

The Hong Kong Institution of Engineers

Route to Professional CAI Engineers for Lift and Escalator Practitioners

for Lift and Escalator Practitioners

The HKIE - Qualifying Body

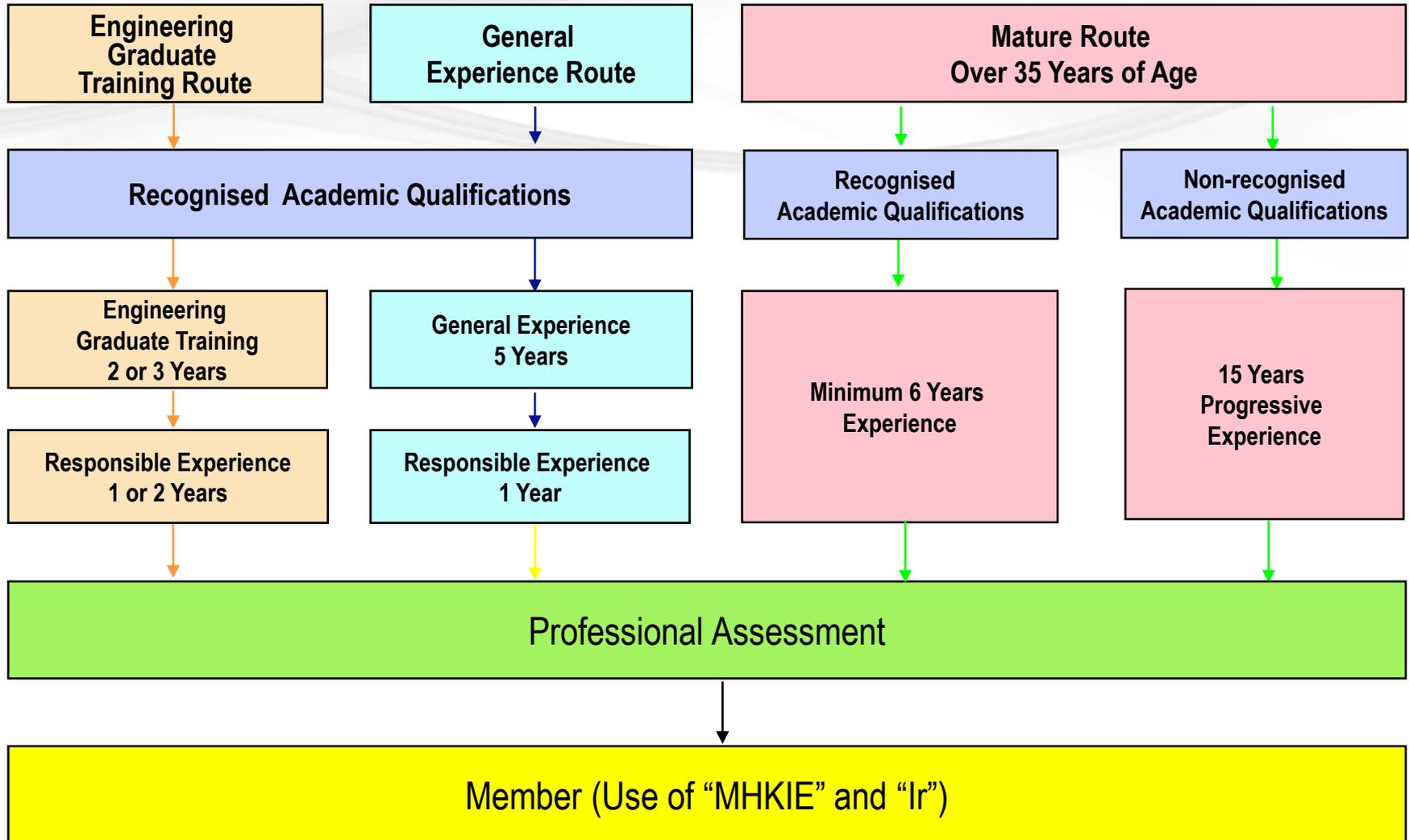
Professional Quality

Set standards for the Education, Training and Professional Assessment of Engineers

21 Engineering Disciplines

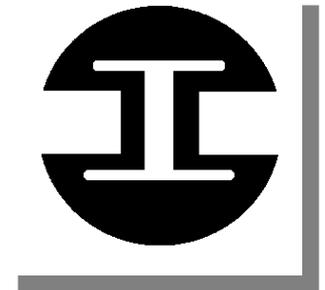
- Aircraft
- Biomedical
- Building
- Building Services
- Chemical
- Civil
- **Control, Automation & Instrumentation**
- Electrical
- Electronics
- Energy
- Environmental
- Fire
- Gas
- Geotechnical
- Information
- Logistics & Transportation
- Manufacturing & Industrial
- Marine & Naval Architecture
- Materials
- Mechanical
- Structural

