



Construction Industry Council

For official use only

Application No.: A-BMR-_____

Application Form for Accreditation of Building Information Modelling (BIM) Manager Courses

Important Notes to Course Providers

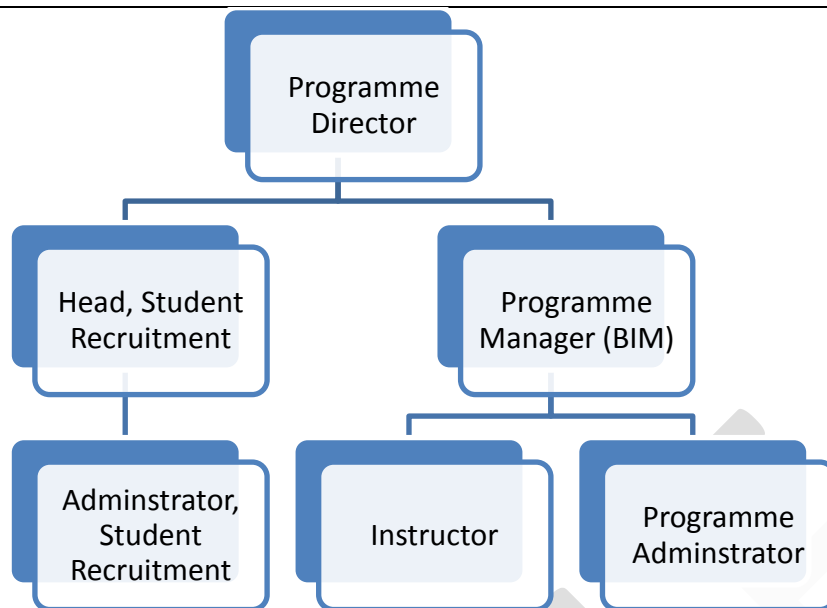
1. Please read carefully the "Application Guide for Accreditation of Building Information Modelling (BIM) Manager Courses" BEFORE completing this application form.
2. It is the responsibility of the Course Providers to provide adequate and sufficient evidence to demonstrate that they meet the assessment criteria. The Course Providers should provide all relevant documents required for assessment by CIC throughout the accreditation process. In preparing evidence, the emphasis should be on quality and relevance, not the quantity.
3. This Application Form together with all necessary supporting documents (either softcopies or hardcopies) shall be submitted by mail to BIM Department - Construction Industry Council, 38/F, COS Centre, 56 Tsun Yip Street, Kwun Tong, Kowloon, or by email to bimcas@cic.hk. Please state "Private and Confidential - Application for Accreditation of BIM Manager Course" on the envelope or email subject. This application form must be submitted together with the documents, if applicable, listed in the Document Checklist. Please provide other relevant supporting documents where necessary. Original diploma, certificate, degree transcript or other important documents should **NOT** be sent to CIC by mail.
4. Upon submission, this Application Form and all other attached documents become part of CIC records and are not returnable.

Part II (Information on the BIM Manager Course)

*Mandatory fields # Delete as appropriate
Input "N.A." if it is not applicable.

| Section 1 Course Information | |
|---|--|
| 1.1 Name of Course Provider* | |
| (English) | ABC Education Centre |
| (Chinese) | ABC 教育中心 |
| 1.2 Name of Award/Certificate Granting Body* | |
| (English) | ABC Education Centre |
| (Chinese) | ABC 教育中心 |
| 1.3 Course Title* | |
| (English) | Advanced Certificate for BIM Manager Course |
| (Chinese) | 建築信息模擬經理高級證書課程 |
| 1.4 Qualification Title (Exit Award)* | |
| (English) | Advanced Certificate for BIM Manager |
| (Chinese) | 建築信息模擬經理高級證書 |
| 1.5 Target Students * | |
| <input checked="" type="checkbox"/> General public <input type="checkbox"/> In-house training | |
| 1.6 Notional Learning Hours* | Contact hours: 60 Self-study hours: 40 Total (Contact hours + Self-study hours): 100 Others (please specify): |
| 1.7 Mode(s) of Delivery & Course Duration* | Full-time: N.A. (hour/day/month#) Part-time: 5 (hour/day/month#) Workplace attachment / on-the-job training/in-house training#: (hour/day/ month#) Others (please specify): |
| 1.8 Start Date | Estimated commencement date: 06/19 |

| Section 2 Information on the Department Providing the Course* |
|--|
| 2.1 Structure of the department offering the course |
| Organisation chart to show the organisational structure of the department, including the major academic and administrative components. |



Guidance: this is about division of work at unit level of BIM department. Course providers may use an organisational chart to illustrate its structure (e.g. job ranks and positions, headcount).

2.2 Teaching and Administrative Responsibilities

Describe the authority of the Dean/Vice-Principal/Academic Director[#] and others within the department who holds the responsibility of the BIM Manager Course to be accredited.

Programme Director

- Oversees the full spectrum of the Centre operation including the administration and financial;
- Work with the Programme Management Committee and relevant subcommittees to design and update the curriculum for the BIM training courses;
- Assess both the professional qualification and relevant experience for the BIM training courses' lecturers;
- Evaluate the teaching performance of the BIM training courses' lecturers; - Liaise with other professional institutions and both the local and overseas universities to organise joint conference on BIM professionalism.

Head, Student Recruitment

- Plan for Student Recruitment
- Assist Programme Director in student recruitment of all the courses of ABC Education Centre
- Oversee student recruitment administration
- Monitor performance of student recruitment administrators
- Oversee student recruitment quality assurance
- Provide secretariat service to student recruitment interview or assessment

Programme Manager

- Plan for programme budgeting
- Assist Programme Director in Programme Development
- Oversee programme administration
- Monitor performance of instructors and programme administrators
- Oversee programme quality assurance
- Involve in the curriculum design and arrange the teaching schedule;

Instructor:

- Involve in the curriculum design and arrange the teaching schedule;
- Design and produce the teaching materials;
- Teaching for the BIM training courses.
- Liaise with other institutions such as HKIS, HKIA and HKIBIM to arrange the joint seminars and workshops.
- Provide student recruitment interview or assessment

Administrator, Student Recruitment

- Provide secretariat service to student recruitment interview or assessment
- Provide all administration works of the Student Recruitment Department
- Provide any work as assigned by the Head of the Student Recruitment Department

Programme Administrator:

- Handle all the course administration such as students' course enrolment; preparing the course materials; answering the students' enquiries on the course registration.
- Make sure the courses running smoothly in the centre.

