1) documents verified by Construction Digitalisation Department of CIC.

(2) On-site assessment performed by BIMAP after reviewing the submitted documents. (For the application of top-up course, on-site assessment may be waived.)

(3) approval/disapproval by BIMCAB.

4.5 Upon the approval of the application by the BIMCAB, the course will be directly admitted to Construction Innovation and Technology Fund (CITF) Pre-Approved BIM Training List unless written objection is submitted by the applicant.

5. Notification of Assessment Result

5.1 The course providers will be informed of the result by mail.

6. Payment

6.1 Fee payable

A non-refundable application fee of HK$9,000 is required for the application.

6.2 Payment Method

Applicants should 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.

7. Validity of Accreditation Status

7.1 The accreditation status of an accredited course shall be valid from the date of granting the accreditation status up to the end of the following calendar year, and the names of the accredited courses will be placed on the CIC-Accredited BIM Coordinator Course and CIC-accredited BIM Coordinator Top-up Course Register.

For the CIC-Accredited BIM Coordinator and the BIM Coordinator Top-up Course run by course providers who are self-accrediting or are accredited by the HKCAAVQ, renewal application would be required every four to five years unless otherwise stated, while the renewal of other courses would be carried out every two years. CIC will keep the course providers on the accreditation register updated on any revisions/amendments to the course requirements or any other issues of relevance to them.

7.2 For CIC-Accredited BIM Coordinator Top-up Course, the renewal period will be the same as the CIC-Accredited BIM Coordinator Course of the respective course provider. The fees for application for accreditation and renewal of the BIM Coordinator Top-up Course are waived and subject to review in 2025.

7.3 The course providers should notify the Construction Digitalisation Department of CIC of any changes/updates made to the items given in Section 4.1(c) to (h) during the validity period of the course accreditation, within 1 month after making the changes/updates, and should keep records of the changes/updates. The course providers should seek approval of the Construction Digitalisation Department of CIC before making any major change or update, such as removal or replacement of key aspects in the course content, reduction in course duration or changes in teachers.

8. Process for Renewal of Course Accreditation

8.1 The Construction Digitalisation Department of CIC will send a renewal application notification to course providers of CIC-Accredited BIM Coordinator Courses at least 3

months prior to the date of expiry of their course accreditation.

8.2 Upon receipt of the renewal application, course providers of CIC-Accredited BIM Coordinator Courses must submit the following to the Construction Digitalisation Department of CIC for renewal at least one month prior to the date of expiry of their existing accreditation:

(a) completed online application form through "My Portal" in CIC BIM Portal (www.bim.cic.hk) for Renewal of Accreditation of BIM Coordinator Courses (Forms PN04-F-02 Part I and PN04-F-02 Part II), including changes/updates made to the items given in Section 4.1(c) to (h) during the period of the existing accreditation; and

(b) a renewal fee (HK$6,000).

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. BIMAP will review the documents and, if a further on-site assessment is considered necessary, BIMAP will follow the assessment procedure given in Section 3.1 On completion of the assessment, BIMAP will make a recommendation to BIMCAB.

The name of the course providers will be removed from the CIC-Accredited BIM Coordinator Course and CIC-accredited BIM Coordinator Top-up Course Register after the expiration date of the existing accreditation if the course providers fail to submit a renewal application, and associated documents if required together with the renewal fee on time.

9. Application for Reinstatement

9.1 For those courses that have been removed from the CIC-Accredited BIM Coordinator Course and BIM Coordinator Top-up Course Register, the course providers may, within 1 year of the date of expiry of their last registrations apply for reinstatement of the course accreditation. In such cases, they must submit the details as required in Section 8.2 to the Construction Digitalisation Department of CIC at least 3 months prior to the deadline of the valid reinstatement period. Applications for reinstatement should be made using form PN04-F-02 Part I and PN04-F-02 Part II, and should following the procedure described in Section 8.2. The course providers may also be required to pay any outstanding subscription since the date of expiry of the last accreditation.

9.2 For courses that have been removed from the CIC-Accredited BIM Coordinator Course and BIM Coordinator Top-up Course Register for more than 1 year from the date of expiry of the last registration, the course provider will need to submit a fresh application for course accreditation.

10. Appeal Cases

10.1 An applicant for accreditation of a BIM Coordinator Course and/or BIM Coordinator Top-up Course, including renewal/reinstatement of course accreditation, who is dissatisfied with the decision of BIMCAB may make an appeal to the CIC BIM Appeal Board (BIMAB).

10.2 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 notification of the decision on the accreditation application from BIMCAB:

(a) a completed Application Form for Appeal (Form PN04-F-03) (upon request through email (bimcas@cic.hk)); and
(b) an application fee (HK$4,500).

