

CIC
BIM
COMPETITION
2021

Tertiary Student Category

*A competition to promote practical use of BIM through
collaborative and competitive learning approach*

CIC BIM Competition 2021

Competition Design Brief

Version R1

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Version Control

Version	Description	Date
R1	Section 3.3.8 (visitors per year)	31 December 2020

1. General Brief

1.1 The CIC BIM Competition 2021, refer as the “Competition”, is organised by the Construction Industry Council (CIC), located at 38/F, COS Centre, 56 Tsun Yip Street, Kwun Tong, Kowloon, Hong Kong.

1.2 This document contains the design brief, competition detailed requirements, submission deliverable requirements, guidance, assessment scoring criteria, awards and prizes, terms and conditions defined for the Competition.

1.3 All the information is meant for the use of this sole Competition only and shall not be used for reference in actual design nor construction project in future, if any, for the particular site.

1.4 The CIC shall not be held liable for any consequences, losses or damages which may arise or result from any misuse by any parties or reliance made on its information for any purposes in future.

2. Introduction

2.1 Background

The 2-stage ideas Competition aims at continue to draw attention from the industry, and encourage collaboration on Building Information Modelling (BIM) adoption. Participants will be given project design requirements to redevelop a new **CIC-Zero Carbon Park (CIC-ZCP)**.

2.2 Objective

The Competition’s objective is to **promote practical uses of BIM through collaborative and competitive learning approach** among tertiary students in construction related disciplines.

2.3 Eligibility

The Competition is only eligible to full-time tertiary (post-secondary) students in forming up a team of 3 to 5 members, with students from a minimum of 2 construction disciplines. (Refer to Section 8.1 – Registration)

There is no limit to the number of team from each institution.

2.4 Competition Schedule

Date	Activities
Dec 2020	Open for Registration
16 Dec 2020	Competition Briefing Webinar
Dec 2020 – Apr 2021	Online Training Materials
1 Mar 2021	Deadline for Registration
Mar 2021 – Apr 2021	Hands-on BIM Software Training Webinars
Mar 2021 – Jun 2021	Free BIM Software Licenses
Apr 2021 – Jun 2021	BIM Mentoring Support
1 Jun 2021 (Tue) (12:00nn)	Submission Deadline for 1 st Round Competition
7 Jun 2021 (Mon)	Judging Panel selects teams for 2 nd Round Competition
11 Jun 2021 (Fri)	2 nd round onsite competition (9:00am-9:00pm) (Finalists being selected to compete onsite within 12 hours)
12 Jun 2021 (Sat)	2nd Round Onsite Competition am: Team presentation to Judging Panel pm: Award Presentation Ceremony

3. Design Brief, Competition Details and Requirements

(This Design Brief is intended for the Competition only, and shall not be allowed for releasing, publishing or use for other intentions.)

3.1 Competition Design

The theme of the Competition is **An Advancing Net Zero (ANZ) Hub in CIC-Zero Carbon Park (CIC-ZCP)**. It will be a redevelopment of CIC-ZCP in the existing site in Kowloon Bay with additional educational and community facilities for supporting new initiatives for architecture, engineering, construction, owner and operations (AECOO) industry.

To promote and accelerate digital transformation for Smart City by enhancing the building / construction practices in AECOO industry, there is a need for the CIC to expand the existing facility of CIC-ZCP to provide more comprehensive overall support to the industry. These include setting up of the following four centres and teams in the CIC:

- Zero Carbon Building (ZCB) in CIC-ZCP
- The Construction Innovation & Technology Application Centre (CITAC)
- The BIM Department of the CIC
- Design for Manufacturing & Assembly (DfMA) & Modular integrated Construction (MiC) Centre

