APPROVAL OF QUALIFICATIONS AND APPRENTICESHIPS HANDBOOK

UK Standard for Professional Engineering Competence

First edition

www.engc.org.uk

Engineering Council

Contents

Approval of Qualifications and Apprenticeships Handbook

Introduction

The Engineering Council believes that all those participating in engineering education and training deserve provision that is world-class and that helps them to develop industry-relevant skills and behaviours. Such skills and behaviours are defined in the Engineering Council's standards of competence and commitment that individuals must demonstrate in order to achieve professional registration, and which are set out in two key documents:

- The UK Standard for Professional Engineering Competence (UK-SPEC)
- The Information and Communications Technology Technician (ICT*Tech*) Standard

Qualifications and apprenticeships that meet the high standards set by the Engineering Council may be 'approved'. This handbook relates to the approval of qualifications and apprenticeships for the purposes of professional registration as an Engineering Technician (EngTech) or ICT Technician (ICT*Tech*). In the development of higher apprenticeships (Level 4 and above) the information provided in this document will be relevant to those seeking approval of such apprenticeships. You may wish to refer to the policy statement on higher apprenticeships in Annex A. Information about IEng or CEng registration, the relevant learning outcomes, exemplifying academic qualifications and standards of competence is available separately.

Professional registration is based on demonstration of competence and commitment. The threshold levels of competence and commitment are set out in the Engineering Council's standards documents. These documents also include examples of activities that could demonstrate achievement of the requirements. This enables individuals and their employers to find out whether they or their staff can meet the registration requirements. Further details and links to the standards are set out later in this handbook.

This handbook is aimed at professional engineering institutions that are licensed by the Engineering Council to approve qualifications and apprenticeships, Awarding Organisations and organisations that are responsible for the development of qualifications and apprenticeships. It sets out the learning outcomes that must be met, the requirements for approval and the evidence that professional engineering institutions should seek in order to confer approved status. To assist you it includes mapping tools and a glossary.

Approval

What is approval?

The approval process is essentially one of peer review. It is applied to qualifications and apprenticeships, and to other integrated training programmes.

The Engineering Council's Registration Code of Practice (Registration Code) paragraphs 32 – 37 sets out the requirements that licensed professional engineering institutions must adhere to in the approval process.

According to the Registration Code, 'approval' attests to overall design, the depth and range of coverage, and the validity and reliability of the assessment. It does not necessarily assure that every

candidate completing it has the required underpinning knowledge and understanding, unless the approval process included confirmation that the educational requirement for registration had been met. Unlike the accreditation of HE degree programmes, approval does not require a visit to a provider.

Why approve?

Approval by professional engineering institutions that are licensed to do so is a mark of assurance that the provision meets the standards set by the UK engineering profession.

It provides clear and transparent evidence to government, funders and others of real engagement with the engineering profession.

The approval process provides a structured mechanism by which professional engineering institutions assess, evaluate and improve the quality of provision through an independent peer review process, and offers professional engineering institutions the opportunity for continuing dialogue between providers and the profession.

What does approval mean to an individual?

Individuals successfully completing an approved qualification or apprenticeship that is listed on the Engineering Council's public database will find the process for registration more straightforward. Often this is referred to as 'standard route' professional registration.

To become registered as an Engineering Technician (EngTech) or ICT Technician (ICT*Tech*), an individual must be a member of a professional engineering institution. Their competence and commitment is assessed by the professional engineering institution. Further details are available on the Engineering Council website.

What sort of qualifications or apprenticeships can be approved?

The engineering profession's emphasis on outcomes rather than inputs enables the development of a variety of diverse and innovative provision, without losing sight of the required skills, knowledge and understanding that tomorrow's engineers and technicians will need.

In the UK, these qualifications may focus on:

- education i.e. the underpinning knowledge and understanding
- the development of competence
- or both of these.

The professional engineering institutions may consider for approval nationally available apprenticeships and qualifications, as well as private provision, such as that operated through a company training programme.

Approved apprenticeships include knowledge, understanding and the development of competence and a range of behaviours. Apprenticeships may or may not include formal qualifications. Regardless of which of these types it is, the approved provision must contribute to the development of an individual to undertake typical EngTech or ICT*Tech* roles. Descriptions of what these roles entail are here:

- EngTech
- ICT*Tech*

A qualification or apprenticeship that demonstrates the knowledge, understanding and skills to meet or partly meet the requirement for registration in a particular category, is known as an exemplifying qualification or apprenticeship.