10.3 Upon receipt of an appeal case, the Chairperson of BIMAB will convene a meeting to review the case within 2 months upon receipt of all necessary documentation about the case. BIMAB's decision could confirm, vary or reverse the determination or decision under appeal and is final. BIMAB will inform BIMCAB of its decision. It may also inform the Council if it considers any issue raised by the appeal case requires the attention of the Council. The application fee will be refunded to the applicant if the appeal is found to be valid.

10.4 The Construction Digitalisation Department of CIC will notify the applicant of the decision of BIMAB.

11. Application

11.1 Email is the primary communication channel between CIC and applicants. Applicants are recommended to check the mailbox of their provided email address proactively.

11.2 The completed Application Form with all necessary supporting documents should be submitted by email to bimcas@cic.hk or by mail to the Construction Digitalisation Department of CIC at the following address:

Private and Confidential - Application for Accreditation of BIM Coordinator Course and/or BIM Coordinator Top-up Course
Construction Digitalisation Department - Construction Industry Council
38/F, COS Centre
56 Tsun Yip Street
Kwun Tong, Kowloon

12. Enquiry

Construction Industry Council (CIC)
38/F, COS Centre, 56 Tsun Yip Street,
Kwun Tong, Kowloon
Tel : 2100-9000
Fax : 2100-9090
Email : bimcas@cic.hk

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Core Subjects of a BIM Coordinator Course

List of Core Subjects of a BIM Coordinator Course has defined the minimum course content hour, examination hour, and content of a BIM Coordinator Course as stipulated in the Schemes. Course providers are required to cover all the subjects in the list for their BIM Coordinator course if they want their courses to be accredited by the Schemes. Course providers have the flexibility to follow the sequence of the list or to follow their own sequence. Course providers also have the flexibility to cover more subjects which are not from the list.

Core Subject Group	Contact Hour	Examination
Core Subject Group 1 – BIM Initiation (minimum 3 hrs)	45	3
Core Subject Group 2 – BIM Software and Technologies (minimum 2 hrs)		
Core Subject Group 3 – BIM Uses and Processes (minimum 24 hrs)		
Core Subject Group 4 – Digital Information Management, Collaboration and Integration (minimum 16 hrs)		

Level of Learning Outcomes

Four levels of learning outcome are set up to map with all the Core Subjects as a means to ensure that the level of learning outcome of each Core Subject is aligned with the course learning outcome as stipulated in the Schemes.

L1 – Appreciation (A) General appreciation of the subject and an understanding of how the subject may affect, or integrate with other subjects.	Lecture only
L2 – Knowledge (K) Knowledge and understanding of the subject and its application.	+ Demonstration
L3 – Experience (E) Ability to perform the subject independently or under supervision.	+ Hands-on exercise
L4 – Ability (B) Ability to perform the subject without supervision and advise others.	+ Hands-on exercise with virtual case

List of Core Subjects of a BIM Coordinator Course under the BIM Certification and Accreditation Schemes

** self-study hours to be determined by the course provider

-	Core Subject	L1	L2	L3	L4	Minimum curriculum hours		Assessment		
						Lecture	Workshop	No. of Assignment	Description	Examination
1. BIM Initiation	*1.1. BIM Concept*					1.5	0	1	Assignments can be in quiz, worksheet…etc. It can be arranged so that it won't occupy any curriculum hour.	Can be combined with other Core Subject Groups to have a single examination
	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	✓								
	1.1.8 Challenges within existing working practices & how BIM addresses them		✓							
	1.1.9 How BIM affects the current practice in AECO industry		✓							
	1.2. Local & Global Contexts, BIM standards and guidelines					1.5	0			
	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		✓							
						3	0	1		

-	Core Subject	L1	L2	L3	L4	Minimum curriculum hours		Assessment		
						Lecture	Workshop	No. of Assignment	Description	Examination
2. BIM Software and Technologies	*2.1. BIM Software, Platform and Technologies*					1	0	1	Participants are suggested to spend their own time on getting know the BIM software. E.g. Homepage of BIM software	Can be combined with other Core Subject Groups to have a single examination
	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			✓		** This Core Subject can be excluded from the CIC-Accredited BIM Coordinator Course*				
	2.1.5 Technical advice on the operation of relevant BIM software			✓		**Require practicing hours which vary from different BIM software (can be excluded from the CIC-Accredited BIM Coordinator Courses)*				
	2.2. Technologies					1	0		Participants are suggested to spend their own time on getting to know various technologies related to BIM.	
	2.2.1 Internet & cloud	✓								
	2.2.2 Laser scanning & photogrammetry		✓							
	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	✓								
							2	0	1		