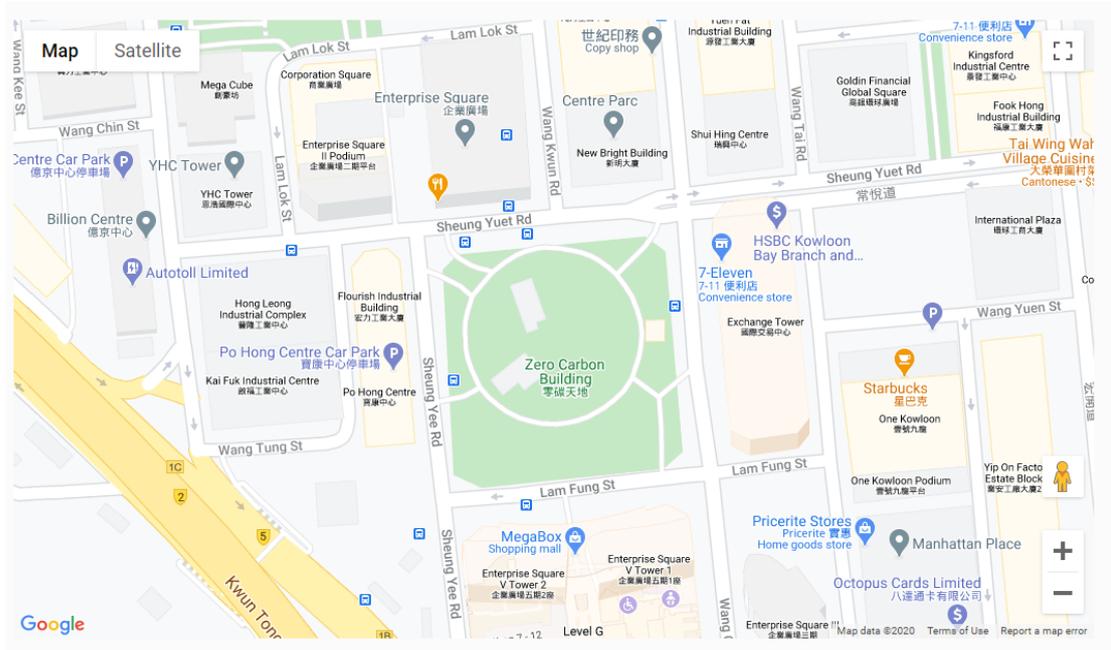
The design calls for a showcase of green / eco-building design and technologies for ANZ, alongside provision of active and passive recreational uses serving the needs of local district as well as the general public, including recreation, or community services.

3.2 The site

The proposed site of CIC-ZCP is situated at 8 Sheung Yuet Road, Kowloon Bay, Hong Kong. The site is originally an open space bounded by Wang Chiu Road, Lam Fung Street, Sheung Yee Road and Sheung Yuet Road with the existing CIC Zero Carbon Building (ZCB). (For information: The footprint of the existing ZCB is about 1,400m² which accommodates a 3-storey building with basement. About 50% of the site is covered by greenery with urban native woodland.)

Site Information and Planning Permission Assumptions for this Competition are as follows:

- a. The site area is approximately 14,700 m².
- b. Maximum building height: Low-rise three-storey structure shall be permitted with street level at 6mPD and the proposed building height not exceeding of 20mPD.
- c. Plot ratio: N/A
- d. Site coverage: 40%
- e. Vehicular ingress and egress are provided at Sheung Yee Road



The Proposed Site



The Existing CIC-ZCP



The site area is approximately 14,700 m²

Successfully registered participants will be provided with a basic BIM model in .IFC format (an open format) indicating the site boundary and the basic layout of the site surrounding context.

Participants may consider to make reference to 3D Photo-realistic Models that available at Planning Department, website:

https://www.pland.gov.hk/pland_tc/info_serv/3D_models/download.htm

3.3 Client's Brief

One of the CIC's missions is to introduce and guide the use of new technologies, machinery and materials from around the world to HK construction industry for making the construction safer, greener, more efficient and of better quality. The proposed design should provide space and facilities to meet the initiatives for supporting the AECOO industry. At the same time, societal aspirations for ANZ should be upheld, despite increase in facilities and building bulk in CIC-ZCP.

