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THE ACCREDITATION OF
HIGHER EDUCATION PROGRAMMES

UK Standard for Professional Engineering Competence

Fourth edition

Consultation draft May 2019

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1 **Contents** (to be drafted after consultation)

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1 Foreword

2 Engineering is concerned with the art and practice of changing the world we live in. Driven
3 by the needs of society and business, engineers strive to find solutions to complex
4 challenges. They work to achieve useful and beneficial outcomes that enhance the welfare,
5 health and safety of all whilst paying due regard to the environment.

6 Whilst the objective of engineering professionalism is the public good, students choose
7 engineering for a variety of reasons and a range of motivations. Whatever these might be, all
8 students deserve an engineering education that is world-class and that develops industry-
9 relevant skills. Accreditation of degree programmes helps to ensure that UK engineering
10 education meets these needs as well as drawing students towards a career in the
11 engineering profession. It demonstrates both nationally and internationally the high standard
12 of UK engineering education and provides a basis for educational establishments to review
13 their programmes and to develop excellence in delivery and content.

14 This accreditation handbook was first published by the Engineering Council in 2004 and
15 since then has been widely used by engineering education providers, individual academics
16 and professional engineering institutions. It has been welcomed for its clarity, brevity and
17 emphasis on learning outcomes rather than inputs, which have been developed in
18 consultation with the profession, including input from employers in industry and engineering
19 academics. It has enabled the development of diverse provision, without losing sight of the
20 required skills, knowledge and understanding that tomorrow's engineers will need.

21 The criteria and process of accreditation are regularly reviewed internationally. The
22 Engineering Council is a full member of the Sydney and Washington Accords, demonstrating
23 that its accreditation process is compatible with the standards of the International
24 Engineering Alliance (IEA) and that the learning outcomes meet or exceed the thresholds for
25 graduate attributes published by the IEA. Alignment has also been demonstrated with the
26 European Network for Accreditation of Engineering Education's EUR-ACE® framework,
27 resulting in the Engineering Council being authorised to award the EUR-ACE® label to
28 engineering programmes accredited for Chartered Engineer registration. Further details
29 about international recognition for accredited degrees can be found on pages 10 and 11.

30 This updated version of the accreditation handbook does not introduce any changes to the
31 required overall standard for the award of accredited status, though the learning outcomes
32 have been substantially revised and learning outcomes introduced for foundation degrees
33 and equivalent qualifications. Accreditation of doctoral programmes is now fully embedded
34 within the handbook which remains rooted in the UK Standard for Professional Engineering
35 Competence (UK-SPEC) and aligned with international standards, notably the Sydney and
36 Washington accords and the EUR-ACE® Framework Standards and Guidelines (EAFSG).
37 The updated handbook also refers to the Engineering Accreditation Board (EAB), the forum
38 for all the professional engineering institutions that hold a licence from the Engineering
39 Council to accredit degrees.

40 This accreditation handbook continues to be the framework within which professional
41 engineering institutions can establish the standard of degree programmes put forward for
42 accreditation, and demonstrate nationally and internationally just what it is that accredited
43 courses deliver.

1 Operating under a Royal Charter, the Engineering Council is charged with regulating the
2 engineering profession in the United Kingdom, setting the standard for the practice of
3 engineering, and maintaining the registers of professional engineers and technicians. The
4 Engineering Council is governed by a Board representing the Professional Engineering
5 Institutions in the UK, together with individuals drawn from industries and sectors with an
6 interest in regulation of the engineering profession. This internationally recognised UK
7 Standard is published by the Engineering Council on behalf of the UK engineering
8 profession. First published in 2004 as the Approval of Higher Education Programmes was
9 developed in collaboration with the profession and kept under review. It was most recently
10 reviewed in 2019.

