

# Development of Professional Diploma Meister Programmes in Hong Kong

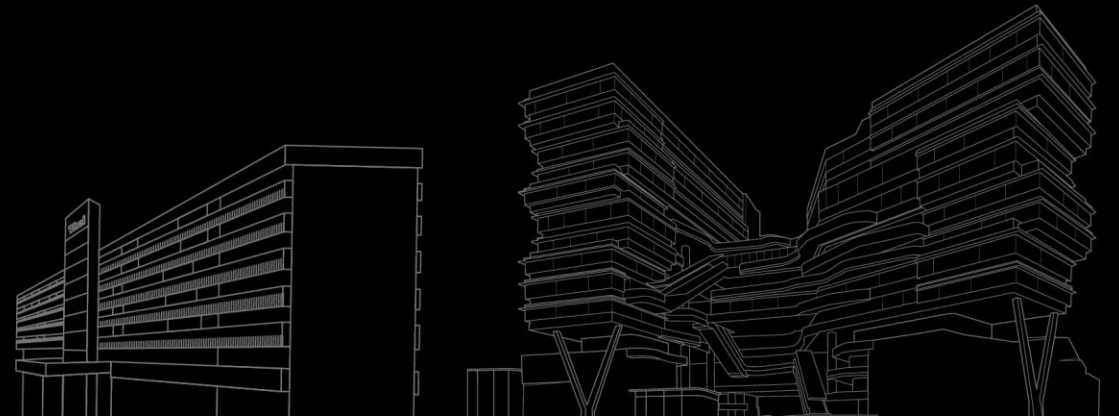
**K L Pun**

Dean, Faculty of Science and Technology, THEi

**Roger Ng**

Assistant Professor, Faculty of Science and Technology, THEi

高科院  
**Thei**





Vocational Training Council (VTC) is the largest vocational and professional education and training provider in Hong Kong



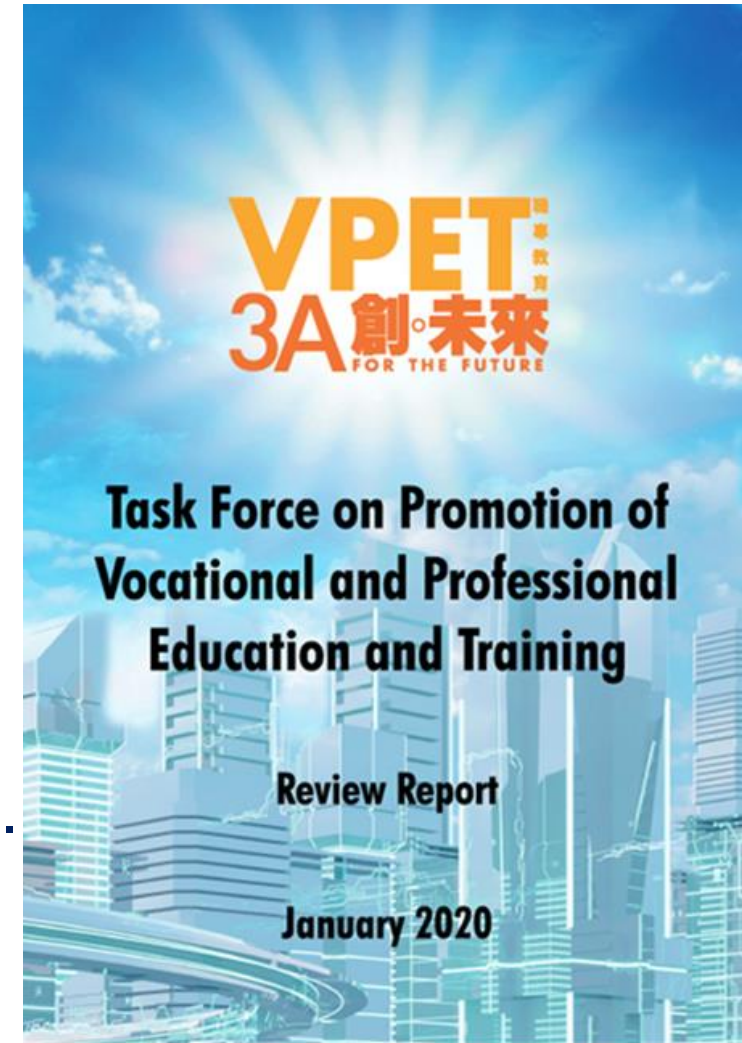
Technological and Higher Education Institute of Hong Kong (THEi) is a member institute of the VTC