Participants are required to demonstrate the accomplishment of the following design challenges, with more reference information appended below:

- 1) An example of sustainable development with building(s) for ANZ
- 2) Striking a balance between building structures and open space for landscaping cum activities
- 3) Passive building design (with results to demonstrate in BIM)
- 4) Innovative design through collaboration
- 5) Creative BIM uses
- 6) Use of BIM Software, platform and openBIM (optional)
- 7) Use of DfMA & MiC with BIM
- 8) Compliance with spatial requirements

3.3.1 Examples of sustainable building

The proposed ANZ-Hub in CIC-ZCP will serve as an example of sustainable development with building(s) for ANZ aiming at:

- Showcase the green/eco-building design & technologies
- Raise community's awareness on low / zero carbon living
- Disseminate information on smart city practices and ANZ

The knowledge of ZCBs can be found as follows:

- ZCB Journal – Vol 1 January 2014 The Making of the ZCB
- <http://zcp.cic.hk/eng/story-of-zcb>
- <http://zcp.cic.hk/eng/how-the-building-works>
- <http://zcp.cic.hk/eng/active-systems>

3.3.2 Integration of Building & the Open Space cum Activities

In response to the local context of tall buildings, streetscapes and circulation patterns (pedestrian & vehicular) in the vicinity, the proposed design needs to strike a balance between building structures and open space with the following considerations:

- Building form and placing structures in a park layout for activities, recreation and landscaping;
- Provide a unique character and identify of the place that meet the intention of the ANZ-Hub in CIC-ZCP, enhance the spatial qualities of the surrounding environment and deliver the message of a green and sustainable built environment.

The selections of planting species such as trees and shrubs are optional in this submission.

3.3.3 Passive Building Design

There are many ways in addressing passive building design. Analysis and illustration utilising BIM model for the proposal passive building design elements should be demonstrated:

- 1) Building massing design
- 2) Building orientation and building openings including cross ventilated layout, north glazing, light shelves, etc.
- 3) Basic selection of building materials
- 4) Application of building elements like window placement, sun shading devices, brise-soleil, wind catchers, etc.
- 5) Other means of passive building design

ANZ:

The participants can set targets based on current CIC-ZCP/ZCB Information and demonstrate how the design proposal can achieve the objectives with illustrations using BIM model.

3.3.4 Innovative Design through Collaboration

Collaborative design is a process that team members bring together different ideas and work together for a common goal to achieve the intended purpose. Innovative design through collaboration requires participants to demonstrate how they collaborate to design with the adoption of BIM tools and process. The participants shall generate the design through maximizing usage of BIM and its collaboration platform.

3.3.5 Creative BIM Uses

In this Competition, the CIC aims at promote BIM as an effective design, collaboration and integrated review tool in achieving better design quality. Uses of BIM in the Competition are listed in the CIC BIM Standards – General (August 2019) as follows:

- 1) Design authoring of core disciplines/ building systems
 - Possible use of generative design in BIM
 - Explore design options and optimise design resolution
- 2) Design reviews
- 3) Existing conditions modelling
- 4) Sustainability evaluation and Site analysis
 - BIM-based study on environmental impacts to the site and building design, and passive building design in addressing such impacts
- 5) 3D / Spatial coordination
- 6) Space layout and programming
- 7) Engineering analysis (optional and will be defined as advanced BIM use)
- 8) Digital Fabrication
 - DfMA (Design for Manufacture and Assembly)
 - Modular Integration Construction (MiC)

(<https://www.bim.cic.hk/Upload/publication/68/download/1/64971e87240748b5b4c2b14d017e1793.pdf>)

Participants are required to adopt any other BIM Standards and Guidelines published from the CIC from time to time and are encouraged to make best use of the BIM Objects available from the CIC's BIM Portal (https://www.bim.cic.hk/en/resources/bim_objects) whenever possible.

3.3.6 Use of BIM Software, CDE Platform and Open BIM Approach

There is no preference of specific BIM software and BIM Cloud Collaboration Platform (also known as Common Data Environment (CDE)) in this Competition. However, participants are encouraged to explore different available solutions and apply those they consider appropriate for their design and collaboration. When sharing the BIM models, participants need to consider the following challenges, like:

- 1) Data compatibility and interoperability between BIM software
- 2) BIM Model sharing method
- 3) Data assess and security control
- 4) Version control

Participants are required to provide a list of software (with version) and CDE platform that they used in this competition.

Open BIM Approach

Participants may consider Open BIM approach for cross BIM software collaboration. Reference can be made to the Industry Foundation Classes (IFC) data. IFC is a platform neutral, open file format specification that is not controlled by a single BIM software. It is an object-

based file format with a data model developed by buildingSMART International to facilitate interoperability in AECO industry, and is a commonly used collaboration format in BIM based projects.

