



# CIC MASTER CLASS PROSPECTUS AY2024/2025



School of Professional Development in Construction



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# Hong Kong Institute of Construction (HKIC)

#### **▶** Introduction

Formerly known as the Construction Industry Training Authority, the Hong Kong Institute of Construction has more than 45 years of experience in providing training in Hong Kong. To align with policies and tie in with developments in the community, Hong Kong Institute of Construction was established in 2018. It aims to nurture accomplished talents with sound professional skills, theoretical knowledge, safety awareness, innovative ideas, passion and pride for the construction industry of Hong Kong.

To align with industry development and market needs, HKIC has incorporated into the programmes the latest construction technologies such as Building Information Modelling (BIM), Modular Integrated Construction (MiC), Multi-trade Integrated Mechanical, Electrical and Plumbing (MiMEP), robots (e.g. drones and welding robots). HKIC has also set up Approved Technical Talents Training Programmes to provide graduates with a comprehensive articulation pathway so that they can plan their further studies and career development goals with greater flexibility.

The School of Professional Development in Construction (SPDC) under HKIC provides high-quality, market-driven professional education and development programmes including courses on construction digitalisation, industrialisation and construction industry innovation and state-of-the-art technologies. The programmes not only enable industry practitioners to obtain professional or recognised qualifications, but also enhance the leadership culture, productivity, project quality and outcomes, enabling the local construction industry to achieve sustainable development in the future.

The construction industry underpins, as it always has, the development of Hong Kong's economy. It is expected that construction output will steadily increase in the future, meaning that demand for knowledge-based skilled technical personnel will continue to grow. We hope that you will join our big family and become a construction professional like no other.

# School of Professional Development in Construction (SPDC)

#### **►** Introduction

Forging Professionalism and Crafting our Future Construction Industry by Innovation and Technologies

Under the leadership of the Hong Kong Institute of Construction (HKIC), with the support of The Government of the Hong Kong Special Administrative Region and the collaborative efforts of various industry partners, the School of Professional Development in Construction (SPDC) is dedicated to offering the finest continuing education courses and specialised training for construction industry professionals.



#### **▶** Vision

To nurture an accomplished workforce with sound professional skills, theoretical knowledge, safety awareness, innovative ideas, passion and pride for the construction industry of Hong Kong.

#### **►** Mission

- To provide training in construction and management skills based on whole person education and construction site practices;
- To promote a culture of work safety and sustainability for the construction industry;
- To foster a culture of career dedication and pursuit of excellence for the construction industry;
   and
- To build up a healthy and caring image of the construction industry.

#### ▶ Motto

Forging Professionalism • Inspiring Innovation



# 3 CIC Master Class by SPDC

Committed to innovation, professionalisation and revitalisation, SPDC has been providing the industry with continuing education programmes, including a wide range of Master Classes covering topics such as Safety Leadership Culture, Artificial Intelligence (AI) for Construction, Large Language Model (LLM) for Construction, Digital Twin and Common Data Environment, Design for Safety (DfS), Modular Integrated Construction (MiC), and Temporary Works. These programmes allow management personnel in the industry to upgrade their skills and increase their competitiveness.

CIC Master Class	Top Management	Management Personnel	General Construction Personnel
Safety Leadership Culture (3 hours)	✓	✓	
Al and LLM for Construction (21 hours)	<b>✓</b>	<b>✓</b>	
Digital Twin and Common Data Environment (21 hours)	✓	✓	
Design for Safety (General Construction Personnel) (4 hours)			<b>✓</b>
Design for Safety (Management Personnel) (20 hours)		<b>✓</b>	
MiC Logistics and Transportation Management (9 hours)		<b>✓</b>	<b>✓</b>
MiC Project Implementation (Project Managers) (21 hours)		✓	
Temporary Works (Engineers and Supervisors) (16 hours)		<b>✓</b>	<b>✓</b>



# 4 Programme Information

#### **CIC Master Class in Safety Leadership Culture**



#### **Enquiries:**

**\( 21009000 / 31997217 / 21009809** 

https://www.hkic.edu.hk/en/programmes/master-class/slcd

#### **Programme Objectives**

Building industry capacity to support the development and nurturing of safety leadership culture in the Hong Kong construction industry. It aims to provide participants with an understanding of why and how to become effective safety leaders and inspire their thinking on the subject.

#### **Programme Highlights**

- · How to become an effective safety leader
- The necessity and the importance of having good safety leaders in an organisation
- · Case studies of safety leadership culture in various construction organisations

#### **Entry Requirements**

- Bachelor's degree (or equivalent) in construction or engineering from a recognised institution;
   OR membership in a recognised professional institution in architecture, engineering,
   or construction.
- Minimum 8 years of relevant work experience in the construction industry; AND
- Current role as a project director or above in an organisation.