Qualifications and apprenticeships that exemplify the required knowledge and understanding for EngTech and for ICT*Tech* are on the Engineering Council's public database.

An explanation of the different types of qualifications and apprenticeships is available in Annex D.

Underpinning knowledge and understanding

The threshold level at which the Engineering Council requires outputs to be delivered at or above, are:

- Level 3 of the Regulated Qualifications Framework (RQF) in England and Northern Ireland or,
- Level 6 of the Scottish Credit and Qualifications Framework (SCQF) or,
- Level 3 of the Credit and Qualifications Framework for Wales (CQFW).

Advice and guidance on how one regulated qualification level compares with another can be found at: www.gov.uk/what-different-qualification-levels-mean

The output standards are set out later in this handbook.

What does approval involve?

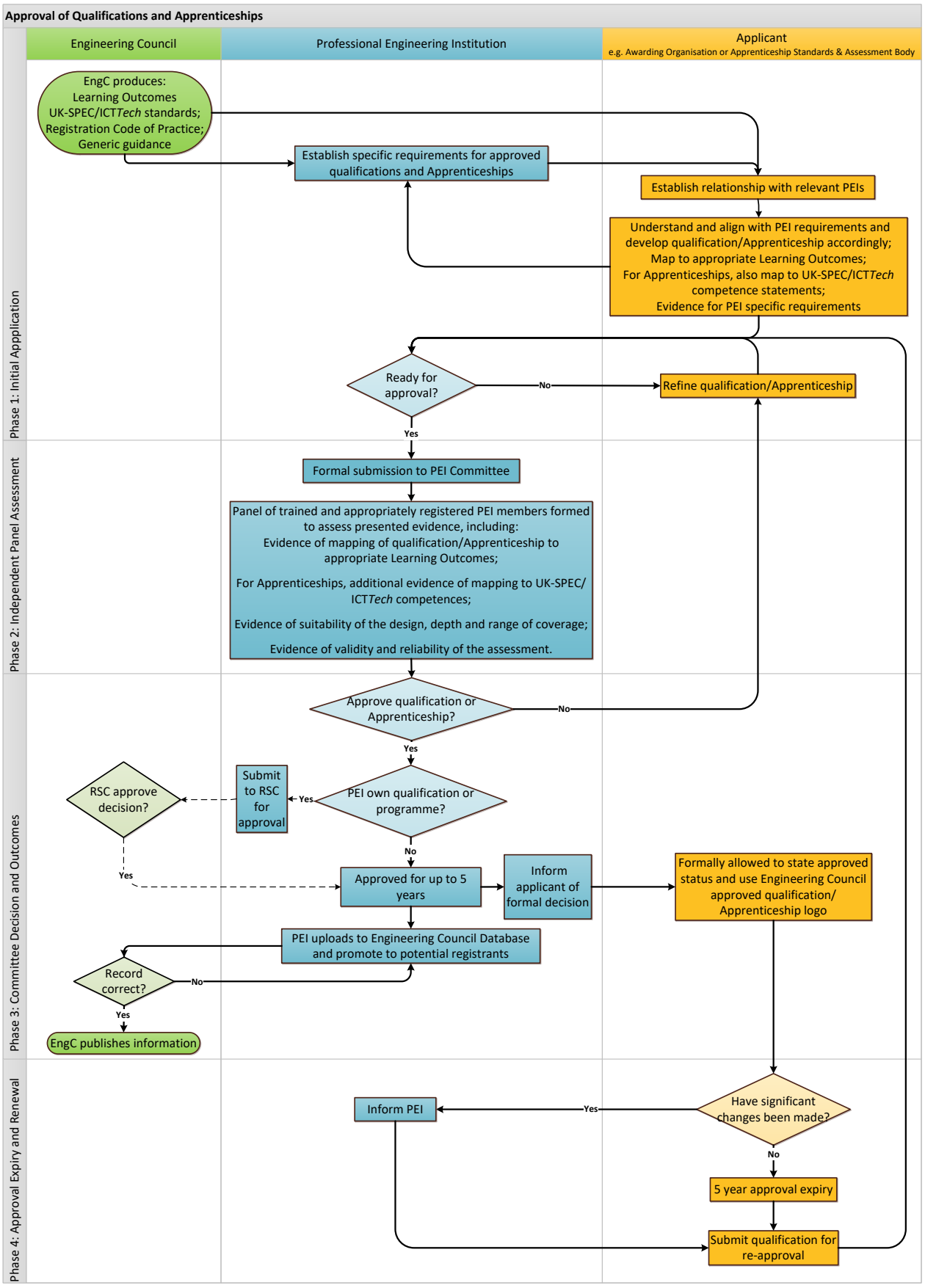
The approval process is essentially one of peer review. Each professional engineering institution undertakes approval within the Engineering Council's requirements, interpreting these for its own sector. Each must publish details of its own criteria and procedures for the approval process and ensure that:

- the provision under consideration meets or exceeds the learning outcomes threshold standard set by the Engineering Council
- the provision under consideration meets or exceeds the threshold level in the UK's frameworks for qualifications and credit, or if it lies outside these frameworks, is demonstrably at a comparable level
- there are clearly defined outcomes
- the technical content is appropriate, which is demonstrated by mapping to the Engineering Council's output standards for technician qualifications and apprenticeships, the professional engineering institutions' own competence and commitment statements, or both as appropriate
- the quality assurance arrangements are satisfactory.

The Engineering Council recognises that at EngTech and ICT*Tech* level, the underpinning knowledge and understanding required can be satisfied by nationally specified qualifications or apprenticeships in engineering and technology disciplines at the levels outlined above. These are subject to other independent external validation; therefore the range of evidence considered is narrower in scope than that required for accreditation of an HE programme, and a visit by a professional engineering institution is not required. This fits with the professions' stated aim of minimising the bureaucratic burden of approval and making use of data or evidence provided for other purposes.

Process for the approval of qualifications and apprenticeships

Please note that this is a high-level diagram and that professional engineering institutions should be contacted for more detailed specifics of their processes.



What evidence should be sought?

A submission for the approval of a qualification or an apprenticeship will include:

- Name, and where available, unique identifier for the qualification or apprenticeship standard
- The level it is placed on the appropriate qualifications framework (if not on a framework, the professional engineering institution must determine the level)
- The learning outcomes of the qualification or apprenticeship standard
- Evidence to support appropriate technical depth and range of coverage
- Evidence of mapping to appropriate learning outcomes
- For Apprenticeships, evidence of mapping to appropriate UK-SPEC and/or ICT*Tech* output standards
- The assessment employed
- Quality assurance arrangements, such as third party accreditation and regulation.

Ways of securing the evidence are summarised in Annex B.

Mapping tools are provided are provided in Annex C to support evidencing of submissions.

The professional engineering institution may request an initial brief submission covering basic details that it will use to determine if the provision being put forward is likely to meet its requirements for approval. Once satisfied of this, the professional engineering institution will appoint an assessor panel.

In the development of apprenticeships leading to Technician registration, professional engineering institutions should request that both the learning outcomes plus UK-SPEC and/or ICT*Tech* Standard requirements are met.

What happens once approval is granted?

All such approved qualifications and apprenticeships must be entered on to the Engineering Council's public searchable database of approved qualifications and apprenticeships by the professional engineering institution.

Providers of these qualifications and apprenticeships are eligible to use the Engineering Council's approved qualifications and apprenticeship logos with the associated statement. English and Welsh versions are available.

Where the professional engineering institution is itself the awarding organisation an application for approval must first be submitted to the Engineering Council's Registration Standards Committee, with supporting evidence as to why it should be approved.

Approval is for a fixed period of not more than five years, with re-approval to the required standards.

International recognition

The UK engineering profession participates in several major international accords, within and outside Europe, which establish the 'tradeability' of engineering and technology qualifications and educational programmes. Through these international accords, approval is an accepted and rigorous process, and

the system applied in the UK is fundamental to the acceptance of UK qualifications and educational programmes internationally.
With increasing globalisation, such accords and frameworks are assuming growing importance with employers as a means by which they can be confident in the education, competence and professionalism of the engineers and technicians involved.

In May 2002, the Engineering Council signed the Dublin Accord, an agreement for the international recognition of the educational base for Engineering Technicians (EngTech).

