

Construction Industry Council BIM Certification and Accreditation Schemes

Core Competencies and List of Core Subjects for Applications for Certification of BIM Coordinators Submitted before 1 October 2026

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]

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>).

List of Core Subjects of a BIM Coordinator

Minimum Level of Competency:

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

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

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

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

-	Core Subject	L1	L2	L3	L4
1. BIM Initiation	<i>1.1. BIM Concept</i>				
	1.1.1 BIM definitions and terminology		✓		
	1.1.2 The difference between 2D CAD, 3D CAD and BIM	✓			
	1.1.3 Concept of BIM 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		✓		
	<i>1.2. Local & Global Contexts, BIM standards and guidelines</i>				
	1.2.1 Local BIM standards & resources		✓		
	1.2.1.1 CIC BIM Standards		✓		
	1.2.1.2 Government BIM standards & resources		✓		
	1.2.2 Global context in BIM development	✓			
	1.2.3 Global BIM standards & resources		✓		
	1.2.3.1 ISO 19650		✓		
	1.2.3.2 BIM FORUM LOD Specification		✓		
	1.2.3.3 openBIM 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	<i>3.1. – BIM Uses and Processes</i>				
	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		✓		
	<i>3.2. – Administration of the BIM projects as a project BIM coordinator</i>				
	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			✓	
	<i>3.3. – Execution of BIM Uses for single and multi-disciplinary coordination in BIM project</i>				
	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			✓	
	<i>3.4. – Assist in BIM related meetings</i>				
	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	4.1. <i>Digital Information Management</i>				
	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. <i>Common Data Environment (CDE)</i>				
	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</i>				
	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			✓	