# Vocational and Professional Education and Training (VPET)

Review Report - Task Force on Promotion of VPET recommends:

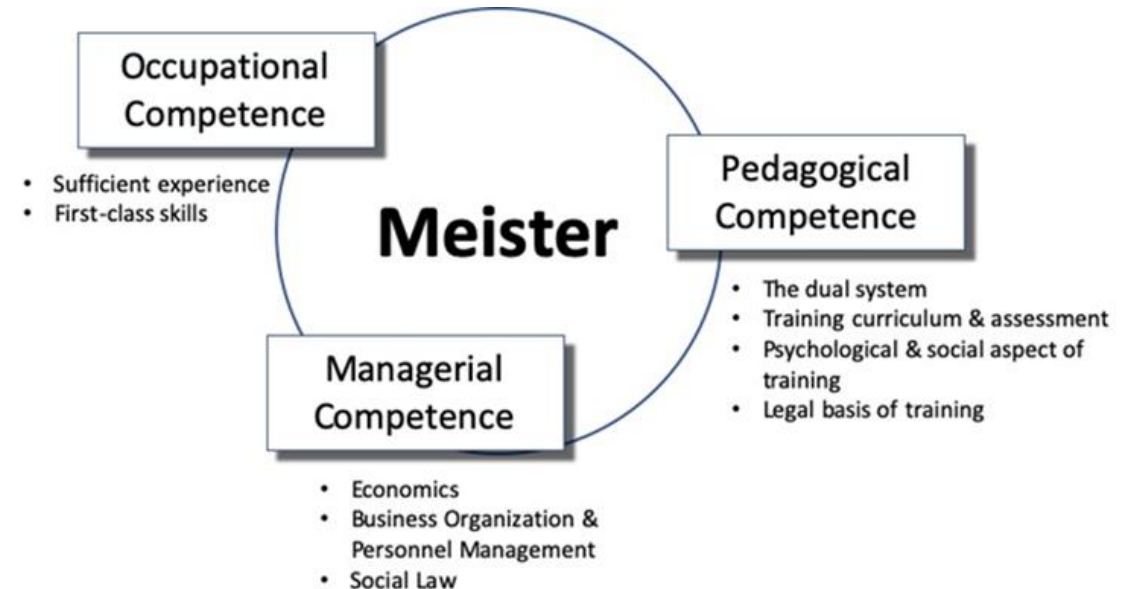
“to *explore the development of a vocational route* whereby professional skill-based vocational qualifications can be acquired flexibly through an appropriate combination of vocational training at schools, workplace assessment, or in service training, and duly recognised under the Qualifications Framework (QF) in close partnership with the industries”.



# Professional Qualifications Pathway

## Objectives:

- A **Skills Master** title shall be established and given to those skilled practitioners of selected industries who possess excellence in areas required by the associations/professional bodies of their trades.
- **Professional Diploma Meister (PDM)**, pegged at HKQF L5, be developed to equip candidates with essential skills and knowledge, alongside practical experience they gain in the course of their professional career development.







