

Admission Requirements for the Biomedical Discipline

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

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

1. Academic Requirement

The academic requirement for Member in the Biomedical Discipline is:

- (i) a first degree (Honours) accredited by the Institution relevant to the Discipline; or
- (ii) an accredited first degree as listed in the Washington Accord relevant to the Discipline and maintained by the Institution; or
- (iii) other acceptable qualifications, such as passes in Engineering Council (UK) Part II Examinations including the “Engineer in Society”, i.e. Part II (A), (B) and (C) up to and including year 2001 and passes in the Engineering Council Postgraduate Diploma in and after year 2002 up to and including 2012.

Other Honours degree level qualifications in engineering or combinations of academic qualifications for “top-up” purposes 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

Biomedical Engineering is a discipline that advances knowledge in engineering, life science and medicine, and improves human health through cross-disciplinary activities that integrate the engineering sciences with the biomedical sciences and clinical practice. The realm of experience in Biomedical Engineering encompasses a huge variety of knowledge and practical skills which includes, inter alia,

- (i) **Bioengineering** – focuses on the underpinning knowledge base, for example, the study of the behavior of neurons and connective tissues with the aid of mathematical models and simulation;
- (ii) **Medical engineering** – focuses on the study, design and construction of instrumentation, prosthesis, and implants for the medical field;
- (iii) **Clinical (or hospital) engineering** – focuses on certification and quality assurance of medical equipment; and hospital engineering activities, such as design and project management of hospital installations, and consulting for the acquisition of medical equipment;
- (iv) **Rehabilitation engineering** – focuses on the development of systems for improving the quality of life of people with disability.

Routes of Gaining Experience

(i) Formal Training Route

2 years' training in Biomedical Engineering

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 Biomedical 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) Drawings and Documents
- (iii) Logbooks (if Scheme "A")
- (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.

All candidates are required to take a Professional Assessment including an interview and essay.