

Glossary of Further Learning Terms

Academic Assessment

Participants with an IEng accredited bachelor degree or a non-accredited bachelor degree will, on completion of their MSc, need to apply to one of the JBM member institutions for an assessment of their package of qualifications. A fee may be payable for this process.

Academic Route

Meeting the educational base requirements by taking an academic qualification such as an accredited MSc.

Accredited Degrees

Degree programmes formally assessed by the JBM as meeting or contributing towards the required academic standards for Incorporated and Chartered Engineer educational bases.

Assessor

Makes judgements on the participant's academic achievements based on the participant's evidence.

Assessor - Individual Case Committee/Individual Case Panel (ICC/ICP)

Makes judgements based on the participant's evidence and is a member of the Individual Case Committee/Panel (ICC/ICP) of one of the JBM member institutions. The ICC/ICP assesses applications from participants whose academic qualifications have not been accredited to confirm whether they meet the educational base for eventual registration as a Chartered or an Incorporated Engineer.

Assessment

To judge the participant's evidence to decide whether the necessary standards have been met. (Concise Oxford Dictionary definition: 'to estimate the quality of.')

CEng Level Accredited Bachelor Degree

A bachelor degree that has been accredited as contributing towards the educational base for a Chartered Engineer. Graduates with these degrees are required to complete a period of further learning to meet the educational base for CEng registration.

Cognate Degree

A cognate degree is a degree such as physics, mathematics, chemistry, and geology (etc.) where there is a strong science base but where an engineering application may be lacking.

Contact Time

Formal learning in a structured environment such as lectures, seminars, tutorials, laboratories, field trips and meetings.

Educational Base

The formal education qualifications needed to become an Incorporated or Chartered Engineer or Engineering Technician.

Employer-Managed Programme

A JBM-approved scheme which requires the participant, with the help of a professional engineer in the organisation acting as a mentor, to plan, record and reflect on specific work experiences to demonstrate that the further learning achieved is at the required academic level.

External Verifier

Audits the process on behalf of the JBM and makes recommendations to the JBM about approval of the scheme.

Further Learning

The academic learning required to bridge the gap between the accredited qualification held by a participant and the educational base needed to register as an Incorporated or Chartered Engineer.

IEng Level Accredited Bachelor Degree

A degree that has been accredited by the JBM as fully satisfying the educational base requirements for registration as an Incorporated Engineer only (ie one that has not been accredited as contributing towards the educational base for a Chartered Engineer).

Internal Verifier

Audits the process on behalf of the employer.

Learning Outcomes

The specific skills or knowledge that a participant should be able to demonstrate after completing a period of training or education.

Learning Period

The estimated period of time during which the participant will complete specific learning activities.

Learning Plan

Each participant, with the help of colleagues and the approval of their supervising engineer, will produce a learning plan. This plan will set out the means through which the learning outcomes are to be achieved (courses, projects, etc); the timescale for their achievement; and the proposed evidence and arrangements for assessment. The learning plan may change and develop along the way. Depending on experiences, the plan may be developed in stages or phases of perhaps six or twelve months' duration and should be re-assessed periodically to identify any gaps and agree future learning priorities.

Learning Time

The complete time period and total effort involved for a participant to complete further learning including formal contact time, preparation for assessment and self-directed learning time.

Mentor

Gives guidance and support to the self-managed participant in the same capacity as a supervising engineer (SE) but is named differently to reflect the differences between the self-managed and employer-managed routes.

Pre-Qualifying Year

Before completing the MSc, students will complete an additional year of study that allows them to study appropriate modules, normally from an accredited undergraduate degree, to enable them to cope with the technical requirements of the full MSc in civil, structural or transport engineering

Prior Learning

The achievement of appropriate knowledge and skills through learning gained prior to the commencement of the work-based further learning programme.

Self-Managed Route

A structured programme of work-based further learning managed by the participant which is not part of an approved employer-managed work-based scheme.

Standard Route

A participant meets the educational base for CEng or IEng registration by holding an accredited degree, or a package of accredited qualifications (ie BEng (Hons) plus MSc; or HNC plus BSc). Such participants can follow the standard route to gain CEng or IEng registration (ie they are not required to apply for an academic assessment). For information on experience requirements (IPD) or professional review requirements, participants should refer to the websites of the JBM member institutions.

Supervising Engineer

A supervising engineer is a Chartered (or Incorporated) engineer who manages the employer-managed further learning programme and provides support and guidance to the participant.

Technical or Non-Technical Badged MSc Programme

A technically-focused MSc typically includes 50% technical modules, plus a dissertation of a technical nature, and is recommended for completion by holders of an IEng accredited bachelor degree. Holders of a CEng level accredited bachelor degree can take either a technical or non-technical MSc programme.

IEng graduates must apply to a JBM member institution for assessment of their package of qualifications.

Technical Report Route

This route allows participants to use their work experience to compensate for a lack of formal academic qualifications at the appropriate level. This route is operated separately by the four JBM member Institutions.

Verification

Ensuring that the assessment process has been properly carried out. (Concise Oxford Dictionary definition: 'to establish the truth of'.)

Work-Based Further Learning Route (WBFL)

A structured way to use learning acquired through work experience to meet the educational base requirements for Chartered or Incorporated Engineer.

ABBREVIATIONS

AHEP: Accreditation of Higher Education Programmes. EngC publication referred to in the guidance note for Employer-Managed Guidelines.

APL: Approved Prior Learning which is taken into account towards completion of further learning. Both certificated learning and experiential learning can be recognised (the latter needs assessment).

CEng: Chartered Engineer (registration with the Engineering Council).

CIHT: Chartered Institution of Highways and Transportation.

EC: Engineering Council; an organisation set up by Royal Charter to regulate the engineering profession in the UK.

FLP: Further Learning Programme.

HND/HNC/FD: Higher National Certificate/Higher National Diploma/Foundation Degree.

IEng: Incorporated Engineer (registration with the Engineering Council).

ICC/ICP: Individual Case Committee/Individual Case Panel.

ICE: Institution of Civil Engineers.

IHE: Institute of Highway Engineers.

IPD: Initial Professional Development.

IStructE: Institution of Structural Engineers.

JBM: Joint Board of Moderators, comprising the ICE, IStructE, CIHT and IHE.

QAA: Quality Assurance Agency for Higher Education.

SE: Supervising Engineer who is a Chartered (or Incorporated) Engineer and manages the employer-managed further learning programme and provides support and guidance to the participant.

SMEs: Small and medium-sized enterprises.

UK-SPEC: UK Standard for Professional Competence. The standard for recognition of professional engineers and professional engineering technicians in the UK which is published by the EC on behalf of the engineering profession.