Guidance: the categorisation of staff into "Management staff", "Teaching/Training staff" and "Programme administrative and support staff" is for reference only. Course providers may have a different categorisation according to their internal structure.

2.3 Other Departments/Supporting Units[#]

Describe the relationship with other departments/supporting units that provide the BIM Manager Course.

- IT department: to support computer facilities and related matters
- Facilities support: to prepare other classroom equipment before lectures/practical sessions.
- Finance Department: to provide all financial allocations and operations to the Programme Department

Guidance: Course Provider could provide information of relationship between BIM Manager Course responsible department and all other supporting departments such as IT department, operations and administration department, customer services or HR department, etc. Course providers may use an organisational chart to illustrate relationship with other Departments/Supporting Units that provide the BIM Manager courses.

Section 3 Course Objectives and Learning Outcomes***3.1 Course Objectives**

List the course objectives.

To train up participant with the capabilities to be an eligible BIM Manager under the CIC Certification Scheme for BIM Personnel - Certification of BIM Manager. After the completion of the course, participant should have acquired adequate knowledge and capabilities to take the leader role in BIM aspects such as BIM Director/BIM Auditor/BIM Manager from corporate to supply chain level.

Guidance: Course objectives refer to the intended purposes of offering the learning programmes, which usually are for addressing the identified needs of the community/industry. For in-house programmes, Course providers may specify how the learning programmes can contribute to the overall corporate objectives.

3.2 Course Learning Outcomes

List the course learning outcomes.

On successful completion of the course students will be able to:

1. Identify and categorise the principles and concepts of Building Information Modelling.
2. Explain and apply BIM software tools to simulate the processes of design and construction
3. Recognise the role of a BIM Manager relative to other construction stakeholders.
4. Prepare a BIM implementation/execution plan across all processes of the whole project cycle.
5. Describe commercial and financial issues of BIM as well as BIM-related contractual issues.

Guidance: Course learning outcomes refers to what a student is able to demonstrate at the end of the course.

Note: As a minimum, students must be able to achieve the following generic learning outcomes upon completion of the course: **Please mark each box to confirm***

| | | |
|-------|---|---|
| (I) | An ability to describe BIM concept definitions and scope, BIM standards and guidelines in the Hong Kong and global contexts. | <input checked="" type="checkbox"/> Yes |
| (II) | An ability to explain BIM software, the modelling process, and current and upcoming technologies. | <input checked="" type="checkbox"/> Yes |
| (III) | An ability to understand BIM uses and BIM software applications, and to design and manage the overall process of a BIM project. | <input checked="" type="checkbox"/> Yes |
| (IV) | An ability to plan and execute the setting-up of a common data environment and data quality control system for effective use and sharing of digital information in a BIM project. | <input checked="" type="checkbox"/> Yes |
| (V) | An ability to describe commercial and financial issues of BIM as well as BIM-related contractual issues. | <input checked="" type="checkbox"/> Yes |

Mark "X" in appropriate box(es) in Table 1 to indicate the relationship between course learning outcomes and generic learning outcomes for BIM Manager Courses.

| Course Learning Outcomes | Generic Learning Outcomes for a BIM Manager Courses | | | | |
|--------------------------|---|------|-------|------|-----|
| | (I) | (II) | (III) | (IV) | (V) |
| 1) | X | | | | |
| 2) | | X | | X | |
| 3) | | | X | | X |
| 4) | | | X | X | |
| 5) | | | | | X |

Table 1 – Mapping of Course Learning Outcomes and Generic Learning Outcomes for a BIM Manager Course

Section 4 Syllabuses and Curriculum*

4.1 For each subject within the course, provide the following:

Subject 1:

Introduction to BIM

Contact hours:

12 hours (3 hours x 4)

Syllabus:

- Principles of BIM
(to be elaborated).....
- Applications of BIM in building industry, implications
(to be elaborated).....
- BIM in architectural design, communications and presentations
(to be elaborated).....
- Multi-discipline co-ordinations
(to be elaborated).....
- BIM in Hong Kong Government submission
(to be elaborated).....
- Quantity taking and preparation of Bills of Quantity
(to be elaborated).....
- Preparation of contract drawings
(to be elaborated).....
- Team implementation
(to be elaborated).....
- BIM in construction
(to be elaborated).....

Essential Reading:

1.) Fundamental BIM, 3rd Edition.....

Further Reading:

1.) BIM in Future, 2nd Edition.....

2.) The BIM Standard – MEP, 1st Edition.....

Assessment weighting

Written report: 50%; examination 50%

Subject 2:

BIM Coordinator

...

Note: Applicant should provide similar details for all subjects of the course.

4.2 Provide details in Table 2 for each subject.

| Subject number | Subject Name | Contact hours per week | No. of teaching weeks | Total contact hours | Assessment components and weightings | Responsible teaching staff |
|----------------|-------------------------------|------------------------|-----------------------|---------------------|--|----------------------------|
| Subject 1 | Introduction to BIM | 3 | 4 | 12 | Written report 50%; examination 50% | John Lau |
| Subject 2 | BIM Coordinator | 3 | 4 | 12 | Written report 50%; examination 50% | May Chan |
| Subject 3 | BIM General Practice | 3 | 4 | 12 | Written report 50%; examination 50% | John Lau |
| Subject 4 | BIM Practice for Structure | 3 | 4 | 12 | Written report 20%; practical 30%; examination 50% | May Chan |
| Subject 5 | BIM Practice for Architecture | 3 | 4 | 12 | Written report 50%; examination 50% | John Lau |

Table 2 - Subject Details

4.3 Subject Learning Outcomes

List the learning outcomes of each subject

Introduction to BIM

On successful completion of the course students will be able to:

1. Identify and categorise the concept and scope of Building Information Modelling
2. Recognise the role of a BIM Manager relative to other construction stakeholders
3. Prepare a BIM implementation/execution plan
4. Apply BIM software tools to simulate the processes of design and construction

...

