


## CPD Series:

# Photovoltaic System Design and Application

Course Code: SC 26-020

24 & 31 July 2026 (Fridays), 7:00pm - 10:00pm

 [In case of adverse weather, course will be rescheduled to 7 August 2026 (Friday), 7:00 pm to 10:00 pm]

### Introduction

The application of Photovoltaic (PV) systems has been a prominent topic in building and railway engineering for recent two decades in Hong Kong, generating significant discussions about financial, Environmental, Social, and Governance (ESG) aspects, and overall environmental value. This course aims to provide participants with an in-depth understanding of PV design and investment principles across various contexts, including power utilities, railway, and building, etc.

### Objectives and Learning Outcomes

This course is tailored for practitioners involved in consultancy services and advanced practical PV engineering, engineering problem solving, focusing on environmental impact and investment design. Upon completion of this course, participants will be able to:

- Design, estimate, and evaluate appropriate system applications for daily PV engineering and investment scenarios, along with generating effective solutions.
- Assess system proposals, select equipment, and make informed investment decisions.

### Who Should Attend

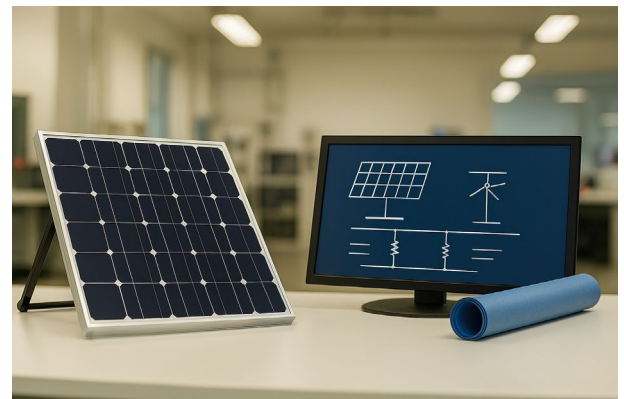
This course is intended for electrical, mechanical, building services, and environmental engineers, sustainable building designers, and operators

### Pre-requisites

An ordinary diploma or certificate in engineering or science (QF3) or higher is required

### Language

Cantonese with presentation slides in English



### Venue

MTR Academy - Hung Hom Centre

### Mode of Learning

Classroom lecture and discussion

### Programme Structure

This course includes the following major topics:

#### Day-1

- Renewable Energy (RE) Development In HK
- Photovoltaic Technologies Introduction
- Power Conditioning System (PCS) Weather Sensor and DC Protective Device Introduction
- Special Projects and their financial model case study

#### Day-2

- System design and calculation
- Software modeling design demonstration
- Sun reflective glare impact calculation and financial analysis

## Speaker



Ir Leung Ming Fai (MF)

MIET, MCIBSE, MHKIE, EFFAS,  
USGBC

CEng (ELL, BSS); R.P.E. (BSS, ENY);

REA; REW (H-CO, H0)

Eng BIM Pro, CCBM, NEC4Reg,

CESGA®, LEED AP® (BD+C & O+M)

MF is a seasoned MEP engineering practitioner with over 20 years of experience across the Contractor, Consultancy, and Railway sectors. He specializes in MEP Engineering, Automation, Sustainability, and Integrated Project Delivery, with a strong focus on execution using BIM technology. MF has significantly contributed to major projects at MTRC and has worked on various public and private building and infrastructure development in Hong Kong, Macau, and Mainland China.

Currently serving as the E&M Engineering Manager and a member of the ESG initiative workgroup at MTRC, MF is responsible for MEP Engineering, ESG, and BIM solution proposals, as well as engineering project reviews for new railway developments.

MF has taught engineering courses at HKEMC, HKUSPACE, VTC- HKIVE, VTC-SHAPE and VTC-THEi since 2012. In addition, he serves as a volunteer for CEng, IEng application assessor, and a Signalling and Transportation (S&T) HK branch committee member in IET-HK.

## Certificate of Attendance

Each participant will receive a certificate of attendance showing 6 hours upon successful completion of this programme.

Programme Fee	Early Bird Fee	Discount Scheme
<b>\$700</b>	<b>\$630</b> (Paid registration on or before 12 July 2026) <i>^Rounded up fee</i>	<b>15% off for</b> <ul style="list-style-type: none"><li>– members of supporting professional bodies^</li><li>– full time staff of MTR and its subsidiary companies^</li><li>– full-time students ( Senior Secondary or above)</li></ul> ^ Latest details, please refer to our webpage

## Application Methods

### Online

Applicants can enrol and online payment by credit card at <https://www.mtracademy.com>

### Enquiry in Person

Address: MTR Hung Hom Building, 1/F., 8 Cheong Wan Road, Hung Hom, Kowloon

Opening hours: Monday - Friday 9am– 8pm; Saturday: 9am – 12:30pm

Closed on Sundays and Public Holidays

## Closing Date for Registration

Please note that due to limitations of venue capacity and relevant logistics, all registrations must be made at least 2 working days prior to the delivery date of individual modules. No walk-in registration will be entertained.

\*MTR Academy reserves the right to turn away successfully enrolled individuals who do not meet prerequisite.