#### **Awards**

 Upon successful completion of the programme, students will be awarded a certificate of CIC Master Class in Safety Leadership Culture.

Mode	Part-time (Daytime)
Medium of Instruction	Cantonese supplemented with English materials / English
Lecturer	Distinguished industry professionals and/or academic scholars
Course Fee	HK\$1,750
Duration	3 hours
Next Intake	2024 November
	2025 January
	March
	May
	July
Venue	CIC premises in Kowloon Bay
Class size	30

#### **CIC Master Class on AI for Construction (including LLM)**



#### **Enquiries:**

**1** 21009000 / 21009894 / 21009891

https://www.hkic.edu.hk/en/programmes/master-class/aifc

#### **Programme Objectives**

Accelerating the widespread adoption of artificial intelligence in the construction industry while providing industry professionals with the opportunity to learn from top experts and harness the full potential of artificial intelligence (AI).

#### **Programme Highlights**

- Strategic implementations and applications of AI for Construction
- Introduction to AI and its sub-fields, Large Language Model (LLM) & Construction Module (Project & Construction Management); AI Design leading to sustainable living; Design Analytic; Smart Project Planning & Construction Management
- Asset Management; Site Monitoring; Site Safety Management
- Types of LLM; LLM Design leading to sustainable living; Automated Construction
- Hands-on CIC Safety LLM workshop

#### **Entry Requirements**

- Bachelor's degree in architecture, engineering, or construction;
   OR membership in a professional institution at an appropriate level.
- Involvement in advanced construction projects with at least 5 years of experience in the construction industry; AND
- Must be nominated by the employer.

#### **Awards**

 Upon successful completion of the programme, students will be awarded a certificate of CIC Master Class on AI for Construction (including LLM).

Mode	Part-time (Daytime)
Medium of Instruction	Cantonese supplemented with English materials / English
Lecturer	Distinguished industry professionals and/or academic scholars
Course Fee	To be announced
Duration	21 hours (3 hours per module per week)
Next Intake	2024 November 26 - 2025 February 11
	2025 March - June
	September - December
Venue	CIC premises in Kowloon Bay
Class size	30

### CIC Master Class on Digital Twin and Common Data Environment



#### **Enquiries:**

**\( 21009000 / 31997217 / 31997343 \)** 

https://www.hkic.edu.hk/en/programmes/master-class/dtcp

#### **Programme Objectives**

Empowering professional practitioners to generate value from construction project data and leverage digitisation to improve business processes through the use of integrated Common Data Environment (CDE) and Digital Twin technologies.

#### **Programme Highlights**

- Strategic implementation through Leadership, Innovation and Transformation
- Values of Common Data Environment and Digital Twin and Case Studies
- Theoretical framework and Standards
- Fundamentals of Common Data Environment and Digital Twin
- Utilising Common Data Environment
- Leveraging Digital Twin
- Technical Site Visit to Digital Twin and Common Data Environment Project(s)

#### **Entry Requirements**

- Bachelor's degree in architecture, engineering, or construction;
   OR membership in a relevant professional institution;
   OR at least 5 years of experience in the construction industry, specifically in Digital Twin and CDE projects.
- Must be nominated by the employer.

#### **Awards**

 Upon successful completion of the programme, students will be awarded a certificate of CIC Master Class on Digital Twin and Common Data Environment.

Mode	Part-time (Daytime)
Medium of Instruction	Cantonese supplemented with English materials / English
Lecturer	Distinguished industry professionals and/or academic scholars
Course Fee	To be announced
Duration	21 hours (3 hours per module per week)
Next Intake	2024 December - 2025 February
	2025 June - September
	December - 2026 February
Venue	CIC premises in Kowloon Bay
Class size	30

# CIC Master Class on Design for Safety (General Construction Personnel)



#### **Enquiries:**

**1** 21009000 / 21009526 / 21009809

https://www.hkic.edu.hk/en/programmes/master-class/dfsg

**DFSG** 

#### **Programme Objectives**

Providing general awareness of Design for Safety (DfS) in the Hong Kong construction industry, focusing on the importance and benefits of applying and utilising DfS across all projects.

#### **Programme Highlights**

- Introduction of DfS: Requirements, Roles and Responsibilities
- Design and Construction Health and Safety
- Lessons Learnt from Major Accidents/Incidents & Statistics in HK, Singapore & UK
- DfS Requirements in Context Project Life Cycle Stages
- DfS Roles & Responsibilities
- DfS Competence Skills, Knowledge and Experience

#### **Entry Requirements**

- General education with relevant construction working experience; AND
- Ability to understand, listen, read and write Chinese and English (preferably for operational level personnel)

#### **Awards**

• Upon successful completion of the programme, students will be awarded a certificate of CIC Master Class on Design for Safety (General Construction Personnel).