As such, the EngTech approved qualifications and apprenticeships listed on the Engineering Council Technician database are mutually recognised by a number of other countries, including: Republic of Ireland, South Africa, Canada, Australia, Korea, New Zealand, South Africa, and the United States of America.

For information and comparison, a table is presented in Annex E to support the mapping of EngTech Learning Outcomes and competence statements to the Dublin Accord requirements.

Output Standards for approved qualifications and apprenticeships

Interpretation

Within this handbook, the following terms are used with the meanings stated:

- **Understanding** is the capacity to use concepts creatively, for example, in problem solving, design, explanations and diagnosis
- **Knowledge** is information that can be recalled
- **Know-how** is the ability to apply learned knowledge and skills to perform operations intuitively, efficiently and correctly
- **Skills** are acquired and learned attributes that can be applied almost automatically
- **Awareness** is general familiarity, albeit bounded by the needs of the specific discipline

Underpinning knowledge and understanding requirements

For qualifications and apprenticeships, the six key areas of learning are as follows:

A Science and mathematics	
Engineering is underpinned by science and mathematics, and other associated disciplines, as defined by the relevant professional engineering institution(s). Technicians will need:	
LO A1	A descriptive, formula-based knowledge and understanding of the scientific principles underpinning relevant current technologies
LO A2	Knowledge and understanding of relevant mathematics, including numerical and data analysis, that is necessary to support the application of technical and practical skills
B Engineering analysis	
Engineering analysis involves the application of engineering concepts and tools to the solution of engineering or ICT problems. Technicians will need:	
LO B1	To understand the limitations of standard tests and measurements relevant to their field of activity
LO B2	Know-how to use the results of engineering analysis for the purpose of developing solutions to well-defined engineering or ICT problems
LO B3	To apply appropriate solutions to well-defined engineering or ICT problems using methods specific to their field of activity
C Design	
Design at this level involves the awareness of an economically viable product, process or system to meet a defined need. Technicians will need:	
LO C1	Awareness of business, customer, and user needs
LO C2	Awareness of constraints on the design process including environmental and sustainability limitations; ethical, health, safety, security and risk issues; intellectual property; codes of practice and standards
LO C3	Knowledge that supports design for the purpose of developing solutions to well-defined engineering or ICT problems
LO C4	Know-how to contribute to the design and/or the design process

LO C5	Know-how to communicate their work to technical and non-technical audiences
D Economic, legal, social, ethical and environmental context	
Engineering or ICT activity can have impacts on the environment, on commerce, on society and on individuals. Technicians therefore need the skills to manage their activities and to be aware of the various legal and ethical constraints under which they are expected to operate, including:	
LO D1	Understanding the need for a high level of professional and ethical conduct in engineering or ICT and a knowledge of professional codes of conduct
LO D2	Knowledge of the commercial, economic and social context of the engineering or ICT processes
LO D3	Understanding the requirement for engineering or ICT activities to promote sustainable development
LO D4	Awareness of relevant legal requirements governing engineering or ICT activities, including personnel, health & safety, contracts, intellectual property rights, product safety and liability issues
LO D5	Awareness of risk issues, including health & safety and environmental risk
E Engineering practice	
This is the practical application of engineering or ICT knowledge and skills. This can include:	
LO E1	Know-how to use relevant materials, equipment, tools, processes, or products
LO E2	Knowledge of procedures and practices for industry standard operations and processes
LO E3	Know-how to use and apply information from technical literature
LO E4	Know-how to use appropriate codes of practice and industry standards
LO E5	Awareness of quality issues and the potential for continuous improvement
LO E6	Awareness of team roles and the ability to work as a member of an engineering or ICT team
F Additional general skills	
Technicians must have developed transferable skills, additional to those set out in the other learning outcomes, and that will be of value in a wide range of situations, including the ability to:	
LO F1	Apply their skills in problem solving, communication, information retrieval, working with others and the effective use of general IT facilities
LO F2	Plan self-learning and improve performance, as the foundation for lifelong learning/CPD
LO F3	Plan and carry out a personal programme of work
LO F4	Exercise personal responsibility, as an individual or as a team member