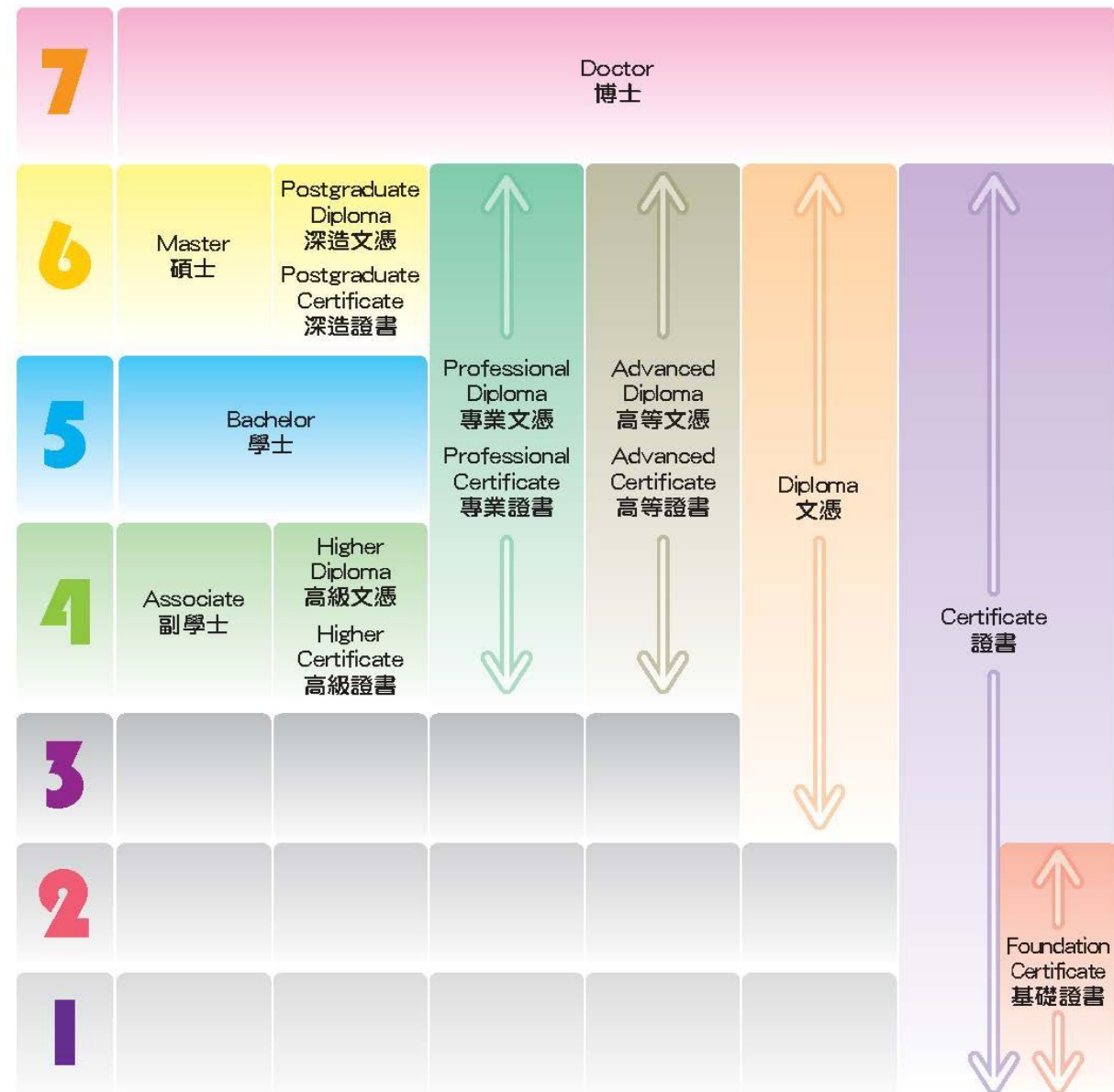
# 資歷架構

## Qualifications Framework

- 7-level hierarchy of the Hong Kong Qualification Framework (QF)
  - A set of **Generic Level Descriptors (GLD)** specifying outcome standards at each QF level in four domains
- The Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ) is responsible for safeguarding the quality and standards of learning programmes recognized under the QF
- HKCAAVQ is a statutory body to provide authoritative advice on academic standards of degree programmes in higher education institutions in Hong Kong