3.3.7 Use of DfMA & MiC with BIM

Given the benefits of using DfMA/MiC approach, participants are recommended to adopt the technologies for building components (kit-of-parts or modules) in the proposed design. The study and application in using the approach can include elements of linear (joint-based), planar (panel-based) and volumetric (module-based). Following elements are required when DfMA/MiC is being applied:

- 1) 4D modelling: to demonstrate buildability and transportation logistics of DfMA/MiC design, through the use of 4D BIM construction simulation and spatial requirement.
- 2) Logistics planning: to identify critical junctions during the process of modules transportation from the port to the site, through routing study/investigation. An imaginary Port is Yuen Fat Wharf which is located at the West Kowloon reclamation area.

3.3.8 Spatial Requirements (Schedule of Accommodation SOA)

To support the mission and vision of the ZCB for the AECO industry and sustainable living for public, the ANZ-Hub in CIC-ZCP is expected to cater for more than 300,000 visitors per year. The spatial functions and facilities are required as follows:

Space / Facilities	Net Operating Floor Area (NOFA) in m ² , not exceeding ±10% variation	Qty	Features / Provisions
Multi-purpose Hall	600	1	Space for conducting conferences, seminars, ceremonies and exhibitions for promoting green design, sustainable living and technologies
	200	3	300 seats 100 seats each
Indoor Exhibition Areas	400	1	Different sizes of exhibition space for use by the four centres, namely ZCB, CITAC, BIM Department, DfMA Centre & MiC Centre as follows: 1. ZCB main functions of - Showcase the green/eco-building design & technologies - Raise community's awareness on low/zero carbon living - Disseminate information on smart city practices
	200	2	
	100	3	

Space / Facilities	Net Operating Floor Area (NOFA) in m², not exceeding ±10% variation	Qty	Features / Provisions
			<p>2. CITAC's five thematic zones, namely Industrialisation, Informatisation, Integration Intelligentisation and Infinity.</p> <p>3. BIM applications demonstration, ranging from design, construction and facility/asset management</p> <p>The provisions of space can be flexible for combining into larger exhibition areas.</p>
Outdoor Exhibition Space	100 200 500 1000	2 2 1 1	<p>External space for demonstration of MiC, DfMA, robotic automation, drones, laser scanning, automatic rebar display samples / demo, etc.</p> <p>The outdoor exhibition space can be integrated with the public open space.</p>
Workshops / Labs	50 100	3 2	Workshops / seminar facilities for various training, including BIM, AR/VR/MR, 3D printing, immersive studio, etc.
Amenities – Canteen / Cafe	700 200	1 1	<p>Cafeteria with internal & external seating</p> <p>Dining space, kitchen facilities, staff change room and store</p>
Classrooms	100	5	Teaching & learning
Office (support)	500	3	General administration and support staff, pantry and stores (not open to public)
Meeting rooms	50	8	General meeting / consultant service (may be open to public by special appointment)
Board room	50	2	Executive meeting (not open to public)
Reception & lounge seating	100	1	Reception, foyer gathering & seating areas for 50 users, small exhibition area
Information resources library	500	1	Collections, reading, library facilities (include individual study tables, service counter, storage, etc.)
Computer server room	100		Computer equipment, data processing
Toilet & changing			Provisions as required by building regulations and relevant planning & design guidelines.
Plant rooms, Water tanks, transformer			Provisions as required by relevant planning & design guidelines

Space / Facilities	Net Operating Floor Area (NOFA) in m², not exceeding ±10% variation	Qty	Features / Provisions
room, switch rooms, etc.			Visitors may access and see the installed equipment through glazed panels to gain tour experience.
Open Space			For active and/or passive recreational uses serving the needs of local district as well as the general public, e.g. open air concerts, eco-friendly wedding, art work displays, etc. An outdoor performance stage (either permanent or demountable structure would be acceptable). Planting and landscape furniture. The landscaped garden will be open to public all day.
Parking , loading & unloading dock		20 2	Parking places for staff and visitors including facilities for disabled users; Loading & unloading bays (including refuse collection)