11 **Getting and engineering degree programme accredited**

12 **Why seek accreditation?**

13 Accreditation of degree programmes by recognised professional and statutory bodies is a
14 mark of assurance that the programmes meet the standards set by a profession. In the UK,
15 the Engineering Council sets and maintains the standards for the engineering profession and
16 sets the overall requirements for accreditation. The Engineering Council licenses over 20
17 Professional Engineering Institutions (PEIs) to undertake accreditation within these
18 requirements – interpreting them as appropriate for their own sector of the profession – and
19 maintains a publicly available qualifications database which accredited degrees. Accrediting
20 PEIs use the accreditation process to assess whether specific educational programmes
21 provide some or all of the underpinning knowledge, understanding and skills for eventual
22 professional engineer registration in a particular category.

23 Accreditation is an accepted and rigorous process that commands respect both in the UK
24 and internationally. It helps students, their parents and advisers to choose degree
25 programmes of the standard recognised by the engineering profession. It confers advantage
26 to graduates from accredited programmes both when they are seeking employment and also
27 when, in due course, they seek professional registration as an Incorporated Engineer (IEng)
28 or a Chartered Engineer (CEng). As accreditation confirms that a degree develops
29 underpinning knowledge and understanding it can also be beneficial if graduates seek
30 interim registration whilst they develop the competence required for a professional title.
31 Some employers require graduation from an accredited programme as a minimum
32 qualification.

33 The accreditation process gives educational institutions a structured mechanism to assess,
34 evaluate and improve the quality of their programmes. Accreditation is a developmental
35 process. It offers the opportunity for a continuing dialogue between PEIs and educational
36 institutions, rather than placing all the emphasis on the periodic accreditation exercise. An
37 important development in 2006 was the adoption by the UK Quality Assurance Agency for
38 Higher Education (QAA) of the Engineering Council's standards for accredited engineering
39 degrees as the subject benchmark statement for engineering. This alignment was strongly
40 supported by the academic community and further strengthens the case for accreditation as
41 well as assisting in reducing the regulatory burden on the higher education sector.

42 **What does accreditation involve?**

43 The accreditation process is essentially one of peer review; it is applied to individual

1 programmes, not to the department or institution overall. An educational institution seeking
2 accreditation for an engineering or technology programme should contact the relevant PEI
3 listed at: <https://www.engc.org.uk/about-us/our-partners/> for advice on the procedure and the
4 requirements for their sector of the engineering profession. There may be a charge for the
5 process, especially for visits outside the UK, and further advice is available from the PEI.
6 There will inevitably be some costs to the higher education institution seeking accreditation,
7 mainly but not wholly in staff time.

8 Each PEI has its own published process for accreditation. Typically the educational
9 institution will make a submission in advance of a visit that includes the following information:

- 10 ● The learning outcomes of the programme(s)
- 11 ● The teaching and learning processes
- 12 ● The assessment strategies employed
- 13 ● The human, physical and material resources involved
- 14 ● Professional registration of its staff
- 15 ● Its internal regulations regarding progression and the award of degrees
- 16 ● Quality assurance arrangements
- 17 ● Evidence that the programme is at an appropriate level commensurate with The
18 Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies
- 19 ● Entry to the programme and how cohort entry extremes will be supported
- 20 ● How previous accreditation recommendations and requirements have been dealt
21 with.

22 The Engineering Council and the PEIs are committed to minimising the bureaucratic burden
23 of accreditation, for example by using data collected by the educational institution for other
24 purposes. Engineering programme accreditation compares very favourably with other
25 professions in this respect.

26 Some PEIs request a brief initial submission covering basic details that is used to determine
27 if the programme is likely to meet its requirements for accreditation. Once satisfied of this,
28 the professional engineering institution will appoint an accreditation panel and make
29 arrangements for the visit. Every effort will be made to align requirements with those that a
30 department would normally have to meet for internal management and quality assurance
31 purposes.