Mode	Part-time (Daytime)
Medium of Instruction	Cantonese supplemented with English materials / English
Lecturer	Distinguished industry professionals and/or academic scholars
Course Fee	HK\$1,500
Duration	4 hours
Next Intake	2024 November 22
	2025 March
	June
	October
Venue	CIC premises in Kowloon Bay
Class size	40

# CIC Master Class on Design for Safety (Management Personnel)



#### **Enquiries:**

21009000 / 21009892 / 21009809

https://www.hkic.edu.hk/en/programmes/master-class/dfsm

#### **Programme Objectives**

Providing a learning experience that draws insights from both overseas and Hong Kong practices related to the development and adoption of Design for Safety (DfS) in the Hong Kong construction industry. The programme will cover identifying hazards and associated significant risks, as well as methods and techniques for control, mitigation, reduction, and treatment. Additionally, it will address aspects such as communication, consultation, cooperation, coordination, and capturing relevant information.

#### **Programme Highlights**

- DfS Introduction, Requirements, Roles and Responsibilities
- Client Strategy Brief, Pre-Construction Information, Hazards and Risks
- DfS Principles of Prevention and DfS Design Risk Management (DRM)
- DfS Case Studies, Syndicate Exercises, Digital Design & Engineering
- DfS Designers Course Assessment, Group Presentation

#### **Entry Requirements**

- Bachelor's degree in architecture, engineering, or construction;
   OR membership in a relevant professional institution;
   OR at least 5 years of experience in the construction industry.
- Must be nominated by the employer.

#### **Awards**

 Upon successful completion of the programme, students will be awarded a certificate of CIC Master Class on Design for Safety (Management Personnel).

Mode	Part-time (Daytime)
Medium of Instruction	Cantonese supplemented with English materials / English
Lecturer	Distinguished industry professionals and/or academic scholars
Course Fee	HK\$5,000
Duration	20 hours (4 hours per week)
Next Intake	2024 October 25 - December 6
	2025 February - April
	June - July
Venue	CIC premises in Kowloon Bay
Class size	40

# **CIC Master Class on MiC Logistics and Transportation Management**



#### **Enquiries:**

**1** 21009000 / 21009894 / 21009525

https://www.hkic.edu.hk/en/programmes/master-class/micl

#### **Programme Objectives**

Building industry capacity to support the development and adoption of MiC in the Hong Kong construction industry by equipping participants with the knowledge and experience in logistics and transportation management on MiC. This programme provides the participants with the opportunity to understand the considerations in planning and operating the logistics and transportation of MiC projects and develop practical competence in problem solving on different transportation scenarios of MiC projects.

#### **Programme Highlights**

- Route planning and Transportation consideration
- Procurement, Liaison and Taxation for MiC logistics
- Statutory requirements on transportation of MiC and Transportation arrangement
- Preparation and protection work, Storage and site arrangement for just-in-time delivery
- Smart logistics management system for MiC
- Integrated smooth logistics and Transportation planning (Group project)

#### **Entry Requirements**

Bachelor's degree in architecture, engineering, or construction;
 OR a relevant professional membership;
 OR (I) involved or to be involved in MiC projects, (II) have at least 5 years of construction experience, and (III) be nominated by the employer.

#### **Awards**

 Upon successful completion of the programme, students will be awarded a certificate of CIC Master Class on MiC Logistics and Transportation Management.

Mode	Part-time (Daytime)
Medium of Instruction	Cantonese supplemented with English materials / English
Lecturer	Distinguished industry professionals and/or academic scholars
Course Fee	HK\$3,840
Duration	9 hours (3 hours per week)
Next Intake	2024 October 21 - November 18
	2025 March - May
	August - September
Venue	CIC premises in Kowloon Bay
Class size	25

# CIC Master Class on MiC Project Implementation (Project Managers)



#### **Enquiries:**

**\( 21009000 / 21009525 / 21009894 \)** 

https://www.hkic.edu.hk/en/programmes/master-class/micp

#### **Programme Objectives**

Building industry capacity to support the development and adoption of MiC in the Hong Kong construction industry. This programme provides the participants with the opportunity to develop practical competence in solving MiC project implementation problems, enriching their experience in problem-solving and technology-enabled MiC project management.