Glossary

Apprenticeship Standard or Framework	An apprenticeship standard or framework is a definition of requirements for an apprenticeship programme. It is used by training providers, colleges, and employers to ensure that all apprenticeship programmes are delivered consistently and to agreed standards. Each standard or framework includes details of the knowledge, skills and competence needed to be demonstrated by the end of the apprenticeship, and may include formal qualifications, behaviours, key skills, and any other requirements of the apprenticeship. Each standard or framework may also include information on job roles, entry routes, length of the apprenticeships and career paths available upon completion.
Approval	A process of peer review of a technician programme against published learning outcomes. This involves a review of a qualification or an apprenticeship programme by a number of professionally registered engineers.
Awarding Organisation (AO)	Awarding Organisations develop and award qualifications to meet the needs of learners, employers and other stakeholders. In the UK, they are 'recognised' and regulated by Ofqual, Scottish Qualifications Authority (SQA) and Qualifications Wales. Awarding Organisations focus on: • Developing high quality qualifications that meet the needs of employers and learners • Approving centres and working with them to ensure high quality delivery of qualifications • Carrying out activity designed to assure the quality of the qualifications awarded • Developing products and services to support their centres and learners
Chartered Engineer (CEng)	One of the professional titles available to individuals who meet the required standard of competence and commitment. www.engc.org.uk/ceng
Competence	The ability to carry out a task to an effective standard. Its achievement requires the right level of knowledge, understanding and skill, as well as a professional attitude. It is part of the requirement (along with commitment) that must be demonstrated in order for an individual to be admitted to the Engineering Council's Register at the relevant level.
Continuing Professional Development (CPD)	The systematic acquisition of knowledge and skills, and the development of personal qualities, to maintain and enhance professional competence. All members of professional engineering institutions have an obligation to undertake CPD, and to support the learning of others. www.engc.org.uk/cpd
Credit and Qualifications Framework for Wales (CQFW)	Credit and Qualifications Framework for Wales (CQFW) covers learning from the very initial stages (Entry, 1, 2 & 3) to the most advanced (Level 8). It is managed by a strategic operational partnership comprising of the Welsh Government, Higher Education Funding Council for Wales (HEFCW) and Qualifications Wales.
Dublin Accord	The Dublin Accord is an agreement for the international recognition of Engineering Technician educational base. More information can be found at: www.ieagreements.org/Dublin
Engineering Council	The UK regulatory body for the engineering profession that sets and maintains internationally recognised standards of professional competence and ethics, and holds the UK register of professional engineers and technicians. www.engc.org.uk
Engineering Technician (EngTech)	One of the professional titles available to individuals who meet the required standard of competence and commitment. www.engc.org.uk/engtech
Exemplifying qualification	An educational or vocational qualification that demonstrates the knowledge, understanding and skills to meet or partly meet the requirement for registration in a particular category. Other qualifications may be permitted if they achieve (or exceed) the same level.
Further education (FE)	In the UK, this refers to education that is post-school and defined on the Regulated Qualifications Framework (RQF) as being at level 3 upwards in England and Northern Ireland, at level 3 upwards on the Credit and Qualifications Framework Wales (CQFW) or level 6 upwards on the Scottish Credit and Qualifications Framework (SCQF). It typically offers nationally available qualifications including: Vocational Qualifications (N/SVQs), Higher National Certificates (HNCs), and Higher National Diplomas (HNDs).
Guided Learning Hours (GLH)	The number of tutor-led contact hours required to support learner achievement of a unit/module or qualification. Guided learning hours (GLH) include: • Induction specific to the programme • One to one or group tutorials