3.4 About CITAC, BIM, DfMA & MiC

3.4.1 Understanding the Construction Innovation and Technology Application Centre (CITAC)

CITAC serves as a knowledge hub by collecting, showcasing and promulgating the latest local and overseas construction technologies with a view to promoting the implementation and application of construction innovation. CITAC currently occupies around 1,000 square meter of an exhibition area with over 40 innovative technologies on display covering the five thematic zones, namely Industrialisation, Informatisation, Integration, Intelligentisation and Infinity. Apart from the exhibition area, CITAC also has a multi-purpose seminar room with a capacity of around 150 people. The setup of CITAC and exhibition themes can be found in the website:

- <https://citac.cic.hk/en-hk/about-citac>
- <https://citac.cic.hk/en-hk/exhibitions/why-innovate>

3.4.2 Promoting & development of BIM in HK – Setup of BIM Space and BIM Lab

BIM technology is an important tool in advancing building design, construction and facility / asset management. The CIC has long been supporting the industry in promoting the implementation of BIM technologies. To build capacity and cope with the growing demand on the use of BIM technologies in the industry, a "CIC BIM Space" and "BIM Lab" are established to organise more BIM related events and training to provide diversified supports, including:

- Showcasing of BIM technologies and applications
- Collaboration with industry partners and stakeholders to promote adoption of BIM via seminars and workshops, etc.
- Provision of a knowledge hub and advisory service

The setup of BIM Department in the CIC and its supporting service can be found in the website: <https://www.bim.cic.hk>

3.4.3 Design for Manufacturing & Assembly (DfMA)

DfMA is an eco-digital design approach using BIM as tool which focuses on ease of manufacture and efficiency of assembly. DfMA enables offsite manufacture of high-quality construction components and efficient assembly of the components on site. With the supply chains building up around components and systems, DfMA accomplishes significant improvements in productivity, safety, quality and sustainability. Applying DfMA enables identification, quantification and elimination of waste or inefficiency in product manufacture and assembly to achieve lean construction. It also minimises the risk of site accidents and a well-planned offsite logistics helps reducing the number of vehicle movements for staff and material improving safety in the site locality.

3.4.4 Modular Integrated Construction (MiC)

Modular Integrated Construction (MiC) is an innovative construction method. By adopting the concept of “factory assembly followed by on-site installation”, MiC helps to ease some of the current challenges faced by the local construction industry. In this method, free-standing integrated modules (completed with finishes, fixtures and fittings) are manufactured and assembled in a factory. By transferring on-site construction processes to a controlled factory environment, buildings can be substantially completed off-site. The adverse impacts of weather conditions, scarce labour resources and site constraints can all be substantially reduced. MiC provides a great degree of production quality control, and can improve construction productivity, safety and sustainability. More information on DfMA and MiC can be found in the following websites:

- <http://www.cic.hk/eng/main/mic/>
- http://www.cic.hk/eng/main/dfma_alliance/

4. Submission and Deliverable Requirements

4.1 Round 1 - Online Submission

1) Presentation slide

- The slide shall document the followings:
 - Design concept and approach to site/ building design issues
 - Compliance of spatial requirement with justification by the use of automatic area calculation in BIM software
 - Collaboration across multi-disciplines design in BIM cloud collaboration platform
 - Creative BIM uses
 - Modular Integration Construction (MiC)
 - DfMA (Design for Manufacture and Assembly)
 - Passive building design being adopted, and justification through daylight study, solar shadow study, (optional: energy model and analysis, natural ventilation simulation as advanced BIM use, please indicate the process of how designs are optimised through analysis), etc.
 - Information of team organisation, division of work, list of BIM software (with version) & BIM cloud collaboration platform used, diagram to illustrate the data transfer among various BIM software, etc.
- Maximum 20 pages in English;
- PowerPoint slides in .ppt or .pptx formats. Please refer to the Template provided (Document: CIC_BIM_Competition_2021_Submission_Slide_Template.pptx).

2) Poster

- The poster should identify the key points in design and how BIM is applied in design process collaboratively to achieve design challenge.
- 4 nos. of A1 size and portrait orientation layout in English.
- Minimum resolution 200 dpi.
- Electronic format in .jpg or .png.
- Please refer to the Template provided (Document: CIC_BIM_Competition_2021_Submission_Poster_Template.pptx).