QF Level  
資歷級別

Choice of Award Titles for Different Levels  
各級別可選用的資歷名銜



# VTC Initiatives for Supporting VPET Pathway

QF Level  
資歷架構級別

L5  
第5級

L4  
第4級

L3  
第3級

L2  
第2級

Job-related Continuing Education & Training  
工作相關持續教育及培訓



QF Level  
資歷級別

Choice of Award Titles for Different Levels  
各級別可選用的資歷名銜



# PDM Programmes of THEi

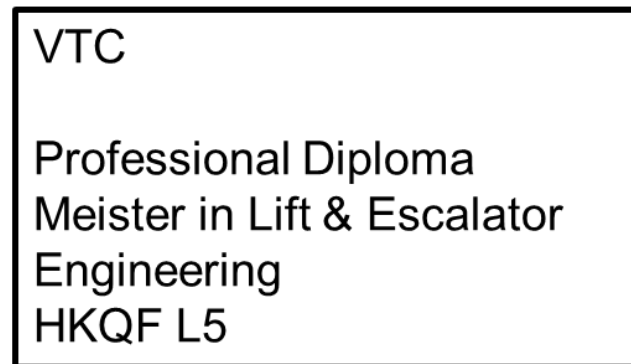
- **PDM in Lift and Escalator Engineering (PDM-LEE)**  
programme is the first programme of its kind under the initiative for the lift and escalator engineering industry in Hong Kong and has been successfully accredited by the HKCAAVQ
- **PDM in Power Electrical Engineering (PDM-PEE)**  
(developing)
- Gas Engineering / Water Technology being considered

The screenshot displays the THEi website interface. At the top left is the THEi logo with 'ANNIVERSARY' text. A navigation bar includes links for 'About THEi', 'Faculties and School', 'Academic Staff', 'Industry Collaboration', 'Student Services', 'Life at THEi', 'Research', and 'Admissions'. A breadcrumb trail reads: 'Home / Faculties and School / Faculty of Science and Technology / Department of Construction Technology and Engineering / Programmes / PDM in Lift and Escalator Engineering'. The main header features the text 'FACULTY OF SCIENCE AND TECHNOLOGY' in large white letters on a red background. Below this is a navigation menu with 'Dean's Message', 'Department of Construction Technology and Engineering' (selected), 'Academic Staff', and 'Programmes'. Under 'Programmes', several options are listed, including 'BEng (Hons) in Civil Engineering', 'BEng (Hons) in Environmental Engineering and Management', and 'BEng (Hons) in Building Services Engineering'. A large image shows two workers in safety gear working on a lift mechanism. Overlaid on the image is the text 'Professional Diploma Meister Lift and Escalator Engineering'. At the bottom, there are buttons for 'Find us on', 'Download Pamphlet', and a prominent red 'APPLY NOW' button with a right-pointing arrow.

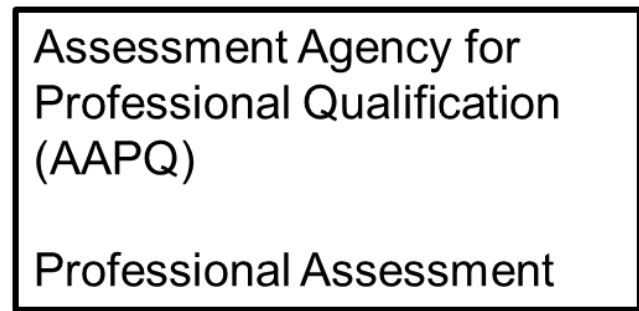
# A Meister as an Industry-recognised Accolade or a Professional Qualification

*Academic qualification  
granted by a local organisation*

***Lift Meister***



*A robust assessment in  
written or practical format, not  
underpinned by an associated  
learning programme*