Note: Applicant should provide similar detail for all subjects of the course.

| | |
|--|---|
| Note: As a minimum, students must be able to achieve the following learning outcomes upon completion of all subjects: | Please mark each box to confirm* |
| (I) An ability to describe the BIM concept definitions and scope, BIM standards and guidelines in the Hong Kong and global contexts. | <input checked="" type="checkbox"/> Yes |
| (II) An ability to explain BIM software, the modelling process, and current and upcoming technologies. | <input checked="" type="checkbox"/> Yes |
| (III) An ability to understand BIM uses and BIM software applications, and to design and manage the overall process of a BIM project. | <input checked="" type="checkbox"/> Yes |
| (IV) An ability to plan and execute the setting-up of a common data environment and data quality control system for effective use and sharing of digital information in a BIM project. | <input checked="" type="checkbox"/> Yes |
| (V) An ability to describe commercial and financial issues of BIM and BIM related contractual issues. | <input checked="" type="checkbox"/> Yes |

Mark "X" in appropriate box(es) in Table 3 to indicate the relationship between subject learning outcomes and generic learning outcomes for BIM Manager Courses

| Subject Learning Outcomes | Generic Learning Outcomes for a BIM Manager Course | | | | |
|---------------------------|--|------|-------|------|-----|
| | (I) | (II) | (III) | (IV) | (V) |
| Subject 1 | X | | | | |
| Subject 2 | | X | | | |
| Subject 3 | | | X | | |
| Subject 4 | | | | X | |
| Subject 5 | X | | | | X |

Table 3 - Mapping of Subject Learning Outcomes and Generic Learning Outcomes for a BIM Manager Course

4.4 Mapping of Subjects offered against the Core Subjects of a CIC-accredited BIM Manager Course. Please complete Part II-4E.

Section 5 Student Admission Requirements*

5.1 Admission requirements

List the admission requirements.

- Worked in construction for more than 5 years,
- Worked in BIM-related office for more than 2 years, and
- A bachelor degree holder in AEC discipline

Guidance: Priority should be given to project managers and professionals, who have completed their undergraduate degree in architecture, engineering, surveying, building or construction.

5.2 Policies and procedures for admission

List the policies and procedures for admission.

- Completion of Application Form by internet or hardcopy formats
- Submission of relevant original documents to prove the requirements as stated in Section 5.1
- Admission interview by Instructors of the course
- The profile of the applicant will be sent to programme manager for approval
- Non-standard route of admission will be given to applicants who do not meet the admission requirement under special consideration of programme director

Guidance: Course provider may specify types of knowledge or skills (e.g. English, knowledge related to the subject areas) the admission tests/entrance examinations are testing and why these are critical for learners to undertake the training activities. Internal policies and procedures for student admission should be listed here as well.

5.3 Methods and procedures for checking documents submitted for admission

Explain the methods and procedures for checking documents submitted for admission.

The interviewer will vet the documents before the interview. Certified true copies of certificates and job reference are needed. All documents will be signed off by the interviewer and programme manager. Discrepancies between the documents and the list on applicant’s CV are required to be clarified by the applicant during the interview.

Guidance: Internal policies and procedures for document checking procedures and policies should be listed.

Section 6 Learning and Teaching Activities*

6.1 Summary of the learning and teaching activities (module, contact hours, self-study hours, etc.)

Provide a summary of the learning and teaching activities.

- Student-centred approach
- Activities are designed to facilitate trainees to attain the intended learning outcomes of the module concerned.
- Activities should reflect / stimulate duties and tasks at the workplace to enable trainees to gain experience and cultivate work attitudes.

Guideline: Information provided in 6.1 is to address the following standard: Teaching/Training methodology is compatible with the programme objectives and appropriate to the learners’ capabilities and learning needs.

Some common examples include: attending or delivering teaching/training activities (e.g. lectures, seminars, and workshops)

Below is an example of the presentation format:

| <i>Lesson</i> | <i>Topics Covered</i> | <i>Objectives</i> | <i>Activities</i> | <i>Materials</i> |
|---------------|----------------------------|-------------------|-------------------|--------------------|
| <i>1</i> | <i>Introduction to BIM</i> | <i>•.....</i> | <i>•Lecture</i> | <i>•Powerpoint</i> |
| | <i>•.....</i> | <i>•.....</i> | <i>•Exercise</i> | <i>•Worksheet</i> |
| <i>.....</i> | <i>.....</i> | <i>.....</i> | <i>.....</i> | <i>.....</i> |
| | | | | |

| 6.2 Medium of Instruction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|------------------|-----------------------------|-------|---------------|-----------------|-------------------|--|-----------------------|--|--|--|------------------|--|------|---------|-------|---------------|-----------------|-------------------|---------------------|----|--|---|---|---|----|-------|-------|-------|-------|-------|-------|-------|
| Class delivery: Cantonese/English Learning and teaching material: English | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.3 Instructor-Student Ratio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Provide the information regarding Instructor-Student ratio. 1:25 <i>Guidance: The ratio should not be too high such that an instructor is able to manage the students effectively.</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.4 Assessment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.4.1 Describe the mechanism for receiving feedback from students and checking their progress. Class works to be submitted by students of each lesson, and to be review and assessed by course instructors; Each subject will have a subject assessment to check the student learning progress of that specific subject; Via end of course evaluation and in-class assessment. <i>Guidance: Course Provider could provider mechanism on receiving the feedback from students and checking students' progression, such as course evaluation survey (mid-term and course-end evaluation), class activities and class-end test, group assignment, projects and presentation, assessment results, etc.</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.4.2 Describe the passing requirement of individual modules and the full course. Classwork 30%, Subject Assessment 30%, Final Exam 40% of total score. Passing % is 60%. Students with any of the categories Classwork/Subject Assessment/Final Exam lower than 60% of the total score will be regarded as FAIL. <i>Guidance: Course Provider should provide sample assessments together with the associated assessment criteria/marking scheme/grade descriptors.</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.4.3 Describe the graduation requirements. Passing of all modules and overall attendance over 70%. <i>Guidance: The graduation requirements might include pass mark for individual modules, overall pass mark/grade, attendance and other specific requirements etc.</i> <i>Below is an example of the presentation format:</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th rowspan="3">Subject / Topics</th> <th colspan="6">Weighting of assessment (%)</th> </tr> <tr> <th colspan="4">Continuous Assessment</th> <th colspan="2">Final Assessment</th> </tr> <tr> <th>Test</th> <th>Project</th> <th>Paper</th> <th>Mid-term Exam</th> <th>Term Assessment</th> <th>Final Examination</th> </tr> </thead> <tbody> <tr> <td>Introduction to BIM</td> <td>20</td> <td></td> <td>/</td> <td>/</td> <td>/</td> <td>80</td> </tr> <tr> <td>.....</td> <td>.....</td> <td>.....</td> <td>.....</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> </tbody> </table> | Subject / Topics | Weighting of assessment (%) | | | | | | Continuous Assessment | | | | Final Assessment | | Test | Project | Paper | Mid-term Exam | Term Assessment | Final Examination | Introduction to BIM | 20 | | / | / | / | 80 | | | | | | | |
| Subject / Topics | | Weighting of assessment (%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Continuous Assessment | | | | Final Assessment | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Test | Project | Paper | Mid-term Exam | Term Assessment | Final Examination | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Introduction to BIM | 20 | | / | / | / | 80 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

6.4.4 Provide details about workplace attachment (if any).

N.A.