	• Teaching sessions • Facilitated workshops • Assessment of learner achievements where the learner is present e.g. when assessing an individual in the workplace or assessing a skills activity in a classroom environment Guided learning hours (GLH) do not include: • Time spent by tutors preparing teaching sessions and learning materials • Time spent by tutors marking assessments where the learner is not present • Study undertaken by the learner in their own time Learner support that is not specific to the content of the programme e.g. study skills
Information and Communications Technology Technician (ICT*Tech*)	One of the professional titles available to individuals who meet the required standard of competence and commitment. www.engc.org.uk/icttech
Incorporated Engineer (IEng)	One of the professional titles available to individuals who meet the required standard of competence and commitment. www.engc.org.uk/ieng
International Engineering Alliance (IEA)	Partnership of international organisations and responsible for the governance of the international accords such as the Dublin, Sydney and Washington Accords.
Learning outcome	A statement of achievement expected of an individual from an approved qualification or apprenticeship.
Modern Apprenticeship (MA)	Modern apprenticeships, available in Scotland, are apprenticeship standards/frameworks which are approved by the Modern Apprenticeship Group (MAG). They set out the minimum requirements which must be included in any recognised Scottish apprenticeship framework. Frameworks and their criteria can be found at: www.skillsdevelopmentscotland.co.uk/our-services/modern-apprenticeships.
MAG	The Modern apprenticeship Group (MAG) is an independent group which draws its authority from the Scottish Government. The group is responsible for the approval and de-approval of all Scottish frameworks and encourages Sector Skills Councils (SSCs) to develop robust frameworks with high participation and completion rates, which can respond to the needs of their sector in changing economic circumstances and priorities.
NOS	National Occupational Standard(s)
Ofqual	The Office of Qualifications and Examinations Regulation (Ofqual) regulates qualifications, examinations and assessments in England and vocational qualifications in Northern Ireland. Ofqual maintain standards and confidence in qualifications: GCSEs and A levels in England, and vocational qualifications in both England and Northern Ireland. Ofqual is independent of government and report directly to Parliament and the Northern Ireland Assembly. www.gov.uk/government/organisations/ofqual
Ofsted	Ofsted is the Office for Standards in Education, Children's Services and Skills. Ofsted inspects and regulates services that care for children and young people, and services providing education and skills for learners of all ages.
Output standard	The overall standard that a programme which comprises of a level of qualification and a set of associated learning outcomes, must meet in order to secure approved status.
Professional Engineering Institution (PEI)	Membership organisation which is licensed by the Engineering Council to assess candidates for professional registration. Some institutions also have a licence to accredit degree programmes and/or company training schemes. For a list see: www.engc.org.uk/peis
PEI Own Qualification	This is a qualification developed by, and where the professional engineering institution is itself the awarding body.
Professional registration	The process whereby an individual is admitted to the Engineering Council's Register based on the individual demonstrating via a peer review process by a licensed professional engineering institution that he/she has met the profession's standards of commitment and competence.
Regulated Qualifications Framework (RQF)	The Regulated Qualifications Framework (formerly the Qualifications and Credit Framework) is a framework that applies to qualifications, diplomas, certificates and other academic awards granted by an education provider in England and vocational qualifications in Northern Ireland.
Royal Charter	A formal document issued by the monarch granting rights and powers to an individual or an organisation.

SASE/W	Specification of Apprenticeship Standards for England (SASE) or Wales (SASW). All frameworks can be found at www.afo.sscalliance.org/frameworkslibrary/
Scottish Credit and Qualifications Framework (SCQF)	Scottish Credit and Qualifications Framework: a framework that applies to qualifications and other academic awards in Scotland. For reference points see www.scqf.org.uk
Sydney Accord	Similar to the Dublin Accord, for Incorporated Engineers (in the UK) or Engineering Technologists. www.ieagreements.com/sydney
Threshold	The minimum standard that a qualification or apprenticeship must meet.
Total Qualification Time (TQT)	Total Qualification Time (TQT) is an indication of how long a typical learner might take to study a qualification, including the time spent on their individual study and on assessment. It includes Guided Learning Hours (GLH), which is the amount of time spent actually being taught or any other form of education or training.
UK-SPEC: the UK Standard for Professional Engineering Competence	The UK standard which sets out the competence and commitment requirements for registration with the Engineering Council as an Engineering Technician, Incorporated Engineer or Chartered Engineer. www.engc.org.uk/ukspec
Unique Identifier	All UK regulated qualifications possess a unique identifier (typically an alphanumeric code) by which they are identified on the Ofqual or SCQF register.

Annex A: Policy statement on higher apprenticeships

The Engineering Council will explicitly support formal recognition on its behalf by professional engineering institutions of higher apprenticeships or equivalent (eg graduate apprenticeships in Scotland) as providing some or all of the knowledge, understanding and competence required for EngTech, IEng or CEng registration. Details of the recognition model(s) and associated standards and regulations will be confirmed as part of the current Standards Review activity.

Degrees that sit within or make up a degree apprenticeship may be considered for accreditation at any time through current accreditation processes as set out in Accreditation of Higher Education Programmes and the Registration Code of Practice.