3) Video

- To demonstrate BIM implementation in design visualisation (walk-through with indications including design layouts, applications of materials, advantages of designs, etc.), schedule of accommodations, interdisciplinary design coordination using BIM, process of how designs are optimised through analysis, evidences of design collaboration in BIM cloud collaboration platform, creative BIM uses and passive building design.
 - Maximum 2.5 minutes.
 - Electronic format of video in .avi or .mpeg format, with or without voice over, sub-titles and music.

- 4) BIM Models
 - BIM models in native format, file or aggregate of files.
 - BIM models shall include all geometries, building and element information, views, images, area schedules (to show the comparison of schedule of area between Client's requirements and proposed design).
- 5) Scripting (optional)
 - To showcase computational design, engineering, analysis and optimisation, which will be defined as one of the advanced BIM use.
 - A verifiable script in Dynamo, Grasshopper, Generative Component or other computer language scripting applied.

4.2 Round 2 - Onsite Competition Format

- 1) To incorporate the CIC's design changes in onsite competition, such design changes requirements and details will be announced on the day of Round 2 competition;
- 2) Onsite update of BIM models and production of required output (including presentation slides) in 12 hours (9:00 am to 9:00 pm) on 11 Jun 2021 (Fri);
- 3) Presentation will be held on 12 Jun 2021 (9:00 am – 12:00 noon, Sat) and presentation sequence will base on draw lots;
- 4) A max. 20 pages PowerPoint slides in English in .ppt or .pptx format (an update on top of those to be submitted in Round 1);
- 5) 4 nos. of A1 Posters in English with at least 200dpi in .jpg or .png, layout in portrait format (an update on top of those to be submitted in Round 1);
- 6) BIM models in native format, the BIM models shall include all geometries, building and element information, drawing sheets, views, images, area schedules (an update on top of those to be submitted in Round 1);
- 7) A verifiable script in Dynamo, Grasshopper, Generative Component or other computer language scripting applied, if any, in the Competition to showcase computational design, engineering, analysis and optimisation (an update on top of those to be submitted in Round 1); and
- 8) Presentation for 15 minutes and be followed with Q&A session by panel of judges for 5 minutes.

4.3 Online Submissions

- 1) Registration will be opened until 1 Mar 2021 (deadline for registration), unless waiver granted by the CIC. Successful registration will be notified via email by the CIC.
- 2) For submission, Participant is required to self-create a Google account and store the requested deliverables (refer to Section 4.1) in the Google Drive, and email the shared Google Drive link by 1 Jun 2021 (12:00nn HK time) to bim@cic.hk.

5. Guidance and Support

Competition Briefing Webinar

- Date: 16 Dec 2020 (Wed)

Online BIM Software Trainings

- Period: Dec 2020 – Mar 2021
- Introductory knowledge of BIM Software being covered
 - Autodesk – Revit, BIM 360 and Dynamo
 - Bentley – OpenBuildings Designer and ProjectWise
 - BIM One – BIM Track
 - Bricsys – BricsCAD
 - Forida – Enscape
 - GVDC – Ecodomus
 - Kalloc – Fuzor
 - Graphisoft – ARCHICAD
 - isBIM – Jarvis BIM Cloud Platform
 - MES – ShareBIM
 - Trimble – Tekla
 - White Frog
 - Other software
- Training will only be arranged for participating teams

Hands-on BIM Software Training Webinars

- Period: Mar 2021 – Apr 2021
- Exact dates of training to be confirmed
- BIM Software being covered
 - ACID – IM-CDE
 - Autodesk – Revit, BIM 360 and Dynamo
 - Bentley – OpenBuildings Designer and ProjectWise
 - BIM One – BIM Track
 - Bricsys – BricsCAD
 - Esri – ArcGIS
 - Forida – Enscape
 - Geosys – SuperMap
 - GVDC – Ecodomus
 - Kalloc – Fuzor
 - Graphisoft – ARCHICAD
 - isBIM – Jarvis BIM Cloud Platform
 - MES – ShareBIM
 - Trimble – Tekla
 - Other software
- Training will only be arranged for participating teams

Free BIM Software Licenses

- Period: Mar 2021 – Jun 2021
- Free BIM Software Licenses being offered
 - ACID – IM-CDE
 - Autodesk – Revit, BIM 360 and Dynamo
 - Bentley – OpenBuildings Designer and ProjectWise
 - BIM One – BIM Track
 - Bricsys – BricsCAD
 - Esri – ArcGIS
 - Forida – Enscape
 - Geosys – SuperMap
 - GVDC – Ecodomus
 - Kalloc – Fuzor
 - Graphisoft – ARCHICAD
 - isBIM – Jarvis BIM Cloud Platform
 - MES – ShareBIM
 - Trimble – Tekla
 - Other software
- Free BIM Software Licenses will only be arranged for participating teams

