

Admission Requirements for the Information Discipline

(Candidates must read this leaflet in conjunction with M3 Routes to Membership)

Candidates applying for the class of Member in the Information Discipline of the HKIE are required to satisfy the following:

1. Academic Requirement

The academic requirement for Member in the Information Discipline is:

- (i) a first degree (Honours) accredited by the Institution; or
- (ii) an accredited first degree as listed in the Washington Accord or Seoul Accord and maintained by the Institution; or
- (iii) other acceptable qualifications, such as passes in the Engineering Council (UK) Part II Examination. i.e. Part II (A), (B) and (C) up to and including year 2001.

Other Honours degree level qualifications in engineering or technology or combinations of academic qualifications may be considered for the class of Member based on an individual assessment. Candidates are required to complete Form 1/AQ. Please refer to section 2 of “M3 Routes to Membership” for details.

2. Training/Experience Requirement

Scope of Experience

The realm of experience in Information Engineering encompasses Software and Systems Engineering, and a huge variety of knowledge and practical skills which includes, inter alia,

1	Computer System and Architecture, Operating Systems	Computer hardware components and the operating systems that manage them, and their design for optimal performance and resource allocation
2	Computations and Information Theory	Process of using algorithms and logical operations to solve problems or perform tasks involves input, processing, and output, forming the foundation of computer science and digital problem-solving.
3	Data Engineering and Data Management	Practice of architecting, developing, and sustaining data systems that ingest, store, and process large-scale information, with an emphasis on building pipelines, ensuring scalability, and guaranteeing data reliability and accessibility for analytical use.
4	Networking and Communications	Processes, systems, and technologies that enable the exchange of information between individuals, devices, or organizations. It involves building connections (networks), establishing protocols for interaction, and ensuring reliable, secure, and efficient data transfer.

5	Software & System Engineering	Engineering principles and methodologies, supported by structured project management and implementation cycles, to develop software systems that are reliable, maintainable, and scalable while meeting user requirements
6	Artificial Intelligence	Development of intelligent systems leveraging machine learning to support prediction, automation, pattern recognition, and content creation across varied domains, while critically examining inherent limitations and ethical implications.
7	Cloud Computing and Information Systems	Provisions of engineering, deployment and operation of on-prem or on-demand cloud IT resources over the intranet/internet to support organizational operations and decision-making.
8	Information security and Cybersecurity	Protection of information, data and systems ensuring confidentiality, integrity, and availability through cryptography, risk management, and threat response.

Routes of Gaining Experience

(i) Formal Training Route

Applicants, having completed the formal training (Scheme “A” Training) and acquired adequate responsible experience to manage engineering activities and can demonstrate their experience compliance with the HKIE Competence Standards, should be allowed to sit for Professional Assessment. In general, it would take no less than three years after graduation to satisfy these.

(ii) General Experience Route

Candidates who have not undertaken pre-approved training will be required to have had a minimum of six years’ relevant work experience in Information Engineering.

Candidates who satisfy the above requirements will be accepted for Professional Assessment.

3. Professional Assessment (Please refer to Section 5 of M3 Routes to Membership for details)

All candidates are expected to deliver the following documentation together with their applications:

- (i) Training & Experience Report
- (ii) Work Drawings, Programs and Documents
- (iii) Logbook (for Scheme “A” trainees only)
- (iv) Continuing Professional Development (CPD) Record

All documents should be the candidate’s own work and documents **must be verified** by a Corporate Member of the Institution or the employer.

All documents submitted will be treated as confidential and will be returned to the candidate after assessment. Candidates should however retain copies of all documents submitted as the Institution does not accept responsibility for any documents lost or damaged.