Guidance: Workplace attachment and/or on-the-job training, if applicable, is structured and managed to meet the programme objectives.

6.4.5 Describe the policies and the mechanism to ensure the integrity, validity and reliability of assessments.

An assessment must measure what it intends to measure. That is, an assessment must match the instructional objectives of the course/module concerned. As such, course/module leaders must ensure that the assessments can duly align with the course objectives. We also recruit external examiners and moderators to ensure the marking process is fair and transparent.

Guidance: Common mechanisms for moderating/reviewing assessment results include: appointing external examiners/moderators/reviewers, assigning internal verifiers, etc. Course Provider may provide the policy and guideline for the requirement of external advisor, examiner, moderator and the QA mechanism and also the appointment letter and term of reference.

6.4.6 List the external examiners or reviewers appointed for the course.

- a representative from “Task force on BIM training” will be appointed to carry out the role of external examiner. (please refer to section 8.2 in Part I)

Guidance: below is an example of the presentation format:

| <i>Modules</i> | <i>Roles</i> | <i>Appointment Period</i> | <i>Name (Position and Organisation)</i> | <i>Experience</i> |
|----------------------------|--------------------------|---------------------------|---|--|
| <i>Introduction to BIM</i> | <i>External Examiner</i> | <i>Jan 2019- Dec 2020</i> | <i>Mr Simon Leung BIM Director XYZ Construction Company</i> | <i>Over 20 years of experience in BIM project Manager MSc in Intelligent Building Technology & Management Current Examiner for BIM Course in AYY Company</i> |
| <i>.....</i> | <i>.....</i> | <i>.....</i> | <i>.....</i> | <i>.....</i> |

Section 7 Course Staff*

7.1 Academic/Teaching Staff

7.1.1 Responsibilities of Course Director/Leader:

- Programme Director
- Oversees the full spectrum of the institution operation including the administration and financial.
 - Design and update the curriculum for the BIM training courses;
 - Assess both the professional qualification and relevant experience for the BIM training courses' lecturers;
 - Evaluate the teaching performance of the BIM training courses' lecturers;
 - Liaise with other professional institutions and both the local and overseas universities to organise joint conference on BIM professionalism.
 - Participate in the BIM Taskforce and be the Committee Member in the professional institution such as HKIBIM.
 -

Guidance: Course provider to prove that competent staff are employed to fulfil the functions of office management and teaching/training.

7.1.2 Provide numbers in Table 4 of staff involved in delivering the BIM Manager Course

| | Last 3 Academic Years | | |
|--|-----------------------|------|------|
| Year: | 2016 | 2017 | 2018 |
| Teaching Staff | | | |
| Teaching Staff (full-time) | 1 | 2 | 2 |
| Teaching Staff (part-time) | 3 | 3 | 4 |
| Teaching Assistant | N.A. | N.A. | N.A. |
| Administrative Staff | | | |
| Administrative Staff (full-time) | 2 | 2 | 2 |
| Administrative Staff (part-time) | N.A. | N.A. | N.A. |
| Technical Staff (e.g. IT support, Facility support, etc.) | | | |
| Technical Staff (full-time) | 2 | 2 | 2 |
| Technical Staff (part-time) | N.A. | N.A. | N.A. |
| Other Staff | | | |
| Other Supporting Staff Please specify : (_____) | N.A. | N.A. | N.A. |
| TOTAL | | | |
| Total Staff establishment | 8 | 9 | 10 |
| No. of Staff vacancies | 0 | 0 | 2 |

Table 4 - Number of Staff Involved in Delivery of the Course

Full-time – normally refers to appointment of service for not less than 40 hours a week

7.1.3 For each teaching staff, complete a copy of the form below[^]. Alternatively, a Curriculum Vitae may be submitted, provided it supplies all the information requested in the form.

| | | | |
|---|--|--|--------------------------|
| Name John Lau | | Present Position full-time trainer | |
| Date joining the Course Provider 02/02/2016 | | Date of present appointment 02/02/2016 | |
| Degree International Construction Management | University/Institution University of Bath | | Date of award 12/2000 |
| Member of HKIA/HKIE/HKIS* N.A. | | Other Professional Qualifications HKICCBIM, HKECCM, HKCIOCE | |
| Subjects taught in the past three years | | | |
| Current teaching subjects | | Student contact hours per subject per year | |
| 1. Introduction of BIM | | 48 | |
| 2. BIM Coordination | | 48 | |
| No. of Publications (last 5 years) N.A. | | No. of Publications (total) N.A. | |
| No. of Consultancy Projects (in progress) N.A. | | No. of Consultancy Projects (total) 2 | |
| No. of years of experience in Construction Industry 15 | | No. of years of experience in Teaching BIM 10 | |
| Summary of Industrial and Related Experience (provide a brief resume) have been teaching BIM related courses in various institutes for 10 years. | | | |

[^] Copy the form as many times as needed for additional teaching staff.

7.2 Technical Staff

Provide details of technical staff supporting the course in Table 5.

| Name | Qualifications | Experience | Duties |
|-------------|---|---|--|
| Andy CHEUNG | HKIISA, HKICCBIM, Bachelor in Civil Engineering | -8 year of Experience in overseeing BIM services including BIM training and implementation. 2 years of management experience for BIM training administration | - Plan for programme budgeting - Assist Programme Director in Programme Development - Oversee programme administration - Monitor performance of trainer and programme administrators Oversee programme quality assurance |
| Mary Ho | Bachelor in Human Resources | -10 year of Experience training field in construction industry. 5 years of management experience in training units / functions | - Plan for programme budgeting - Assist Programme Director in Programme Development - Oversee programme administration |

| | | | |
|--|--|--|--|
| | | | <ul style="list-style-type: none"> - Monitor performance of trainer and programme administrators - Oversee programme quality assurance |
|--|--|--|--|

Table 5 - Details of Technical Staff Supporting the Course

7.3 Staff Training and Development

List the staff development plans (future) and activities (past 2 years).

Staff development Subsidy scheme has been in place to subsidise and encourage staff to further develop themselves to meet organisational needs. Staff are entitled to a maximum of 100% subsidy per calendar year upon confirmation of probation. Newly-joined can also be entitled to the cap sum on a prorata basis. Time-off can also be granted in respect of actual attendance of the course and the taking of examinations, if any.