BIM Mentoring support

- Period: Apr 2021 – Jun 2021
- Mentors from the CIC-Certified BIM Manager (CCBM) and HKIBIM Member
- Mentoring support will only be arranged for participating teams

6. Assessment Scoring Criteria

Scoring Criteria	%
1st Round	
Use of Information and Compliance of Client's Requirements	25
Computational Design, Engineering, Analysis and Optimisation	25
Creativity, Innovation & Technologies	25
Communications and Presentation Skills	25
TOTAL	100
2nd Round (On-site competition)	
1 st round score	20
Compliance to Design Information, Flexibility & Responsiveness	30
Collaboration & Teamwork	20
Communications and Presentation Skills	20
Creativity, Innovation & Technologies	10
TOTAL	100

7. Awards and Prizes

Prizes	
First Prize	Plaque + Certificate A Chance to Participate in an Overseas Inspiration
Second Prize	Plaque + Certificate
Third Prize	Plaque + Certificate
Max. 6 Merits	Plaque + Certificate
All	E-Certificate of Participation E-Certificate of Attended Training Webinars

8. Terms and Conditions

By participating in the Competition, each team shall make a registration to participate in the Competition, refer as the “Participating Team”, and each Team Member unconditionally accepts and agrees to comply with and abide by the Terms and Conditions in the Design Brief and the decisions of the CIC, which shall be final and binding in all respects.

8.1 Registration

- 1) No registration fee is required. The registrants are solely responsible for their own expenses in preparing all submissions and deliverables.
- 2) Eligibility: The participants shall be studying a full-time undergraduate or postgraduate program in a registered tertiary institution in Hong Kong as of the 31 January 2021. For overseas students, only of those who hold a valid Hong Kong Identity card is eligible for the participation. There is no limit to the number of participating team to register the Competition.
- 3) Every participant is restricted to joining 1 team only for the Competition.
- 4) Each Participating Team shall have 3 to 5 members (including the team leader), with students from minimum 2 construction disciplines (including, but not limited to, Architecture, Civil/Geotechnical Engineering, Building Services Engineering, Environmental Engineering, Surveying, Construction, Building and Real Estate, Urban Planning and other construction related disciplines).
- 5) The staff of the CIC and their families are not allowed to participate in the Competition.
- 6) Each Participating Team is encouraged to attend the briefing, online training and hands-on trainings, if any, organised by the CIC or its representative or supporting organisations.
- 7) The participants are required to update the CIC for replacement or update on members and to submit the new name list latest by the deadline for registration.
- 8) Only the registered team members who completed the full submissions to the Competition are qualified to receive the electronic certificates of participation.
- 9) The CIC has the final decision on the eligibility of the participants and reserves the right to reject any participant who does not meet the eligibility criteria.
- 10) The CIC reserves the final decision on the Competition and has the right to cancel and/or modify any terms and conditions at any time in the Competition without prior notice.
- 11) The CIC reserves the final decision on the Competition and has the right to cancel or change the awards and other arrangements for the Competition without prior notice.
- 12) The participants shall bear full legal and related responsibilities arising from any possible breach of intellectual property rights in respect of their registration and competition, and shall indemnify the CIC and other concerned parties against any claims and liabilities arising from any such breach.

- 13) All participants who submit registration to the Competition, agree to assign the intellectual property rights of their designs to the CIC on promotion, exhibition, demonstration and training purposes both locally and internationally.
- 14) If a participant is found to have disposed to a third party, such as by assignment, transfer or provision as security, or is making registration procedures, etc., for all or any part of the intellectual property rights or any other rights concerning the submitted registration after the submission, the submission will be made invalid.
- 15) All works must be original works of the participant. The registration will not be shown in other competitions or published. Participants are required to indicate that they are not infringing upon the rights (including design rights and copyright) of the submission.
- 16) Any teams are subject to investigations regarding originality and eligibility for Intellectual Property Rights, design rights or copyright registration. If they do not comply with the requirements, the CIC has the sole discretion to disqualify and forfeit the prizes involved without any liability to the selected participants or any other persons, and other Participating Team may be selected as the winner.
- 17) Participants are required to agree to the CIC's publication of their name and authorise the CIC to collect, process and use their personal data for the event's liaison and promotion. All materials are kept strictly confidential except for the above purposes.
- 18) If any participant provides incorrect, incomplete or inaccurate information, or violates any registration terms or conditions of the Competition, the CIC has the final decision to cancel such participant's qualifications and reserves the right to withdraw the relevant awards.