32 The panel will include academic and industrial members trained in the principles of
33 accreditation and conversant with its requirements. The visit typically takes place over two or
34 three days. The panel will expect to meet staff, students and industry representatives
35 involved in programme design and delivery. Where applicable, the industry representatives
36 may be members of the Industrial Advisory Board (or equivalent). During the visit, the panel
37 will expect to see laboratory and other teaching space and be provided with examples of
38 marked student work including major projects, along with marking schemes/assessment
39 criteria and written feedback to students. External examiner reports and the operation of
40 internal quality assurance systems will also be reviewed.

41 Accredited degree programmes should feature student engagement with relevant
42 scholarship, research and/or professional practice and an accreditation panel will expect to
43 see evidence of industry involvement in programme design and delivery.

1 Higher Education providers are encouraged to develop innovative degree programmes in
2 response to industry needs and the Engineering Council does not favour any particular
3 approach to teaching, learning or assessment. The key consideration is that a graduate from
4 an accredited degree programme must meet all of the prescribed learning outcomes.
5 Assessment should be designed to minimise opportunities for students to commit academic
6 misconduct, including plagiarism, self-plagiarism and contract cheating. Wherever possible,
7 a suitable variety of assessment methods should be used, to minimise the availability of
8 opportunities for students to incorporate plagiarised work by another author, or previous
9 work by the student, either within the level of study or across levels. Policies and procedures
10 relevant to academic integrity should be clear, accessible and actively promoted rather than
11 simply made available.

12 Departments delivering accredited degrees are encouraged to promote equality, diversity
13 and inclusion in line with applicable national regulatory frameworks and also embed inclusive
14 design within the curriculum. Sustainability of engineering practice is an issue of concern for
15 the profession and degree providers are encouraged to make use of the United Nations
16 Sustainable Development Goals in programme design and delivery:
17 <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

18 The PEI will normally expect to see the following evidence for each programme presented
19 for accreditation:

- 20 ● Programme specification or equivalent showing programme aims, learning outcomes
21 and curriculum structure
- 22 ● A mapping or explanation showing where and how each AHEP Learning Outcome is
23 assessed within the programme
- 24 ● For each unit/module that contributes to the achievement of AHEP Learning
25 Outcomes, the unit/module specification, examination papers and coursework
26 assessments with marking schemes/guides and samples of marked student work
27 covering the full range of student achievement*
- 28 ● Student project handbook(s) and a representative sample of major project reports,
29 along with the completed marking scheme/feedback sheet for each project*
- 30 ● Information about industry involvement in programme design and delivery
- 31 ● Information about student and staffing numbers, outline CVs for all staff who teach on
32 the programme to show highest academic qualification, teaching qualification and
33 professional registration (i.e. CEng, IEng or EngTech or equivalent)
- 34 ● Information about specialist practical facilities used by students on the programme
- 35 ● Information about library resources (print and digital) available to students on the
36 programme
- 37 ● The academic regulations for progression and award of the degree (to evidence
38 compliance with Engineering Council policy on Compensation and condonement -
39 see page 8)
- 40 ● Arrangements for student academic and pastoral support
- 41 ● Quantitative data showing student progression rates from entry through each
42 level/year of study to graduation
- 43 ● Information about the operation of quality assurance processes at programme level,
44 in particular arrangements for programme approval, annual monitoring and periodic
45 review

- 1 ● Information about student involvement in quality assurance and enhancement
- 2 processes
- 3 ● External examiner reports and responses from the department for the three most
- 4 recent years

5 *Important Note: An accreditation panel is only able to recommend that accreditation is
6 backdated to earlier entry years if a sample of final year work is reviewed for that particular
7 cohort. Education institutions should retain suitable samples of work for this purpose. All
8 samples of student work should be suitably anonymised.

9 **Location of study**

10 Professional engineering institutions must normally visit all campuses involved in delivery of
11 programmes they are invited to accredit, or only accredit for delivery in campuses visited. A
12 visit is usually required to enable the professional engineering institution to consider
13 evidence from a range of indicators, including those listed in paragraph tbc of the
14 [Registration Code of Practice](#). If a programme is delivered on multiple campuses (including
15 through franchise or partnership¹ arrangements) students will only be considered to have
16 completed an accredited programme if they have completed the programme at a campus²
17 for which accreditation is confirmed.