Routes to Corporate Membership



Engineering Registration Board

- Established by law to maintain Register of Professional Engineers
- Administered by The Hong Kong Institution of Engineers
- 21 Disciplines
- Assists public and government to identify qualified and competent engineers for the discharge of duties laid down by law
- Qualifications for Registration:
 - * Member of the HKIE in a discipline or other professional qualifications recognised by the Board
 - * One year relevant post-qualification professional experience in Hong Kong
 - * Ordinarily resident in Hong Kong



Guidance Notes for Lift and Escalator Engineers

<i>HKIE Competence Requirements</i>	<i>Relevant Lift and Escalator Engineering Experiences</i>
Applying CAI Engineering Knowledge (C1, C2, C11)	
<p>C1. Comprehend and apply knowledge of accepted principles underpinning widely applied good practice for professional engineering;</p>	<p>Apply professional knowledge and skills in CAI engineering to design, implement, operate and maintain, investigate incidents and provide professional advice on CAI equipment for lift and/or escalator systems to analyse the integrity of system concerned, and CAI system of operation and safety device.</p>
<p>C2. Comprehend and apply knowledge of accepted principles underpinning good practice for professional engineering that is specific to Hong Kong; and</p>	<p>Understand and familiar with statutory requirements of Lifts and Escalators Ordinance (Cap. 618), relevant local code of practice, regulations and related ordinance; and</p> <p>Apply professional knowledge and skills in CAI engineering, in accordance with Cap. 618, to design, implement, operate and maintain, investigate incidents and provide professional advice on CAI equipment for lift and/or escalator systems.</p>
<p>C11. Maintain the currency of his or her professional engineering knowledge and skills.</p>	<p>Organise and attend related CPD activities.</p>

Guidance Notes for Lift and Escalator Engineers

Developing Technical Solutions (C3 and C4)	
C3. Define, investigate and analyse complex engineering problems in accordance with good practice for professional engineering; and	Plan and supervise the development, manufacture, construction, installation, operation, maintenance and repair of the lift and/or escalator systems; and Investigate infrequently encountered complex engineering problems without precedent reference of solutions and be responsible to resolve the problems with originality in analysis.
C4. Design or develop solutions to complex engineering problems in accordance with good practice for professional engineering.	Design and develop new installations and/or modernise the lift and/or escalator systems including the CAI system to meet the defined requirements and objectives.

Guidance Notes for Lift and Escalator Engineers

Managing Engineering Work (C5, C6, C7 and C12)	
C5. Be responsible for making decisions on part or all of one or more complex engineering activities;	Be responsible for the management of installation and/or maintenance of the lift and/or escalator systems; and Manage the use of diverse resources including people, money, equipment, materials and technologies; and Participate the resolution of critical problems arising from interactions between wide-ranging technical, engineering and other issues.
C6. Manage part or all of one or more complex engineering activities in accordance with good engineering management practice;	Supervise the installation of the lift and/or escalator systems and inspect the quality of the work and to deal with any problems that arise; and Carry out extraordinary and emergency maintenance work on lifts and/or escalators when a breakdown, fault or other CAI issues encountered.
C7. Identify, assess and manage engineering risk; and	Conduct risk assessment and manage the risks associated with the installation, repair, maintenance and overhaul of the lift and/or escalator systems.
C12. Exercise sound professional engineering judgement.	Be responsible for engineering activities requiring judgement in technical, manpower, financial, safety, environment aspects.

Guidance Notes for Lift and Escalator Engineers

Upkeeping Professional Acumen (C8, C9 and C10)	
C8. Conduct engineering activities to an ethical standard prescribed by the HKIE;	Understand and familiar with HKIE ethical standard and show how to apply them in projects.
C9. Recognise the reasonably foreseeable social, cultural, health, safety, sustainability and environmental effects of professional engineering activities generally;	Respond to emergency breakdowns and ensure health and safety regulations are met and produce risk assessment reports and legal and insurance documents.
C10. Communicate clearly with other engineers and others that he or she is likely to deal with in the course of his or her professional engineering activities.	Demonstrate the effective communication skills with workers, engineers, stakeholders and public related to design, implementation, operation and maintenance, incidents investigation and providing professional advice on mechanical, electrical and control equipment for lift and/or escalator systems.

Thank you