8.2 Pre-Competition

- 1) The Participating Teams shall complete the Competition at their own premises for the first round.
- 2) For the second round, the Participating Teams shall bring along their own computers and software, they are advised to take all necessary precautions to ensure that the Competition areas, equipment and machines are safe for use by the team members. The CIC shall not be held responsible for any accidents, damages or mishap that may happen to the participants during the Competition.
- 3) Participants may use any BIM authoring software or tools. It is recommended that the BIM authoring software or tools and other supporting analysis / simulation software or graphic and presentation tools for the Competition to be Open BIM compliant including the support of import and export files in Industry Foundation Classes (IFC) format.
- 4) Participants will be notified through email if any changes incurred on submission or presentation time and venue.

- 5) The event will be cancelled if a No. 8 typhoon signal or above is hoisted or the black rainstorm warning signal is raised three hours prior to the original start time of the event. The event will be then re-scheduled to the next available date.

8.3 During Competition

- 1) All participants must comply strictly with all terms and conditions of the Competition defined by the CIC. The Judges and the CIC reserve the rights to disqualify any participant if he/she suspects, in its sole discretion, that the participant did not follow any terms and conditions.
- 2) Failure by the participant to comply with instructions given by the Judges or the CIC, or participants caught in cheating and not producing genuine works, may also incur loss of score. Continuous violation of any terms and conditions, may result in suspension or termination from the Competition.
- 3) The participant shall report to the CIC / Judges as soon as possible, if any grievances. Appeals after the Competition will not be entertained. The Judges' decision shall be final.
- 4) Any participants from the shortlisted team must inform the CIC as early as practicable if he/she could not participate on the day of the second round competition.
- 5) No replacement of any team member is allowed due to whatever reasons. The same full team shall participate the second round competition for the best result, however, minimum one member of a team can still proceed the second round competition.
- 6) The participants shall bring along their own computers with all necessary software and tools with legal licenses to the competition venue for the completion of the competition.
- 7) Any illegal stuffs such as un-authorized software licenses are prohibited. The competition venue with power supplies and power extension cord will be provided by the CIC. Internet connection will not be provided by the CIC for the second round competition. The participants shall arrange and provide their own internet connection if there is a need.

8.4 Assessment and Judging

- 1) The submissions are assessed based on the assessment scoring criteria.
- 2) The results of the Competition will be decided by judging panel and are final. There is no mechanism to appeal or object.
- 3) The judging panel will be composed of representatives of the CIC and the industry BIM experts.
- 4) The panel of Judges shall abstain from evaluating a team where there may be conflict of interest issues. In such a case, the chief judge to be elected by the panel shall make the final decision.
- 5) Assessment shall not be done in the presence of the participants.

- 6) If any stated prizes are unavailable, the CIC reserves the right to substitute one or more items, in its sole and absolute discretion. No prize is exchangeable, transferable, or redeemable for cash.

8.5 Post-Competition

- 1) All submissions will not be returned, and the participant agrees to authorise the CIC to modify, use, reproduce, publicly display or display the registration on the Internet or other media for promotional purposes without prior obtaining the participant's agreement or pay royalties to them.
- 2) The CIC shall retain and hold exclusive rights for promotion, exhibition, demonstration and training purposes both locally and internationally. The exclusive rights include Intellectual Property rights, Design rights, Patent, Trademark, Copyrights, media rights, overall deliverables, including but not limited to the BIM models, posters, reports, multimedia, scripts, materials and projects created and submitted for the Competition.
- 3) All decisions made by the CIC and Judges are final. No correspondence or appeals shall be entertained.
- 4) The top three prize winners and the merit winners may be invited for joining in CIC's coming events and activities.

~ THE END ~