-	Core Subject		L1	L2	L3	L4	Minimum curriculum hours		Assessment		
							Lecture	Workshop	No. of Assignment	Description	Examination
3. BIM Uses and Processes	*3.1. – BIM Uses and Processes*										Can be combined with other Core Subject Groups to have a single examination
	3.1.1	General understanding of the workflows in local construction projects	✓				** This Core Subject can be excluded from the CIC-Accredited BIM Coordinator Course*				
	3.1.2	BIM strategy, BIM uses, BIM processes		✓			2	0	1	Participants are suggested to spend their own time on essential, reference or further readings. Assignment can be incorporated into workshop.	
	3.1.3	Key personnels in relation to BIM and their roles and responsibilities	✓								
	3.1.4	BIM related documents such as Exchange Information Requirements (EIRs), Asset Information Requirements (AIRs), BIM Execution Plan (BEP) throughout the full project life-cycle			✓						
	3.1.5	Applications of various technologies to achieve BIM uses		✓							
	3.2. – Administration of the BIM projects as a project BIM coordinator						2	6			
	3.2.1	Project implementation following the BEP			✓						
	3.2.2	Setup, creation and publishing of BIM models following BIM related documents such as BEP or BIM standards			✓						
	3.2.3	Establish and maintain data structures or links throughout the BIM processes			✓						
	3.2.4	Administration and maintenance of BIM models in BIM project			✓						
	3.2.4.1	Monitor overall BIM models work progress			✓						
	3.2.4.2	Coordination of BIM models with internal or other disciplines			✓						
	3.2.4.3	Maintain the BIM models appropriately and compile with BIM documents such as BEP or BIM standards			✓						

	3.3. – Execution of BIM Uses for single and multi-disciplinary coordination in BIM project					2		1		
	3.3.1 Spatial Coordination and 3D Construction Coordination (As stated in CIC BIM Standards General)			✓			3			
	3.3.2 Phase Planning (4D Modelling) (As stated in CIC BIM Standards General)			✓			3			
	3.3.3 Design Reviews (As stated in CIC BIM Standards General)			✓			2			
	3.3.4 Drawing Production directly from BIM software / platform			✓			2			
	3.4. – Assist in BIM related meetings					1	1			
	3.4.1 Meeting with appointing Party			✓						
	3.4.2 Meeting with Lead Appointed Party and/or Appointed Parties			✓						
	3.4.3 Internal meeting			✓						
	3.4.4 Multidiscipline collaboration meeting			✓						
	3.4.5 Site co-ordination meeting			✓						
						7	17	2		

-	Core Subject		L1	L2	L3	L4	Minimum curriculum hours		Assessment		
							Lecture	Workshop	No. of Assignment	Description	Examination
4. Digital Information Management, Collaboration and Integration	*4.1. Digital Information Management*						2	3	1	Participants are suggested to spend their own time on essential, reference or further readings. Assignment can be incorporated into workshop.	Can be combined with other Core Subject Groups to have a single examination
	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)						2	3		ditto	
	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 – Data Quality Control & Assurance across various stages						2	4	1	ditto	
	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			✓						
							6	10	2		
						Sub-Total (Hours)	**18**	**27**	No. of Assignment		6
						Total	**45**		Examination		3

Core Subjects of a BIM Coordinator Top-up Course for the Accreditation of BIM Coordinator Courses

List of Core Subjects of a BIM Coordinator Top-up Course has defined the minimum course content hour, examination hour, and content of a BIM Coordinator Top-up Course as stipulated in the Schemes. Course providers are required to cover all the subjects in the list for their BIM Coordinator Top-up course if they want their courses to be accredited by the Schemes. Course providers have the flexibility to follow the sequence of the list or to follow their own sequence. Course providers also have the flexibility to cover more subjects which are not from the list.

Core Subject Group	Contact Hour	Examination
Core Subject Group 1 – BIM Initiation **(removed)**	19	2
Core Subject Group 2 – BIM Software and Technologies (minimum 2 hrs)		
Core Subject Group 3 – BIM Uses and Processes (minimum 11 hrs)		
Core Subject Group 4 – Digital Information Management, Collaboration and Integration (minimum 6 hr)		

Level of Learning Outcomes

Four levels of learning outcome are set up to map with all the Core Subjects as a means to ensure that the level of learning outcome of each Core Subject is aligned with the course learning outcome as stipulated in the Schemes.