Annex B: Securing evidence during approval

Engineering Council Registration Code of Practice: Approval Requirements	**Suggested Evidence Requirements for Approval**
The knowledge, understanding and skills to underpin performance are an essential component of competence. The requirements for each registration category shall be exemplified by particular educational qualifications. Approval of a qualification or programme attests to: • its overall design, • the depth and range of coverage, and • the validity and reliability of the assessment. It does not necessarily assure that every candidate completing it has the required underpinning knowledge and understanding, unless the approval process included confirmation that the educational requirement for registration had been met. In approving a qualification or programme, Licensed Members shall ensure that: • it is at the appropriate level in the Regulated Qualifications Framework (formerly Qualifications and Credit Framework) or the Scottish Credit and Qualifications Framework, or if it lies outside these frameworks, is demonstrably at a comparable level; • it has clearly defined outcomes and is of an appropriate technical nature. This shall be demonstrated by mapping to the Engineering Council's output standards for technician qualifications and apprenticeships, Licensed Members' own competence and commitment statements, or both as appropriate; • it has satisfactory quality assurance arrangements.	**Overall design** □ Title of qualification or programme □ Purpose of the qualification or programme □ Qualification or programme learning outcomes **Depth and Range of Coverage** □ Size of the qualification or programme e.g. Total Qualification Time (TQT), Guided Learning Hours (GLH), number of units or credits, minimum duration □ Qualification or programme specifications and structure □ Syllabuses and module descriptors □ Project list and project handbook e.g. information on project □ Apprenticeship logbook **Validity of Assessment** □ Methods of assessment □ How student/apprentice work is assessed and moderated □ How students/apprentices work is examined, assessed and moderated □ Progression details □ Classification of Award/Programme e.g. Pass, Merit, Distinction **Reliability of Assessment** □ Ofqual/Ofsted Report □ Awarding Organisation Accreditation Method □ Apprenticeship Regulatory Compliance e.g. SASE/W, Trailblazer apprenticeship requirements □ External examiners'/verifiers' reports and related responses □ Internal Programme Review Reports
	Supporting Third Party Recognition Other supporting evidence may be available from the applicant organisation such as its own accreditation process for delivery. □ Ofsted Institutional Audit Review e.g. copy of the latest version and any provider responses □ Information related to assessment of providers and staff competence □ How samples of student/apprentice work are assessed and moderated □ How examination papers and module solutions are assessed and moderated □ Internal Programme Review Reports □ Facilities for students □ Future plans and intentions

Annex C: Mapping tools

The following tools will support you in developing your qualifications or apprenticeships to meet the required learning outcomes for technician registration.

For apprenticeships, you will also be requested to map your programme to the competence statements for technician registration as described in UK-SPEC or the ICT*Tech* standard.

Mapping tool for EngTech:

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Mapping tool for ICT*Tech*:

20150323_ICTTech
%20Learning%20Ou

Annex D: Apprenticeships and qualifications explained

Apprenticeships

Apprenticeships offer learners a way of gaining nationally recognised competence, typically through the successful award of qualifications, whilst working and earning a wage. Off the job training is normally provided through day release to a college or training provider, with the job specific skills being gained through working and training alongside experienced staff on a day-to-day basis.

Apprenticeships deliver a combination of knowledge, understanding and skills, usually through qualifications, including:

- knowledge and understanding through vocationally related qualifications or Technical Certificates (England, Wales and Northern Ireland only)
- work-based competence through an National/Scottish Vocational Qualifications (N/SVQs)

Many apprenticeships also deliver other skills such as Maths and English, communication, Information Technology, and personal learning and thinking skills, as well as employment rights and responsibilities.

In England, Trailblazer apprenticeship Standards were introduced from 2014, and are required to meet professional standards where available. As such, they offer a range knowledge, skills and behaviours, support a commitment to professional standards and ongoing professional development. More information can be found at: www.gov.uk/government/publications/future-of-apprenticeships-in-england-guidance-for-trailblazers

Qualifications

Qualifications have undergone a range of changes in recent years as the Government requirements for public funding have developed. More information on national frameworks can be found at: www.gov.uk/what-different-qualification-levels-mean and more information on regulated qualifications at: Ofqual (England and Northern Ireland), Scottish Qualifications Authority and Qualifications Wales.

