

**Construction Industry Council**  
**BIM Certification and Accreditation Schemes**

**Application Guide for**  
**Registration of CIC-Certified Building Information Modelling Coordinators (Associate)**

**1. Background**

- 1.1** This Application Guide sets out the approach and procedures to be adopted in the processing and assessment of applications for registration as CIC-Certified Building Information Modelling (BIM) Coordinators (Associate).
- 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** In late 2022, CIC conducted a holistic 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, the CIC-Certified BIM Coordinators (Associate), which was launched on 22 March 2023.

## **2. Eligibility Criteria for Registration as CIC-Certified BIM Coordinators (Associate)**

**2.1** The registration of CIC-Certified BIM Coordinators (Associate) is targeted at BIM practitioners who already have relevant practical coordination experience in BIM projects, meet the relevant academic requirement and have completed a CIC-Accredited BIM Coordinator Course..

**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 (Associate) are expected to uphold the standing and reputation of the CIC and the BIM profession.

## **3. Core Competencies of CIC-Certified BIM Coordinators**

CIC-Certified BIM Coordinators (Associate) should know about the Core Competencies of CIC-Certified BIM Coordinators as listed below:

- (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 software<sup>1</sup> 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 CIC-Accredited BIM Coordinator Course under the BIM Certification and Accreditation Schemes are listed in Annex B of this Application Guide.

## **4. Assessment Criteria for Registration of CIC-Certified BIM Coordinators (Associate)**

**4.1** The following assessment criteria will be adopted for registration of CIC-Certified BIM Coordinators (Associate):

- (a) Qualification – A diploma (or equivalent) in Qualifications Framework (QF) Level 4 or above qualification accredited or recognised by a CIC-recognised professional body<sup>2</sup> in architecture, engineering, surveying, building or construction, or equivalent, as

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<sup>1</sup> 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>).<sup>2</sup> List of CIC-recognised professional body is available on website of BIM Department of CIC (<http://www.bim.cic.hk/>).

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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 understanding and experience of the Core Competencies of CIC-Certified 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, **PLUS**
  - ii. At least one BIM software/platform training course in operation level as recognised by CIC, **OR** possession of any certification of BIM software in operation level issued by respective software developers (refer to Section 7) **OR** any equivalent as accepted by CIC.
- (d) Employer<sup>3</sup> Evaluation Form(s) – submission of at least one set of evaluation form. The Employer form will be used to verify the applicant's BIM experience as stated in (b) and to evaluate the applicant's BIM capability obtained from the BIM experience stated in (b).
- (e) Professional conduct and integrity demonstrated by the Employer Evaluation Form, 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 any CIC-Certified BIM personnel registers,
  - 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 registration unless the BIMCAB has other considerations after taking into account of all circumstances.

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<sup>3</sup> Employer could be direct manager or supervisor of the project team.

## 5. Adept Route for Applying Registration of CIC-Certified BIM Coordinators (Associate)

Applicants, who do not have the required academic qualification under the Normal Route as described in Section 4 above, can consider to apply through an 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 understanding and experience of the Core Competencies of CIC-Certified 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, **PLUS**;
  - ii. at least one BIM software/platform training course in operation level as recognised by CIC, **OR** possession of any certification of BIM software in operation level issued by respective software developers (refer to Section 7), **OR** any equivalents accepted by CIC.
- (d) Employer Evaluation Form(s) – submission of at least one set of evaluation form. The Employer form will be used to verify the applicant’s BIM experience as stated in (b) and to evaluate the applicant’s BIM capability obtained from the BIM experience stated in (b).
- (e) Professional conduct and integrity demonstrated by the Employer Evaluation Form, 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 registration unless the BIMCAB has other considerations after taking into account of all circumstances.

## **6. Processing and Assessment of Applications for Registration of CIC-Certified BIM Coordinators (Associate)**

**6.1** An applicant for registration of a CIC-Certified BIM Coordinator (Associate) must submit the following to the Construction Digitalisation Department of CIC for assessment:

- (a) completed the application form and submitted all necessary supporting documents by mail to the BIM Construction Digitalisation Department - Construction Industry Council, 38/F, COS Centre, 56 Tsun Yip Street, Kwun Tong, Kowloon, or by email to [bimcas@cic.hk](mailto:bimcas@cic.hk). Please state "Private and Confidential - Application for Registration of BIM Coordinators (Associate)" on the envelope or email subject.
- (b) application fee (HK\$500), which will be waived for application before 1 October 2023;
- (c) for 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), and  
at least one set of evaluation form from employer that prove the applicant has in the past 5 years gained at least 1 year full-time relevant practical experience in BIM project coordination and related tasks (with at least 6 months stationed in Hong Kong). Standardised evaluation form for employer will be provided by CIC. The applicant should ask his/her employer to fill in the standardised evaluation form(s) and return to CIC separately;
- (d) for adept route, proof of 6 years of full-time relevant work experience (with at least 2 years stationed in Hong Kong), and  
at least one set of evaluation form from employer that prove the applicant has in the past 5 years gained at least 2 years full-time relevant practical experience in BIM project coordination and related tasks (with at least 1 year stationed in Hong Kong);
- (e) evidence of completing
  - i. A CIC-Accredited BIM Coordinator Course, (e.g. completion certificate); **AND**
  - ii. Evidence of completing at least one BIM software/platform training course in operation level as recognised by CIC **OR** possession of any certification of BIM software in operation level issued by respective software developers; (Refer to Section 7); and
- (f) a curriculum vitae.

- 6.2** 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. An application with irregularities may result in disapproval.
- 6.3** CIC will review the content of the submitted documents, if the submissions are completed and fulfill the requirement of Registration of CIC-Certified BIM Coordinator (Associate), the applicant will be recommended to the BIMCAB for approval as CCBC(Associate) [CCBC(A)].
- 6.4** It is expected that the application process will take, after receiving all necessary documents, around 3 to 4 months in normal circumstances. The application process consists of 2 stages:
- (a) documents verified by Construction Digitalisation Department of CIC.
  - (b) approval/disapproval by BIMCAB.

## **7. Guideline on BIM Education in Operation Level**

### **7.1 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 Pre-approved BIM Training Courses, they will be considered on a case-by-case basis. Please note that applicants may be required to submit supplementary information about the course for our vetting as below:

- (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 CIC-Accredited BIM Coordinator Courses in the list).

## **7.2 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 Registration of the CIC-Certified BIM Coordinators (Associate) but does not indicate that the applicant possesses the required minimum competency level of Core Competency 2 (Level 3) as stipulated in this Registration.*

## **8. Notification of Assessment Result**

Applicants will be informed of the result by mail.

## **9. Payment**

### **9.1 Fee payable**

A non-refundable application fee of HK\$500 is required for the application. Application fee is waived for applications submitted to CIC before 1 October 2023.

### **9.2 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.

## **10. Certification Validity**

The registration status of a CIC-Certified BIM Coordinator (Associate) shall be valid for **3 years** from the date of granting the registration, and the names of the successful applicants will be placed on the CIC-Certified BIM Coordinators (Associate) Register. Any extension of the validity period will be subject to the system review by the BIMCAB in two years' time after the launch of this new tier.

## **11. Appeal Cases**

**11.1** An applicant for registration as a CIC-Certified BIM Coordinator (Associate), 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).

**11.2** 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.

**11.3** Applicants will be informed of the result by mail.

## **12. Application**

**12.1** Email is the primary communication channel between CIC and the applicants. Applicants are recommended to regularly check the mailbox of their email address(es) provided to CIC in their application forms.

**12.2** The completed Application Form with all necessary supporting documents should be submitted by email to [bimcas@cic.hk](mailto:bimcas@cic.hk) or by post to the Construction Digitalisation Department of CIC at the following address:

Private and Confidential - Application for Registration a of BIM Coordinator

Construction Digitalisation Department - Construction Industry Council

38/F, COS Centre

56 Tsun Yip Street

Kwun Tong, Kowloon

## **13. Enquiry**

Construction Digitalisation Department - Construction Industry Council

38/F, COS Centre

56 Tsun Yip Street

Kwun Tong, Kowloon

Tel : 2100 9000

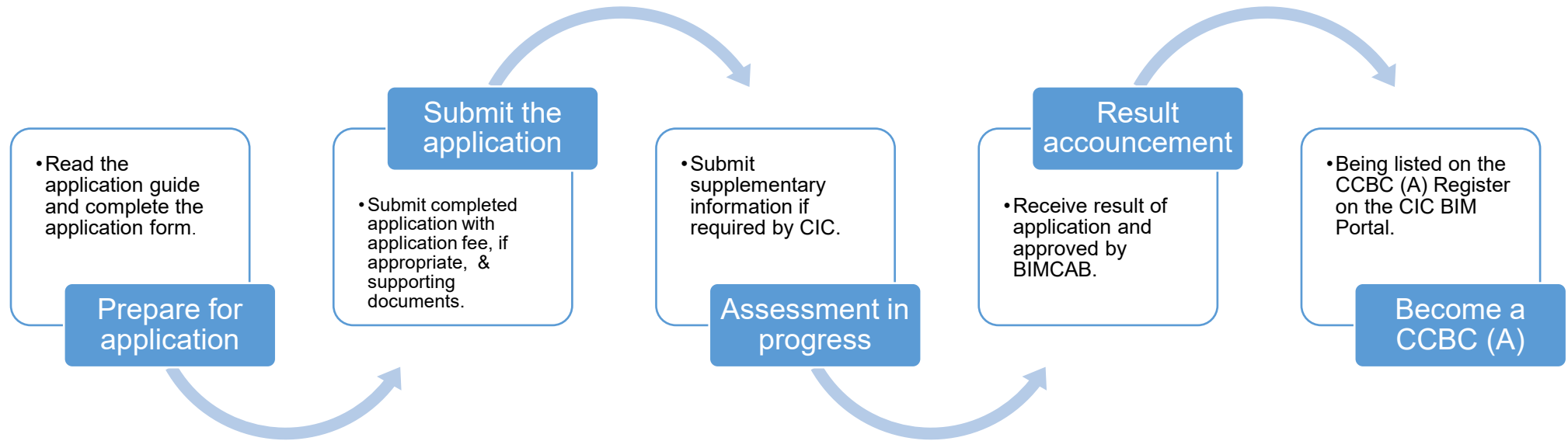
Fax : 2100 9090

Email : [bimcas@cic.hk](mailto:bimcas@cic.hk)

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**How to become a CIC-Certified BIM Coordinator (Associate)?**



**List of Core Subjects of a BIM Coordinator Course under the Building Information Modelling (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. BIM Initiation | <b>1.1. BIM Concept</b>   |    |    |    |    |
|                   | 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                 |    | ✓  |    |    |
|                   |   |    |    |    |    |
|                   | <b>1.2. Local &amp; Global Contexts, BIM standards and guidelines</b>       |    |    |    |    |
|                   | 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. BIM Software and Technologies | 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  |    |    | ✓  |    |
|                                  | 2.1.5                        | Technical advice on the operation of relevant BIM software  |    |    | ✓  |    |
|                                  |                              |   |    |    |    |    |
|                                  | 2.2. Technologies            |   |    |    |    |    |
|                                  | 2.2.1                        | Internet & cloud  | ✓  |    |    |    |
|                                  | 2.2.2                        | Laser scanning & photogrammetry   |    | ✓  |    |    |
|                                  | 2.2.3                        | Unmanned Aircraft System (UAS) / Drone  |    | ✓  |    |    |
|                                  | 2.2.4                        | 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. BIM Uses and Processes | <b>3.1. – BIM Uses and Processes</b>   |    |    |    |    |
|                           | 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   |    | ✓  |    |    |
|                           |  |    |    |    |    |
|                           | <b>3.2. – Administration of the BIM projects as a project BIM coordinator</b>  |    |    |    |    |
|                           | 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  |    |    | ✓  |    |
|                           |  |    |    |    |    |
|                           | <b>3.3. – Execution of BIM Uses for single and multi-disciplinary coordination in BIM project</b>  |    |    |    |    |
|                           | 3.3.1 Spatial Coordination and 3D Construction Coordination (As 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   |    |    | ✓  |    |
|                           |  |    |    |    |    |
|                           | <b>3.4. – Assist in BIM related meetings</b>   |    |    |    |    |
|                           | 3.4.1 Meeting with appointing party  |    |    | ✓  |    |

| -     | Core Subject   | L1 | L2 | L3 | L4 |
|-------|--|----|----|----|----|
| 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                                 |    |    | ✓  |    |

|  | Core Subject   | L1 | L2 | L3 | L4 |
|--|--|----|----|----|----|
| 4. Digital Information Management, Collaboration and Integration | <b>4.1. Digital Information Management</b>   |    |    |    |    |
|  | 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         |    |    | ✓  |    |
|  |  |    |    |    |    |
|  | <b>4.2. Common Data Environment (CDE)</b>  |    |    |    |    |
|  | 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  |    | ✓  |    |    |
|  |  |    |    |    |    |
|  | <b>4.3 – Data Quality Control &amp; Assurance across various stages</b>  |    |    |    |    |
|  | 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  |    |    | ✓  |    |