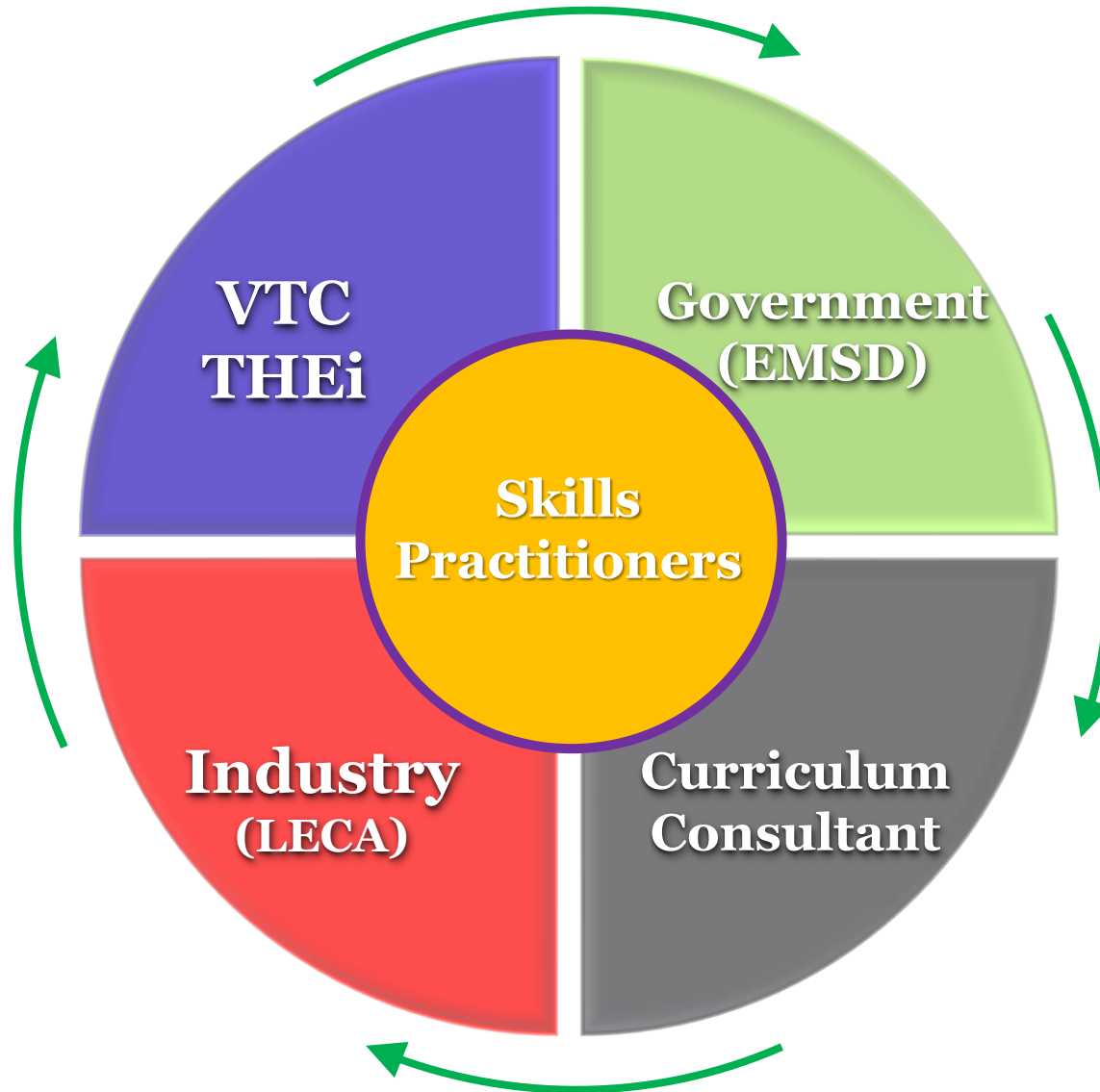
***Lift Meister***

*Registered Lift &  
Escalator Worker*

*Professional experience  
gain*



# Multipartite Collaboration



EMSD: Electrical and Mechanical Services Department;  
LECA: Lift and Escalator Contractors Association

# International Curriculum Consultant

An international consulting firm supported the curriculum design of the first Professional Diploma Meister programme to develop:

- Frameworks and functional analysis of the Meister graduates
- Workplace learning and assessment strategies to achieve competence
- Competence-based standards and assessment products

## A Proposal for the Development of HKQF L5: Professional Diploma for Lifts and Escalators

Vocational Training Council (VTC)  
Hong Kong



## VTC

Briefing Note for Functional Mapping Workshop



# Synergy in VTC



Faculty of Science and Technology, THEi

- Engineering programmes
  - Building Services Engineering
  - Civil Engineering
  - Environmental Engineering and Management



## Professional Diploma Meister Programmes



IVE (Engineering)



Pro-Act

# Working Group Meetings

## Professional Qualification Working Group Meeting

- EMSD (機電工程署)
- LECA (電梯業協會)
- HKGULEE (香港電梯業總工會)
- VTC (職業訓練局)
- THEi (高科院)



- Project Steering
- Curriculum Framework
- Entry Requirement

## Industry Consulting Group (ICG) Meeting

- Strategic guidance and decision-making (e.g. defining Programme Learning Outcomes)

## Subject Matter Experts (SMEs) Group Meeting

- Consultation of specific industry skill requirements



# Student Demand

- Some of the 6,000 Registered Lift Workers (RLWs) and Registered Escalator Workers (REWs) are serving the lift and escalator industry; No. of Grade B Registered Electrical Worker (REW) who have QF level 4 qualifications ~3,900
- For those who have proven experience in handling projects and having the calibre to lead the growth of technical team, should be trained up to assume a leader's role in their organisations.
- Major stakeholders of the industry would nominate skilled-workers who are potential technical leaders/managers/superintendents to enroll in the programme
- The nominees must fulfil the minimum entrance requirement



# Programme Overview

## Professional Diploma Meister in Lift & Escalator Engineering

- Class size: 20 (max)
- HKQF Level 5
- Duration: 2-year, part-time
- Delivery: weekday evening and/or weekend classes
- Learning mode: Classroom + Workshop + Workplace
- MOI: English supplemented with Chinese



Professional Diploma Meister in Lift and Escalator Engineering is recognised under the  
QF Level: 5  
QR Registration No.: 22/000122/L5  
Registration Validity Period: 01/04/2022 to 31/08/2025

## Admission Requirements

Admission is on a competitive basis, with applicants judged on their ability to meet the entrance requirements of the Programme. The minimum entrance requirement of the Programme is summarised as follows:

i. Professional Requirement:

- › Registered Lift **and** Escalator Worker (Cap 618),

**AND**

ii. Academic Qualifications and Experience Requirement:

- › A relevant Higher Diploma or Professional Diploma at QF Level 4 **AND** at least 8 years' post Registered Lift Worker (RLW) and Registered Escalator Worker (REW) work experience, OR
- › A Relevant Professional Certificate (QF Level 4) acceptable to the Faculty Dean **AND** at least 12 years' post RLW and REW work experience; OR
- › Qualification deemed equivalent by the Faculty Board **AND** at least 8 years' relevant work experience following acquisition of both RLW and REW registrations.

Mature applicants at the age of 30 or above and having minimum 12 years of post RLW and REW work experience may also be considered for admission on a case-by-case basis.

## Employer's Nomination, Endorsement and Signature

The applicant should be nominated by his/her employer to study the programme. The employer should endorse the information about the work experience given by the applicants is accurate and complete.

The employer should also be committed to providing extensive workplace learning and assessment opportunities to students by playing an active role in:

- › providing students with the opportunities required to acquire knowledge, skill, and competence on the job;
- › signing off students' workplace training and experience logs;
- › allocating experienced staff to act as trainers, verifiers and assessors; and
- › making provision for formal training in the workplace such as process run-throughs, formal on-job training, etc.