In 2013, the Department for Education (DfE) introduced a range of changes in England, separating vocational qualifications into “Applied General” and “Tech Levels”, with the aim of simplifying the vocational qualification system. A descriptor of these qualifications and the criteria for public funding is now included. More information can be found at: www.gov.uk/government/publications/16-to-19-vocational-qualifications-technical-guidance

Applied General

These are rigorous advanced (level 3) qualifications that equip students with transferable knowledge and skills. They are for post-16 students wanting to continue their education through applied learning. They fulfil entry requirements for a range of higher education courses, either by meeting entry requirements in their own right or being accepted alongside and adding value to other qualifications at the same level.

Applied General qualifications must be at least 150 GLH, and be recognised by a number of Higher Education Institutions (HEIs).

Tech Levels

These are rigorous advanced (level 3) technical qualifications, on a par with A levels and recognised by employers. They are for post-16 students wishing to specialise in a specific industry, occupation or occupational group. They equip a student with specialist knowledge and skills, enabling entry to an apprenticeship or other employment, or progression to a related higher education course. In some cases, these qualifications provide a ‘licence to practise’ or exemption from professional exams. Tech Levels are one of three components of the new Technical Baccalaureate (TechBacc) performance table measure. Tech Levels must be at least 300 GLH and be recognised by 5 or more employers, a recognised professional or trade bodies, or a national licensed professional registration scheme.

Professional engineering institutions may also approve a range of other qualifications that are currently in delivery across the UK (or abroad). These include:

Vocationally Related Qualifications (VRQ)
VRQs are predominantly taught programmes delivered in a classroom or workshop setting. These qualifications are based on National Occupational Standards and provide the underpinning knowledge to help learners achieve a related NVQ. VRQs prepare learners for further learning and the workplace by offering the practical and academic knowledge and skills required in a particular job. Assessment often combines internal written or practical assignments with external written or onscreen tests.

Technical Certificates
Technical Certificates are VRQs or knowledge qualifications that are recognised within apprenticeship frameworks in England, Wales and Northern Ireland. They are closely linked to National Occupational Standards and give learners the underpinning knowledge and understanding that are required to complete an NVQ. Technical Certificates are not currently recognised in Scotland.

National Vocational Qualifications (NVQ)
NVQs are competence qualifications and are delivered through on-the-job training. NVQs are assessed through a learner's portfolio of evidence which proves their knowledge and ability to perform specific tasks, plus one-to-ones where an assessor watches the learner perform work-related tasks. NVQs are based directly on the National Occupational Standards defined by Sector Skills Councils and industry employers. Available in England, Wales and Northern Ireland as standalone qualifications, NVQs are also key components of apprenticeship frameworks Many competence qualifications accredited on the Regulated Qualifications Framework (RQF) include 'NVQ' in the title.

Scottish Vocational Qualifications (SVQ)
SVQs are competence qualifications which are recognised in Scotland. Like NVQs, they are also based directly on National Occupational Standards set by Sector Skills Councils and employers. SVQs are assessed through a learner's portfolio of work-based evidence. EAL's SVQs are currently being updated for the new Scottish Credit and Qualifications Framework (SCQF).

Other Types of Qualifications:
Key Skills: Key Skills qualifications remain available for apprentices in England to gain transferable skills in application of number, communication, and information and communication technology. Wider Key Skills are open to learners across England, Wales and Northern Ireland. These cover improving own learning and performance, problem solving, and working with others. The qualifications are assessed through a combination of multiple-choice exams and evidence gathered in a portfolio.
Functional Skills: Functional Skills qualifications cover the fundamental practical skills in English, Mathematics and Information and Communication Technology (ICT) for learners and apprentices in England. The qualifications focus on applying these skills in real life situations, and feature assessments with task based questions.
Essential Skills Wales: These qualifications show the ability to master the skills needed in education, training, work and life in general. The suite covers application of number, communication, and information and communication technology (ICT) for learners and apprentices in Wales. As these qualifications are a method of demonstrating competence, it is recommended that they are embedded in everyday workplace activities or other programmes of learning.
Basic Skills: Basic skills qualifications cover adult literacy and adult numeracy for learners involved in a wide range of programmes both in and out of the workplace. Their purpose is to improve confidence in these areas, giving learners the ability to progress in education, training and work as well as using these skills effectively in their personal lives.

Engineering Council
recognising professional excellence

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