#### **Programme Highlights**

- An Overview of the Landscape of MiC in the Construction Industry
- MiC Project Setup & Planning Contractor Perspective
- Logistics and Transportation Management for MiC Projects
- Procurement of MiC Projects in the HK Construction Industry
- Application of Smart Logistic Management System for MiC Projects
- Construction Safety for MiC Projects
- Application of Digital Technologies for QA/QC for Offsite and Onsite
- A Holistic Approach Towards the Adoption of MiC: BIM-enabled Design Process, Statutory Requirements, and KPIs for MiC Projects
- Sustainable Construction & Achieving Net-Zero through MiC Projects
- Integrated High Productivity Construction (Group Projects)

#### **Entry Requirements**

- Bachelor's degree in architecture, engineering, or construction;
   OR membership in a relevant professional institution;
   OR At least 5 years of experience in the construction industry, specifically in MiC-related projects.
- Must be nominated by the employer.

#### **Awards**

 Upon successful completion of the programme, students will be awarded a certificate of CIC Master Class on MiC Project Implementation (Project Managers).

Mode	Part-time (Daytime)
Medium of Instruction	Cantonese supplemented with English materials / English
Lecturer	Distinguished industry professionals and/or academic scholars
Course Fee	HK\$8,000
Duration	21 hours (3 hours per module per week)
Next Intake	2024 December - 2025 March
	2025 May - August
Venue	CIC premises in Kowloon Bay
Class size	25

# **CIC Master Class on Temporary Works** (Engineers and Supervisors)



#### **Enquiries:**

**1** 21009000 / 21009525 / 21009894

https://www.hkic.edu.hk/en/programmes/master-class/twes

Promoting good practices for temporary works in the Hong Kong construction industry. It aims to develop participants' knowledge and practical competence to achieve optimised TW solutions with safe outcomes.

#### **Programme Highlights**

**Programme Objectives** 

- An overview of Design for Safety (DfS) on Temporary Works Design and Management in Construction Industry
- Temporary Works Design and Management: Statutory Requirements; Risk Management; Roles and Responsibilities; TW Policy, Procedures and Process
- Temporary Works Management Plan and Application of Innovative Technologies: Special Temporary Works Solutions
- Implementation of Falsework and Formwork in Hong Kong: Scaffolding Systems Planning;
   Design; Installation; Monitoring and Dismantling
- Excavation and Lateral Support
- Demolition of a Building

#### **Entry Requirements**

Bachelor's degree in architecture, engineering, or a related field;
 OR a relevant professional membership;
 OR at least 5 years of construction experience AND be nominated by the employer.

#### **Awards**

 Upon successful completion of the programme, students will be awarded a certificate of CIC Master Class on Temporary Works (Engineers and Supervisors).

Mode	Part-time (Daytime)
Medium of Instruction	Cantonese supplemented with English materials / English
Lecturer	Distinguished industry professionals and/or academic scholars
Course Fee	HK\$3,050
Duration	16 hours
Next Intake	2024 September 11 - November 20
	2025 March - June
	July - October
Venue	CIC premises in Kowloon Bay
Class size	40

# 5 Alumni Testimonials

"With over 36 years in the industry and having attended hundreds of classes, I can confidently say that the instructors in this course surpass any professors or experts I have encountered in terms of knowledge, skills, and ability to provoke thought. I was pleasantly surprised and deeply satisfied."

Alumnus from Master Class in Safety Leadership Culture

"Concise, good experience sharing and content coverage."

Alumnus from Master Class on MiC Project Implementation (Project Managers) "The speakers have given a lot of useful examples and shared practical experience and lessons learnt."

Alumnus from Master Class on Digital Twin

"CIC provides an excellent platform for speakers to share their valuable CDE experience and to promote smart construction management."

Alumnus from Master Class on Common Data Environment (Project Managers)

"The course can give directions to company leaders for development of safety management skills."

Alumnus from Master Class in Safety Leadership Culture

"The interaction between speakers, case sharing and group project is helpful for understanding DfS. Understood the temp work design consideration and innovative idea."

Alumnus from Master Class on Design for Safety (Management Personnel)



The information provided in this prospectus and all aspects of the programme offerings are subject to change at the sole discretion of HKIC-SPDC. For the most up-to-date programme information, please visit the HKIC-SPDC website (https://www.hkic.edu.hk/en/about/spdc). In the event of any disputes regarding the content of this prospectus, HKIC-SPDC reserves the right to make the final decision. Additionally, HKIC-SPDC maintains the right to cancel any programme(s), in which case all fees paid will be fully refunded.

### **School of Professional Development in Construction, Hong Kong Institute of Construction**



(852) 2100 9000

(852) 2100 9575

https://www.hkic.edu.hk/en/about/spdc

#### 香港建造學院為建造業議會機構成員

Hong Kong Institute of Construction (HKIC) is a member organisation of the Construction Industry Council (CIC)