Guidance: Course Provider may refer to professional bodies/associations in their industries for examples of development activities. Some common examples include: attending or delivering teaching/training activities (e.g. lectures, seminars, conference, and workshops), serving as members of committees relevant to the profession, writing of published research articles/papers, participating in competitions, etc.

Specific evidence is required to address the following standard:

- *Appropriate and adequate staff professional development activities are planned for the purpose of programme development (e.g.*
- *Suggested evidence includes staff development plan for the programme development and teaching/training staff.*

Section 8 Financial Resources for the Course*

Provide information on the financial resources and the budget for the course on a yearly basis (Income and Expense).

ABC Education Centre, is fully funded by the Hong Kong Construction Alliances. Management Board of ABC Education Centre has the full authority in overseeing, review, approval and disapproval of all the financial issues of ABC Education Centre. A copy of the signed Deed is given in Annex B.2.1. The financial statements of ABC Education Centre for the year ended 31 December 2016 and the related independent Auditor's Report (24 May 2017) are presented in its Annual Report 2016.

A financial projection related to the course is tabled below.

| | | |
|------------------------------|--------------------------|-------------------------|
| Course fee per student | 6800 | |
| Breakeven number | 10 students per class | |
| Maximum class size | 20 students | |
| Number of enrolment per year | 3 | |
| Student intake per year | 60 | |
| | Each class (HK\$) | Each year (HK\$) |
| Incomes | | |
| Tuition fee | 136,000 | 408,000 |
| Other income | | |
| Other subsidies | | |
| Total income | 136,000 | 408,000 |

| Expenses | | |
|--|---------------|----------------|
| Staff cost | 25,000 | 75,000 |
| Staff development and Training expense | 5,000 | 15,000 |
| Accommodation, Facility and Equipment | 30,000 | 90,000 |
| Teaching support | 5,000 | 15,000 |
| Others | 3,000 | 9,000 |
| Total expenses | 68,000 | 204,000 |
| Surplus/(Deficit) | 68,000 | 204,000 |
| | | |

Guidance: Course Provider should provide specific income and expenditure account (I & E account) and/or budget for the BIM Manager Courses. The financial documents should be signed by relevant financial executive e.g. financial controller, or being record in the minutes of respective management meeting.

| Section 9 Facilities for the Course* | | | | | |
|---|--|---------------------------|----------------------|---------------------------------|--------------|
| <input checked="" type="checkbox"/> Mark the Box if the information in this Section is the same as information provided in <u>Section 6</u> of Application Form PN02-F-01-Part I, in which case skip this section. Otherwise, fill in 9.1 - 9.3. | | | | | |
| 9.1 Address of the training venues for the Course | | | | | |
| (English) | Please refer to PN02-F-01-Part I Section 6 | | | | |
| (Chinese) | Please refer to PN02-F-01-Part I Section 6 | | | | |
| 9.2 Facilities and Equipment for the Course | | | | | |
| Type of Room | No. of Rooms | Seating Capacity per room | Facilities/Equipment | Computer Hardware Specification | BIM Software |
| a. | Please refer to PN02-F-01-Part I Section 6 | | | | |
| b. | | | | | |
| c. | | | | | |
| d. | | | | | |
| e. | | | | | |
| 9.3 Guidelines for regular review of the adequacy and appropriateness of the training facilities, venues and equipment for conducting the course with supporting documents, e.g. Safety Requirement Specification, Certificate of Insurance, Emergency Exit Routes, etc. | | | | | |
| Please refer to PN02-F-01-Part I Section 6 | | | | | |

Section 10 Support to Students on the Course

10.1 List the support services provided to the students, e.g. career planning and counselling services (if any).

Our programme team will provide advisory support to students who have difficulties in study. Classrooms are open to students for study in weekends by reservation.

Guidance: Examples of student support services include: career guidance, advice on further studies, counselling services, remedial classes, e-learning systems, language enhancement courses, library services and facilities for self-practice, etc.

10.2 Channels for students to receive training and teaching information from the Course Provider.

Lectures and practical sessions. PowerPoint and notes will be provided at each lecture.

Guidance: Course Provider could state channels for student to receive training and teaching information, such as Learning Management System (LMS)/online platform, social media, relevant seminar, reference books and additional tutorials would be provided

10.3 Channels for students to provide feedback to the course provider.

Emails (with teaching/training staff, management), regular meetings between staff and learners, learner unions/committees, etc.

Guidance: Course Provider could provide more feedback channels, such as evaluation form, verbal and written comment to Course Provider. There should be policy and guideline in the area to be provided for accreditation purpose. E.g. students may also provide feedback through email, telephone, etc.

Section 11 Quality Assurance Mechanism for the Course

Mark the Box if the information in this Section is the same as information in **Section 8** of Application Form PN02-F-01-Part I, in which case skip this section. Otherwise, fill in 11.1 – 11.5.

11.1 Quality Assurance Mechanism

Details of the quality assurance mechanism for the development, approval, monitoring, review and modification of the course, including reference to the quality assurance standards used, if applicable.

[Please refer to PN02-F-01-Part I Section 8](#)

11.2 Responsible Units

Provide details in Table 6 of the responsible personnel/committees/external members for course development, approval, monitoring, review and modification

| Responsible Staff/Committees/ External Members (Positions & Names) | Major Responsibilities |
|---|-------------------------------|
| <p>Please refer to PN02-F-01-Part I Section 8</p> | |

Table 6 – Responsible Staff/Committees/External Members and their major responsibilities

11.3 Course Development and Approval

11.3.1 Mechanism/methods, with relevant supporting documents, used to ensure that the course can address the industry's/community's needs.

[Please refer to PN02-F-01-Part I Section 8](#)

11.3.2 Course vetting/validation/approval procedures and associated approval criteria (the standards of quality) at course and/or organisational levels that guide review and approval of the course to ensure that the educational/training and course objectives are met.

[Please refer to PN02-F-01-Part I Section 8](#)

11.4 Course Management and Monitoring

11.4.1 Approach used to monitor course delivery with responsible units/persons, the frequency of monitoring, the review focus, tools and the follow-up procedures:

[Please refer to PN02-F-01-Part I Section 8](#)

11.5 Course Review and Continuous Improvement Measures

Course review process and continuous improvement measures with the course review activities, responsible unit/person, the frequency of monitoring, the review focus, tools and the follow-up procedures:

[Please refer to PN02-F-01-Part I Section 8](#)

SAMPLE

Section 12 Applicant Declaration

I, Peter Chan (name in full), on behalf of ABC Education Centre (name of Course Provider) being an applicant for accreditation of a Building Information Modelling (BIM) Manager Course do hereby DECLARE that the above is a true statement of the course particulars, that I have read and understood the RULES as stipulated by Construction Industry Council (CIC) and do hereby accept the final decision of the BIM Certification and Accreditation Board of CIC.