# Programme Design and Curriculum

Professional Modules	~ 60%
Management and Training Modules	~ 40%

Appropriate combination of vocational training at schools and workplace learning assessment



## Professional Modules

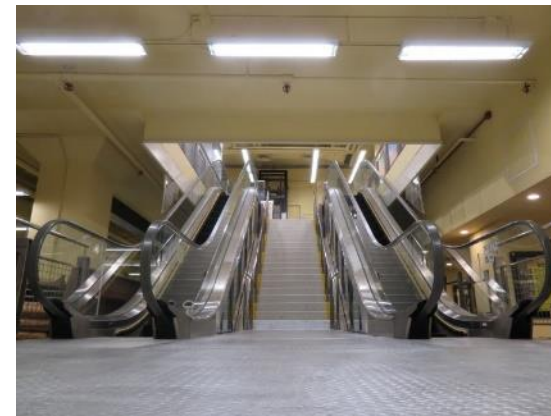
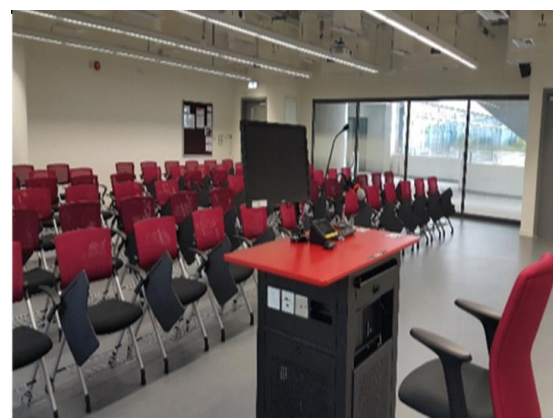
- Lifts & Escalators – Maintenance
- Lifts & Escalators – Installation
- Lifts & Escalators – Testing & Commissioning
- Lifts & Escalators – Modernization
- Advanced Technology
- Industry based Project

## Management and Training Modules

- Project and QSHE Management
- Legal and Contemporary Issues in the Industry
- Training and Coaching

# Campuses

- THEi (Tsing Yi Campus) (**Host campus**)
- Lifelong Learning Centre, Billion Plaza II
- Pro-Act Training and Development Centre (Electrical), VTC Kwai Chung Complex
- Pro-Act Training and Development Centre (Electrical), VTC Pokfulam Complex
- Lift & Escalator Modernisation & Maintenance Training Centre (under construction)





# Programme Aims and Objectives

Aim:

... to nurture Meister (aka Skills Masters/Industry Masters) who can demonstrate occupational, managerial and pedagogical competencies in the full range of the specific specialisms.

Programme Objectives (POs):

PO1: ... **professional, managerial and mentoring competencies** ...

PO2: ... **technical expertise** ...

PO3: ... **financial viability and statutory compliance** ...

PO4: ... **mentoring and coaching**

PO5: ... **awareness of technological and operational innovations** ...



# Programme Learning Outcomes (PLO)

Upon completing the PDM programme, students will be able to:

- PLO 1: ... *technical competencies* ...
- PLO 2: ... *costing and legal compliance* ...
- PLO 3: ... *training* ...
- PLO 4: ... *new technology* ...
- PLO 5: ... *professional ethics* ...



# Relationship between Programme Objectives (POs) and Programme Learning Outcomes (PLOs)

For example:

Programme Learning Outcomes (PLOs)	Programme Objectives (POs)				
	1	2	3	4	5
PLO1		√		√	√
PLO2	√		√		
PLO3	√	√		√	
PLO4			√	√	
PLO5		√	√		√

# Mapping of Programme Learning Outcomes (PLOs) and Generic Level Descriptors (GLDs) at QF Level 5

For example:

Programme Learning Outcomes (PLOs)	Generic Level Descriptors (GLDs) at QF Level 5			
	Knowledge & Intellectual Skills	Processes	Autonomy & Accountability	Communication, ICT and Numeracy
1	√	√	√	
2			√	√
3	√	√		
4		√	√	
5		√		√

# Application for Use of PDM Title



*(For Official Use Only)*

Date of receipt : \_\_\_\_\_

Serial No. : \_\_\_\_\_

## Application for Use of Award Titles outside the Award Titles Scheme

### Application Form

#### Notes to Applicants

1. Please read the document on the Award Titles Scheme (ATS) at the Hong Kong Qualifications Framework (QF) website ([www.hkqf.gov.hk](http://www.hkqf.gov.hk)) before submitting this application.
2. Applications should be made before the programme is submitted to the relevant quality assurance body for accreditation/assessment.