L1 – Appreciation (A) General appreciation of the subject and an understanding of how the subject may affect, or integrate with other subjects.	Lecture only
L2 – Knowledge (K) Knowledge and understanding of the subject and its application.	+ Demonstration
L3 – Experience (E) Ability to perform the subject independently or under supervision.	+ Hands-on exercise
L4 – Ability (B) Ability to perform the subject without supervision and advise others.	+ Hands-on exercise with virtual case

List of Core Subjects of a BIM Coordinator Top-up Course for the Accreditation of BIM Coordinator Courses

** self-study hours to be determined by the course provider

-	Core Subject		L1	L2	L3	L4	Minimum curriculum hours		Assessment		
							Lecture	Workshop	No. of Assignment	Description	Examination
1. BIM Initiation	*1.1. BIM Concept*		Removed								
	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									
	1.1.8	Challenges within existing working practices & how BIM addresses them									
	1.1.9	How BIM affects the current practice in AECO industry									
	1.2. Local & 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	Minimum curriculum hours		Assessment		
						Lecture	Workshop	No. of Assignment	Description	Examination
2. BIM Software and Technologies	*2.1. BIM Software and Technologies*									Can be combined with other Core Subject Groups to have a single examination
	2.1.1 Overview of common BIM software	Removed				1	1	0	Participants are suggested to spend their own time on getting know the BIM software. E.g. Homepage of 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			✓						
	2.1.5 Technical advice on the operation of relevant BIM software			✓						
	2.2. Technologies	Removed								
	2.2.1 Internet & cloud									
	2.2.2 Laser scanning & photogrammetry									
	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									
						1	1	0		

-	Core Subject	L1	L2	L3	L4	Minimum curriculum hours		Assessment		
						Lecture	Workshop	No. of Assignment	Description	Examination
3. BIM Uses and Processes	*3.1. BIM Uses and Processes*	Removed						1	Participants are suggested to spend their own time on essential, reference or further readings. Assignment can be incorporated into workshop	Can be combined with other Core Subject Groups to have a single examination
	3.1.1 General understanding of the workflows in local 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									
	3.1.4 BIM related documents such as Exchange Information Requirements (EIRs), Asset Information Requirements (AIRs), BIM Execution Plan (BEP) throughout the full project life-cycle									
	3.1.5 Applications of various technologies to achieve BIM uses									
	3.2. Administration of the BIM projects as a project BIM coordinator									
	3.2.1 Project implementation following the BEP	Removed				1	1			
	3.2.2 Setup, creation and publishing of BIM models following BIM related documents such as BEP or BIM standards			✓						
	3.2.3 Establish and maintain data structures or links throughout the BIM processes			✓						
	3.2.4 Administration and maintenance of BIM models in BIM project	Removed								
	3.2.4.1 Monitor overall BIM models work progress									
	3.2.4.2 Coordination of BIM models with internal or other disciplines									
	3.2.4.3 Maintain the BIM models appropriately and compile with BIM documents such as BEP or BIM standards									
	3.3. Execution of BIM Uses for single and multi-disciplinary coordination in BIM project					2		1	Assignment can be incorporated into workshop	
	3.3.1 Spatial Coordination and 3D Construction Coordination (As stated in CIC BIM Standards General)			✓			2			
	3.3.2 Phase Planning (4D Modelling) (As stated in CIC BIM Standards General)			✓			2			
	3.3.3 Design Reviews (As stated in CIC BIM Standards General)			✓			1			
	3.3.4 Drawing Production directly from BIM software / platform			✓			2			
	3.4. – Assist in BIM related meetings	Removed								
	3.4.1 Meeting with appointing Party									
	3.4.2 Meeting with Lead Appointed Party and/or Appointed Parties									
	3.4.3 Internal meeting									
	3.4.4 Multidiscipline collaboration meeting									
	3.4.5 Site co-ordination meeting									
						3	8	2		

-	Core Subject	L1	L2	L3	L4	Minimum curriculum hours		Assessment		
						Lecture	Workshop	No. of Assignment	Description	Examination
4. Digital Information Management, Collaboration and Integration	*4.1. Digital Information Management*							1	Participants are suggested to spend their own time on essential, reference or further readings. Assignment can be incorporated into workshop.	Can be combined with other Core Subject Groups to have a single examination
	4.1.1 Value of data & how it should be managed	Removed				1	1			
	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	Removed								
	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	Removed				0	2			
	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	Removed								
	4.3 – Data Quality Control & Assurance across various stages					0	2	1	ditto	
	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			✓						
						1	5	2		

Sub-Total (Hours)	**5**	**14**	No. of Assignment	4
	Total	**19**	Examination	2

Core Competencies of a BIM Coordinator

The Core Competencies of a BIM Coordinator are:

(1) BIM Initiation: Ability to describe BIM concept definitions and scope, BIM standards and guidelines in Hong Kong and global contexts. (Level 2)

(2) BIM Software and Technologies: Ability to operate BIM software and the modelling process, and describe current and relevant technologies. (Level 3)

(3) 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)

(4) 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)

(5) Communication Skills: Ability to apply interpersonal and communication skills in meetings, report / training material writing, etc. (Level 3)

Minimum Level of Competency:

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

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

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

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