I undertake that, in the event of any change in the above particulars, I will make known the changes, within 30 days, in writing to the BIM Certification and Accreditation Board.

I have read the following and hereby undertake:

- To comply and act in accordance with the Regulations and Rules of CIC as they now exist, or as they may in the future be amended
- To pay promptly any monies due to CIC, including but not limited to any fee, subscription, levy, arrears, fine or other penalty, or re-imburement in accordance with any scheme of compensation, or in respect of any goods or services commissioned by me or the relevant Course Provider from CIC
- To declare any criminal conviction related to me or employees of the relevant Course Provider within 30 days

I understand and authorise CIC to make any reasonable enquiries and check all information in relation to this application for accreditation of a Building Information Modelling (BIM) Manager Course.

I acknowledge that CIC has the right to withdraw approval of application status if I and the relevant Course Provider do not meet the requirements. I understand and agree that CIC may investigate the statements I have made with respect to this application, and that I and relevant Course Providers may be subject to disciplinary actions for any misrepresentation (whether fraudulent and otherwise) in this application.

If at any time CIC discovers that I have failed to disclose any of the pertinent information in this form or that I have provided false information it will have the right to terminate my application with immediate effect (with no further obligation to refund any subscription or other fees).

I understand that the fees paid are non-refundable and non-transferable.

For access and correction of data, please address enquiries to:

BIM Department - Construction Industry Council
38/F, COS Centre, 56 Tsun Yip Street
Kwun Tong
Kowloon
Tel: 2100 9000
Fax: 2100 9090
E-mail: bimcas@cic.hk

I have read and agreed to comply with the "Application Guide for Accreditation of Building Information Modelling (BIM) Manager Courses" BEFORE completing this application form.

I declare that the content of this form is true and correct. I understand and accept that I am accountable for the truth of this declaration

Peter
Authorised Signature with Company Chop

Date: 28/1/2019

Peter Chan, Executive Director
Name & Title of Authorised Representative

Date: 28/1/2019

Please scan this page if this Application Form is submitted via email.

Section 13 Document Checklist

To facilitate the application process, check the following items before submission to CIC. We suggest that you keep a copy of all relevant documents for your own records, before submission.

** Please write the Appendix Number at the top of the document to be submitted.

| Document Attached | Not Applicable | Document Same As Part I | Document | Appendix Number** |
|-------------------------------------|--------------------------|-------------------------|---|-------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Completed and signed application form PN02-F-01-Part II | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Proof of recognition of the course by other accreditation bodies or professional bodies | Part II-1A |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Sample of Certificate(s) of the course | Part II-1B |
| | | | Section 2 Information on the Department Providing the Course | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Organisation chart to indicate details of the organisational structure of the Department hosting the course | Part II-2A |
| | | | Section 4 Syllabuses and Curriculum | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Course outline/syllabus about individual subject/topic | Part II-4A |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Templates/records for conducting course review, e.g. questionnaire, review report | Part II-4B |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Records for follow-up actions taken, e.g. meeting minutes | Part II-4C |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Sample teaching/training materials | Part II-4D |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Mapping of subjects offered against the Core Subjects of a BIM Manager Course | Part II-4E |
| | | | Section 5 Student Admission Requirements | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Sample application form and record | Part II-5A |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Sample admission test paper (if applicable) | Part II-5B |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Sample interview questions (if applicable) | Part II-5C |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Students' handbook showing the admission requirements and special admission policy | Part II-5D |
| | | | Section 6 Learning and Teaching Activities | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Sample lesson plans | Part II-6A |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Sample assessment papers, the associated assessment criteria and relevant documents | Part II-6B |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | List of appointment criteria and term of appointment for external examiners/moderators/reviewers | Part II-6C |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Guidelines to external examiners/moderators/reviewers | Part II-6D |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Sample external examiners/moderators/reviewers reports | Part II-6E |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Documents outlining student support services, e.g. handbook, brochure and website | Part II-6F |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | List of (potential) placement employers | Part II-6G |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Workplace attachment policy and/or guidelines (to students, supervisors, employers, etc.) | Part II-6H |

| Document Attached | Not Applicable | Document Same As Part I | Document | Appendix Number** |
|-------------------------------------|--------------------------|-------------------------------------|---|-------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Workplace attachment course outline and/or class schedule | Part II-6I |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Sample assessment for workplace attachment | Part II-6J |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Sample templates for keeping records of students' activities | Part II-6K |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Sample agreement with (potential) placement employers | Part II-6L |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Insurance coverage for students during placement | Part II-6M |
| | | | Section 7 Course Staff | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Profiles and/or curriculum vitae of teaching staff | Part II-7A |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Staff development plans | Part II-7B |
| | | | Section 8 Financial Resources for the Course | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Financial statements / proof of the past two years' operation of the course (if applicable) | Part II-8A |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Financial projections and business plans for the course showing the operator's sustainability for meeting the teaching/ training responsibilities | Part II-8B |
| | | | Section 9 Facilities for the Course | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Floor plan and photos of training facilities/venue | Part II-9A |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Guidelines on using training facilities, venues and equipment | Part II-9B |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Safety Requirement Specification, Certificate of Insurance, Emergency Exit Routes, etc. | Part II-9C |
| | | | Section 10 Support to Students on the course | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | - | Policies/sample tools for support to students | Part II-10A |
| | | | Section 11 Quality Assurance Mechanism | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Sample templates/tools for collecting external inputs | Part II-11A |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Records showing the external inputs collected for the existing course(s), e.g. meeting minutes | Part II-11B |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Records showing course(s) has gone through the internal development process (including vetting and approval) | Part II-11C |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Flowchart showing the process for course development and approval with responsible personnel/committees | Part II-11D |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Sample course proposals/plans | Part II-11E |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Sample tools and records for monitoring course delivery, e.g. class observation form | Part II-11F |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Sample tools and records for course review, e.g. questionnaires and summary statistics | Part II-11G |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Sample course review template/report/meeting minutes | Part II-11H |

| Document Attached | Not Applicable | Document Same As Part I | Document | Appendix Number** |
|-------------------------------------|--------------------------|--------------------------|---|-------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Summary of changes made to the course and follow up actions taken | Part II-11I |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Students' handbook or relevant guidelines for complaint handling | Part II-11J |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Flow chart showing the interrelationship of the personnel and/or committees for course development, management and review | Part II-11K |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Terms of reference of the committees responsible for course development, management and review | Part II-11L |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | List of appointment criteria and roles and responsibilities of external advisors | Part II-11M |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | List of external committees or advisory bodies consulted | Part II-11N |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sample records of consultation | Part II-11O |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Brief profiles of external advisors or external examiners / moderators / reviewers | Part II-11P |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Terms of agreement with third parties, if any | Part II-11Q |
| | | | Section 12 Payment Method | |
| <input checked="" type="checkbox"/> | - | - | Cheque for the application fee | |

Section 14 Payment Method*

All payments received are non-refundable, non-endorsable and non-transferable.

