

MICP

Master Class on MiC Project Implementation (Project Managers)

建造業議會大師級培訓課程：組裝合成建築（項目經理）

This course aims to build industry capacity for supporting the development and adoption of MiC in the Hong Kong construction industry. It provides the participants with the opportunity to develop practical competence to solve MiC project implementation problems and hence extends their experience in problem-solving and technology-enabled MiC project management.

Upon successful completion of the course, participants are expected to be able to:

1. Recognize the development and trends of high productivity construction, and appraise the mindset shift towards OSC approaches in the construction industry;
2. Develop problem-solving capabilities and propose innovative built environment solutions for a realistic development of MiC projects;
3. Evaluate proposed solutions in terms of time, cost, quality, safety, sustainability and compliance with legislations/regulations in MiC project implementation; and
4. Promote changes in practice towards integrated and technology-enabled MiC project delivery and hence improve construction project performance in the Hong Kong construction industry.

Lecturer 講師	Professionals 專業人士
Medium of Instruction 授課語言	Cantonese supplemented with English terminology 廣東話輔以英文技術用語
Study Mode 課程制式	Part-time day course 日間部份時間制
Duration 授課期	Tentative Start Date: July 2024 暫定開課日期: 2024年7月 3小時 x 7堂 (共21 小時) 3 hours x 7 sessions (Total 21 hours)
Venue 上課地點	HKIC Kowloon Bay Campus, 44 Tai Yip Street, Kowloon Bay, Kowloon 九龍 九龍灣大業街 44 號香港建造學院九龍灣院校
Admission Requirements 入學條件	(i) Holder of a Bachelor degree in an architectural, engineering or construction-related discipline; OR (ii) Being member of an appropriate professional institution at an appropriate membership level; OR (iii) Should have involved /to be involved in MiC related projects and with at least 5 years working experience in construction industry AND nominated by the employer
Award of Certificate 證書頒發	Student fulfilled the following requirements will be awarded the Completion Certificate (i) Achieve 85% attendance rate (i.e. students are allowed to take leave of absence for a maximum of 3 hours or 1 lesson); and (ii) Pass the Final Assessment (i.e. 50 marks or above)
Course Fee 課程費用	\$8000
Enquiry 查詢課程	21009000 / 21009525
Application Method 報名方法	Please apply online on SPDC portal 請透過建造專業進修院校的 網上報名系統 報名

Course Content 課程內容

- 1. (1) Logistics and Transportation Management for MiC Projects;
(2) An overview of the landscape of MiC in the construction industry**
 - 1.1.1 Upstream Workflows: (1) Procurement/Sourcing of Materials; (2) Onsite Installation Setup; Liaison with related government departments; related taxation requirements for MiC materials
 - 1.1.2 Downstream Workflows: Considerations for logistic arrangements and transportation of MiC Modules (Land Transport and Marine Transport); Delivery of wide loads; traffic regulatory requirements/compliance; custom duty & tax; JIT delivery and pickup point for MiC projects
 - 1.1.3 Workflows illustration with MiC projects: Penny's Bay Quarantine Centre; Yip Shing Street Modular Social Housing; and Cheung Chau/Stone Cutter Island DSD MiC, etc.
 - 1.2.1 Current Status, Forecast and Trends of MiC Development (Local and Overseas)
 - 1.2.2 MiC-related Policies & Supply Chain Establishment for Hong Kong
 - 1.2.3 Development of the landscape of MiC in the Hong Kong Construction Industry
- 2. A holistic approach towards the adoption of MiC: BIM-enabled Design Process, Statutory Requirements, and KPIs for MiC Projects (Part 1):**
 - 2.1. The latest development of building regulations for the adoption of MiC in Hong Kong
 - 2.2. Integrated BIM-enabled Design Process for MiC Project Implementation
- 3. Procurement of MiC Projects in the Hong Kong Construction Industry**
 - 3.1. Partnership between Main Contractor & MiC vendors; Contractual Management of Material Supply Chain for MiC Projects;
 - 3.2. MiC Project Contractual Arrangements for Offsite Fabrication Works: Key concerns and considerations about alignment of material specifications for MiC materials.
 - 3.3. Overall MiC Project Contractual Arrangements for Offsite and Onsite Production
 - 3.4. Selection of Procurement Strategies; ECI and Contractor's Design Responsibility
- 4. (1) Application of Smart Logistic Management System for MiC Projects;
(2) Sustainable Construction and Achieving Net-Zero through MiC Projects**
 - 4.1.1 Development and implementation of the Smart Logistic Management System for Penny's Bay Quarantine Centre on Lantau Island and Kai Tak Community Isolation Facilities
 - 4.2.1 Design of MiC Projects: Design for Low Operational Carbon – Passive Design and Active Systems; Design for Low Embodied Carbon – Green Building Materials; CIC Green Product Certificates; Green Finance; BIM Plug-in for embodied carbon calculation
 - 4.2.2 Design for Carbon Offset in MiC Projects – Renewable Technologies
 - 4.2.3 Net-Zero through MiC Projects: Measure of success – environmental benefits; global trend: science-based targets
- 5. (1) Construction Safety for MiC Projects;
(2) A holistic approach towards the adoption of MiC: BIM-enabled Design Process, Statutory Requirements, and KPIs for MiC Projects (Part 2)**
 - 5.1.1 Design for safety: Roles and responsibilities of key stakeholders in MiC projects; Issues & Concerns from Contractual Perspective; Specification and demarcation of works
 - 5.1.2 Design for Safety Management System for MiC/MiMEP Projects: Differentiation between repetitive category of works and non-repetitive category of works; safety risk identification at early design stage.
 - 5.2.1 MiC Project Setup and Planning; Risk Control Approaches to meet KPIs for MiC Projects – Contractor Perspective
- 6. (1) A holistic approach towards the adoption of MiC: BIM-enabled Design Process, Statutory Requirements, and KPIs for MiC Projects (Part 3)
(2) Application of Digital Technologies for QA/QC for Offsite and Onsite**
 - 6.1.1 MiC Project Planning; Design for risk mitigation approaches to meet KPIs for MiC Projects – Designer Perspective
 - 6.2.1 Application of associated digital technologies for the progress development of MiC projects: Offsite module fabrication workflows and QA/QC inspections; Onsite module installation workflows and QA/QC inspections (incl. considerations on site constraints & key challenges); Appropriate MiC factory setup.
 - 6.2.2 MiC processes and workflows: ArchSD; Buildings Department; and Housing Department.
- 7. Integrated High Productivity Construction (Integrated Group Projects)**
 - 7.1. A series of three 1-hour sessions for group project presentation-discussion
 - 7.2. Participants will form three separate Study Teams (8-9 members in each group) to conduct their own study for 3 real-life MiC projects in Hong Kong