

## **Admission Requirements for the Manufacturing, Industrial & Systems Discipline**

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

Candidates applying for the class of Member in the Manufacturing, Industrial & Systems (MIS) Discipline (formerly known as “Manufacturing and Industrial (MIE) Discipline”) of the HKIE are required to satisfy the following:

### **1. Academic Requirements**

One of the following academic requirements for Member in MIS Discipline:

- (i) A first engineering degree (Honours) accredited by the Institution relevant to MIS Discipline
- (ii) An accredited first engineering degree as listed in the Washington Accord relevant to MIS Discipline and maintained by the Institution
- (iii) Other acceptable qualifications, such as passes in relevant subjects of Engineering Council (UK) part II Examinations up to and including year 2001 or passes in relevant subjects in the Engineering Council Postgraduate Diploma in and after year 2002 up to and including 2012
- (iv) Other non-recognised Honours engineering degree level qualifications may be considered for the class of Member based on an individual assessment. Candidates are required to complete Form I/AQ. Please refer to Section 2 of “M3 Routes to Membership” for details

### **2. Training/Experience Requirements**

#### **Scope of Experience**

The scope of experience shall include the knowledge and application of the science/technology and practice of Manufacturing, Industrial & Systems Engineering. The scope of experience and responsibility will include, but is not necessary limited to the following fields:

- Production/Manufacturing processes
- Service planning/operation, project management
- Material management, engineering economics
- Quality management/engineering, testing and certification
- Quantitative Method, system measurement/modeling and data analysis/analytic
- Management information system, e-technologies application
- Systems engineering/management, industrial engineering
- Logistics engineering/system, supply chain management
- Commercial and industrial management

- Process/System design, planning and control
- Logistics system/engineering/management, supply chain
- Asset and Maintenance Management

It is not reasonable to expect an applicant to be fully conversant in the entire scope of experience; one must however have broad experience and responsibility in one or more fields, as well as a good understanding of other related aspects.

### **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 a minimum of 6 years relevant work experience (including 1 year responsible experience) in Manufacturing, Industrial & Systems Engineering.

Details of the training and experience requirements are included in Section 3 of “M3 Routes to Membership”.

#### **(iii) Mature Route**

Candidates over 35 years old may apply via the mature route.

Candidates with recognised academic qualifications should have a minimum of 6 years relevant work experience in Manufacturing, Industrial & Systems Engineering.

Candidates with non-recognised academic qualifications should have 15 years progressive work experience in Manufacturing, Industrial & Systems Engineering. Details of the requirements are included in Section 6 of “M3 Routes to Membership”.

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

### **3. Professional Assessment**

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

- **Training and Experience Report**

Details are included in Section 5 of “M3 Routes to Membership”.

- **Work Drawing, Programs and Documents**

All candidates may submit relevant examples of recent work.

- **Logbook of Scheme ‘A’ (for Formal Training Route)**

Details are included in Section 4 of “M3 Routes to Membership”.

- **Paper (for Mature Route)**

Candidates should submit a relevant paper of approximately 5,000-10,000 words, based on a design study, a report of original work or previously published works of his own authorship.

- **Continuing Professional Development (CPD) Record**

Details are included in Section 4 of “M3 Routes to Membership”.

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 candidates after assessment. Candidates should however retain copies of all documents submitted as the Institution does not accept responsibility for any documents lost or damaged.

All candidates are required to take Professional Assessment (including an interview and essay writing<sup>1</sup>) in accordance with Section 5 of “M3 Routes to Membership”. Mature candidates may be required to write an essay at the discretion of the Assessors.

#### **4. Supplementary Requirements**

Graduates of the BSc (Hons) in Product Design and Analysis (43092) of the Mechanical Engineering Department of the Hong Kong Polytechnic University are required to top-up with the following courses offered by the Hong Kong Polytechnic University in meeting the academic requirements for Member in Manufacturing, Industrial & Systems Discipline:

- ISE441 Engineering Project Management
- ME4214 Design for Product Safety

---

<sup>1</sup> Please refer to Form 1/MD Instructions to Applicants Section 4 Scheme of Adopting Results of Language Tests in lieu of essay/technical write-up for HKIE Membership Admission