Please mail to the BIM Department - Construction Industry Council, 38/F, COS Centre, 56 Tsun Yip Street, Kwun Tong, Kowloon.

A cheque made payable to "Construction Industry Council"

Cheque no. 123456

Name of the bank HSBC

| For official use only | | | | | |
|---------------------------------|------|---------|-------------------------------------|------|---------|
| | Date | Officer | | Date | Officer |
| Form Received^ | | | Acknowledgement of application form | | |
| Fee Received | | | Receipt of application fees | | |
| Particulars verified | | | Additional information required | | |
| Additional information received | | | Recommended | | |
| Interviewed on | | | Not Recommended (With reason) | | |
| Remarks : | | | Certificate No. | | |

Please put the subjects offered/to be offered against the core subjects. A subject can be mapped against multiple core subjects.

| | Core Subjects of a BIM Manager Course under the BIM Certification and Accreditation Schemes | | Subjects offered/to be offered |
|----------------------------------|---|--|--------------------------------|
| 1. BIM Initiation | 1.1 BIM Concept | | |
| | 1.1.1 | BIM definitions and terminology | Subject 1 |
| | 1.1.2 | The difference between 2D CAD, 3D CAD and BIM | Subject 1 |
| | 1.1.3 | Concept of BIM as whole project and whole estate perspective | Subject 1 |
| | 1.1.4 | Value and benefits of adopting BIM | Subject 1 |
| | 1.1.5 | Value of BIM for AM and FM | Subject 1 |
| | 1.1.6 | Collaborative working in BIM | Subject 1 |
| | 1.1.7 | Limitations of BIM | Subject 1 |
| | 1.1.8 | Challenges within existing working practices and how BIM addresses these | Subject 1 |
| | 1.1.9 | How BIM affects the current practice in AECO industry | Subject 1 |
| | 1.2 Local & Global Contexts, BIM standards and guidelines | | |
| | 1.2.1 | Local BIM standards and resources | Subject 1 |
| | | 1.2.1.1 CIC BIM Standards | Subject 1 |
| | | 1.2.1.2 Government BIM standards and resources | Subject 1 |
| | 1.2.2 | Global context of BIM development | Subject 1 |
| | 1.2.3 | Global BIM standards and resources | Subject 1 |
| | | 1.2.3.1 ISO 19650 | Subject 1 |
| | | 1.2.3.2 BIM FORUM LOD Specification | Subject 1 |
| | | 1.2.3.3 OpenBIM | Subject 1 |
| 2. BIM Software and Technologies | 2.1 BIM Software | | |
| | 2.1.1 | Overview of industry leading BIM software / applications | Subject 2 |
| | 2.1.2 | Characteristic, strength and limitation of industry leading BIM software | Subject 2 |
| | 2.1.3 | Versions and file formats | Subject 2 |
| | 2.1.4 | Interoperability across industry leading BIM software | Subject 2 |
| | 2.2 Technologies | | |
| | 2.2.1 | Cloud platform | Subject 2 |
| | 2.2.2 | Laser scanning | Subject 2 |
| | 2.2.3 | Photogrammetry | Subject 2 |
| | 2.2.4 | GIS | Subject 2 |
| | 2.2.5 | Application of smart devices | Subject 2 |
| | 2.2.6 | VR/AR/MR | Subject 2 |
| | 2.2.7 | VDC | Subject 2 |
| | 2.2.8 | RFID | Subject 2 |
| 2.2.9 | Gaming technology in BIM | Subject 2 | |
| 2.2.10 | Robotics | Subject 2 | |
| 2.2.11 | Automation | Subject 2 | |

| | Core Subjects of a BIM Manager Course under the BIM Certification and Accreditation Schemes | | Subjects offered/to be offered | |
|----------------------------------|--|--|--|----------------------|
| | 2.2.12 | API | Subject 2 | |
| | 2.2.13 | MiC | Subject 2 | |
| | 2.2.14 | Indoor positioning | Subject 2 | |
| | 2.2.15 | Upcoming Trend | Subject 2 | |
| 3. BIM Uses and Processes | 3.1 Client BIM Strategic Stage | | | |
| | 3.1.1 | BIM strategy, BIM uses, BIM processes | Subject 3 | |
| | 3.1.2 | Key personnel in relation to BIM | Subject 3 | |
| | 3.1.3 | Determine the information management and CDE strategy | Subject 3, Subject 4 | |
| | 3.1.4 | Determine the BIM/AIM/GIS strategy | Subject 3 | |
| | 3.1.5 | Determine level of development in the context of graphics and information | Subject 3 | |
| | 3.1.6 | Determine level of integration of digital information into asset and facility management | Subject 3 | |
| | 3.1.7 | Case study | Subject 3 | |
| | 3.2 Client Pre-tender Project Stage | | | |
| | 3.2.1 | Determine and oversee the development of Client Information Model (CIM) | Subject 3 | |
| | | 3.2.1.1 | Organisational Information Requirements (OIRs) | Subject 3 |
| | | 3.2.1.2 | Asset Information Requirements (AIRs) | Subject 3 |
| | 3.2.2 | Employers Information Requirements (EIR) | Subject 3 | |
| | 3.2.3 | Determine project technology and systems requirement and integration | Subject 3 | |
| | 3.2.4 | Determine project delivery requirements | Subject 3 | |
| | 3.2.5 | Determine the soft landings approach | Subject 3 | |
| | 3.2.6 | Contract and consultancy requirement | Subject 3 | |
| | 3.2.7 | Assessment of supply chain capability and capacity (Tender Assessment) | Subject 3 | |
| | 3.2.8 | Case study | Subject 3 | |
| | 3.3 Definition & Design Stage | | | |
| | 3.3.1 | BIM Execution Plan developed by supply chain | Subject 3 | |
| | | 3.3.1.1 | Pre-contract BIM Project Execution Plan | Subject 3 |
| | | 3.3.1.2 | Post-contract BIM Project Execution Plan | Subject 3 |
| | 3.3.2 | Supervision in fulfilling BIM uses in planning and design stages listed in CIC BIM Standards | Subject 3 | |
| | 3.3.3 | Project Information Model (PIM) data exchanges and validation | Subject 3 | |
| | 3.3.4 | BIM PIM file setup | Subject 3, Subject 2 | |
| | | 3.3.4.1 | BIM origin point and orientation setup | Subject 3, Subject 2 |
| | | 3.3.4.2 | Model division | Subject 3, Subject 2 |
| | | 3.3.4.3 | Modelling methodology | Subject 3, Subject 2 |
| | | 3.3.4.4 | Project-based industry and BIM standards | Subject 3, Subject 2 |
| | 3.3.5 | Direct BIM-related meetings | Subject 3 | |
| | | 3.3.5.1 | Meeting with high level | Subject 3 |
| | | 3.3.5.2 | Meeting with supply chain level | Subject 3 |
| | | 3.3.5.3 | Internal meeting | Subject 3 |
| | | 3.3.5.4 | Multidiscipline collaboration meeting | Subject 3 |