# Programme Launch Ceremony of PDM-LEE on 23 Jun 2022





DAILY NEWS

## 【資深電梯技術工程人員持續進修】職訓局首辦「大師級」升降機及自動梯課程 學歷達資歷架構第五級 培育文武兼備電梯管理專才

【明報專訊】職業訓練局（VTC）轄下的香港高等教育科技學院（THEi高科院）開辦兩年兼讀制的「升降機及自動梯大師級專業文憑課程」，學歷達至資歷架構第5級，即等同學士學位水平。對象學員為獲註冊升降機及自動梯工程人員資歷後，加上至少8年或以上升降機及自動梯工作經驗的資深技術工程人員。

### 目錄

- 1 課程以德國大師級職專教育系統為藍本
- 2 港續推大型基建 帶動機電人才需求有增無減
- 3 電梯業界代表：業界需吸納及培育人才 傳承專業知識及技術



【資深電梯技術工程人員持續進修】

職訓局首辦「大師級」升降機及自動梯課程 學歷達資歷架構第五級 培育文武兼備電梯管理專才

課程以德國大師級職專教育系統為藍本

「升降機及自動梯大師級專業文憑課程」旨在提供清晰的學歷進修階梯，學員完成課程後，可擔任升降機及自動梯機構工程技術相關範疇的管理人員；內容以德國大師級職專教育系統為藍本，通過以解決問題為本的學習模式，協助學員掌握緊貼行業發展的科技及技術、分析能力與管理技巧，培育學員成為工作經驗、專業知識與管理能力兼備，以及受業界認可的「升降機及自動梯大師」。



# Operation of the Programme

## Semester 1

Lifts & Escalators – Maintenance

Legal and Contemporary Issues in the Industry

## Semester 2

Lifts & Escalators – Maintenance

Project and QSHE Management

## Semester 3

Lifts & Escalators – Installation

## Semester 4

Lifts & Escalators – Testing & Commissioning

Advanced Technology

Industry Based Project

## Semester 5

Lifts & Escalators – Modernisation

Training and Coaching

Industry Based Project

## Semester 6

Industry Based Project



Group Discussion Form		
Group or course	Professional Diploma Master in Lift and Escalator Engineering Programme	Date
Name of Module	Lift and Escalator Maintenance	Time (minutes)
Discussion 1		
Describe the operational features of different types of buildings?		
Questions: (The teachers should require to make the questions in which students should be provided to feedback)		
1. Residential		
2. Commercial		
3. Shopping Mall		
4. Industrial		
Group number:	Name of the student:	
Feedback for each question:		

高科院  
Thei

## LEGAL AND CONTEMPORARY ISSUES IN THE INDUSTRY

PROFESSIONAL DIPLOMA MASTER IN LIFT AND ESCALATOR ENGINEERING  
LECTURE NOTES

### Module Aims

This module aims to develop students' skills and knowledge of the legal and contemporary issues in the operation and administration of lift and escalator industry. Students will learn the structure of the Hong Kong Law and Legal System, as well as the specifics of the legislation and regulations that affect the operation and administration of lift and escalator works. Key to this will also be development of students' skills in interpreting the applicability of legislation to their daily work and operations and building their ability to communicate and develop this knowledge in others.

### Module Learning Outcomes

On completion of this Module, students are expected to be able to:

1. apply broad knowledge of the Hong Kong Legal System to inform future action;
2. interpret and communicate ordinances and regulations applicable to the industry;
3. apply specialised knowledge of ordinances and regulations as applicable to self and other staff in daily operations, seeking guidance of others where appropriate; and
4. demonstrate professional ethics and conduct that arise as a part of daily operations.

**Thank you!**