| | Core Subjects of a BIM Manager Course under the BIM Certification and Accreditation Schemes | | Subjects offered/to be offered | |
|---|--|---|---------------------------------------|-----------|
| | 3.3.6 | Case Study | Subject 3 | |
| | 3.4 Construction Stage | | | |
| | 3.4.1 | BIM Execution Plan developed by supply chain | Subject 3 | |
| | | 3.4.1.1 Pre-contract BIM Project Execution Plan | Subject 3 | |
| | | 3.4.1.2 Post-contract BIM Project Execution Plan | Subject 3 | |
| | 3.4.2 | Supervision in fulfilling BIM uses in construction & handover stage listed in CIC BIM Standards | Subject 3 | |
| | 3.4.3 | Project Information Model (PIM) data exchanges and validation | Subject 3 | |
| | 3.4.4 | Direct BIM related meetings | Subject 3 | |
| | 3.4.5 | Case study | Subject 3 | |
| | 3.5 Handover Stage | | | |
| | 3.5.1 | As-built information verification | Subject 3 | |
| | 3.5.2 | Oversee data transfer from PIM to Asset Information Model (AIM) | Subject 3 | |
| | 3.5.3 | Supervision in fulfilling BIM uses in handover stage listed in CIC BIM Standards | Subject 3 | |
| | 3.5.4 | Case study | Subject 3 | |
| | 3.6 Operation & Maintenance Stage | | | |
| | 3.6.1 | Update Assets Information Model (AIM) | Subject 3 | |
| | 3.6.2 | Roles, responsibilities and authorities for maintaining the AIM | Subject 3 | |
| | 3.6.3 | Post occupancy evaluation | Subject 3 | |
| | 3.6.4 | Case Study | Subject 3 | |
| 4. Digital Information Management, Collaboration and Integration | 4.1 Digital Information Management | | | |
| | 4.1.1 | Value of data and how it should be managed | Subject 4, Subject 2 | |
| | 4.1.2 | Interoperate data/information to facilitate cross-disciplinary and cross-BIM platform collaboration | Subject 4 | |
| | 4.1.3 | Limitations of BIM software in relation to information management | Subject 4, Subject 2 | |
| | 4.1.4 | Determine level of development in the context of graphics and information in different stages | Subject 4 | |
| | 4.1.5 | Determine level of integration of digital information into asset and facility management | Subject 4, Subject 2 | |
| | 4.1.6 | Oversee the process and quality of information exchange | Subject 4 | |
| | | 4.1.6.1 | IFC / BCF / XML...etc. | Subject 4 |
| | | 4.1.6.2 | COBi | Subject 4 |
| | 4.2 Common Data Environment (CDE) | | | |
| | 4.2.1 | Overview of CDE | Subject 4, Subject 2 | |
| | 4.2.2 | Overview of various CDE platforms | Subject 4, Subject 2 | |
| | 4.2.3 | Setup of CDE | Subject 4, Subject 2 | |
| | 4.2.4 | Assessment of CDE | Subject 4 | |
| | 4.2.5 | Management of CDE | Subject 4 | |
| | 4.2.6 | Limitations of CDE | Subject 4, Subject 2 | |
| | 4.3 Data Quality Control and Assurance across various stages | | | |
| | 4.3.1 | System checking | Subject 4, Subject 2 | |
| | 4.3.2 | Model audit | Subject 4, Subject 2 | |
| | 4.3.3 | Model checking | Subject 4, Subject 2 | |
| 4.3.4 | Audit reporting | Subject 4, Subject 2 | | |

| | Core Subjects of a BIM Manager Course under the BIM Certification and Accreditation Schemes | | Subjects offered/to be offered | | |
|--|---|---|--|--|----------------------|
| 5. Commercial and Contractual Aspects | 5.1 Commercial Issues | | | | |
| | 5.1.1 | Establishing BIM-ready Environment to support the corporation | | | |
| | | 5.1.1.1 | BIM strategy at the organisation level | Subject 5, Subject 3 | |
| | | 5.1.1.2 | Challenges in BIM implementation | Subject 5 | |
| | | 5.1.1.3 | Phases in BIM implementation | Subject 5 | |
| | | 5.1.1.4 | Hardware requirement for BIM | Subject 5 | |
| | | 5.1.1.5 | Software requirement for BIM | Subject 5 | |
| | | 5.1.1.6 | Manpower management for BIM | Subject 5, Subject 3 | |
| | | | 5.1.1.6.1 | Staff plan | Subject 5, Subject 3 |
| | | | 5.1.1.6.2 | Staff recruitment | Subject 5, Subject 3 |
| | | | 5.1.1.6.3 | Staff training | Subject 5, Subject 3 |
| | | 5.1.2 | Promotion of adopting BIM in office/to clients | | |
| | | | 5.1.2.1 | Value and benefit of adopting BIM | Subject 5 |
| | | | 5.1.2.2 | Value and benefit of data and information from BIM | Subject 5 |
| | | | 5.1.2.3 | Evaluating Return on Investments (ROI) in adopting BIM | Subject 5 |
| | | 5.2. Contract Issues | | | |
| | | 5.2.1 | Ownership of data | Subject 5 | |
| | | 5.2.2 | Intellectual property right | Subject 5 | |
| | | 5.2.3 | Legal implication and potential liability | Subject 5 | |
| | | 5.2.4 | Professional indemnity | Subject 5 | |
| | | 5.2.5 | Introducing NEC | Subject 5 | |
| | 5.2.6 | Commercial implications for contracts and insurances in relation to BIM | Subject 5 | | |