18 If a degree is delivered at multiple campuses the university must either agree with the
19 accrediting professional engineering institution(s) a means of clearly presenting the campus
20 of study/accreditation status of each degree awarded (this might be on degree certificates,
21 transcripts or university issued certificates of accreditation) or ensure that the degree is
22 accredited for delivery at every campus for the same intake dates.

23 Universities involved in delivering or awarding of franchised degrees, degrees delivered in
24 partnership or at multiple campuses must either secure accreditation of engineering
25 provision that is delivered through franchise or partnership arrangements and at all
26 campuses, or make it absolutely clear in any material referring to the programmes that such
27 programmes have not been accredited. Professional engineering institutions may refuse to
28 accredit programmes if they believe that universities are not being sufficiently clear about the
29 non-accredited status of franchised degree programmes and/or degrees delivered through
30 collaborative partnership(s) and/or at different campuses.

¹ Partnership in this context refers specifically to partnership arrangements pertaining to the delivery of an accredited degree.

² Completed at a campus means that the student registered at that campus and, with the exception of distance or work based learning students, they completed the majority of their studies including final assessments at that campus.

1 Compensation and condonement

2 Many UK universities' examination board rules include some allowance for compensation or
3 condonement³ of limited failure in one or more modules, where this is compensated by a
4 stronger performance across the programme as a whole. Paragraph tbc of the Registration
5 Code of Practice requires accrediting professional engineering institutions to consider the
6 higher education institution's regulations regarding progression. They may impose
7 constraints on an accreditation decision as a result of this.

8 The Engineering Council defines compensation as: "The practice of allowing marginal failure
9 (ie not more than 10% below the nominal pass mark) of one or more modules and awarding
10 credit for them, often on the basis of good overall academic performance."

11 The Engineering Council defines condonement as: "The practice of allowing students to fail
12 and not receive credit for one or more modules within a degree programme, yet still qualify
13 for the award of the degree."

14 In the consideration of the accreditation of undergraduate and postgraduate engineering
15 degree programmes:

- 16 1. Evidence that all AHEP learning outcomes are met by all variants of each
17 programme must be provided before accreditation can be granted.
- 18 2. No condonement of modules delivering AHEP learning outcomes is allowed.
- 19 3. A maximum of 15 ECTS credits in a Bachelors or integrated Masters degree
20 programme can be compensated, and a maximum of 10 ECTS credits in a Masters
21 degree other than the integrated Masters degree.
- 22 4. Major individual and group-based project modules must not be compensated.
- 23 5. The minimum module mark for which compensation is allowed is 10% below the
24 nominal module pass mark (or equivalent if a grade-based marking scheme is used).

25 The key consideration in the rules above is to ensure that graduates of accredited
26 engineering degree programmes have met all the programme learning outcomes specified in
27 this handbook.

28 Decision making

29 Programmes may be accredited as fully or partially meeting the educational requirement for
30 registration as either Incorporated Engineer (IEng) or Chartered Engineer (CEng). All
31 Honours degrees accredited since 1999 as partially meeting the educational requirement for
32 CEng also fully meet the educational requirement for IEng registration. Qualifying phrases
33 such as 'provisional accreditation' and 'partial accreditation' are not used.

34 Following accreditation, the educational institution must notify the PEI about any major
35 changes made to an accredited programme.

36 Users of this accreditation handbook are encouraged to refer to the Guidance Note on
37 Academic Accreditation available on the Engineering Council website page:

³ There are no consistent definitions of the terms 'compensation' and 'condonement' across UK universities, and they are often confused. The Engineering Council therefore adopts a similar definition to that used by QAA and HEA, and, for the avoidance of doubt, includes this definition in this statement.

1 www.engc.org.uk/ahep

2 **Learning outcomes**

3 The standards that must be met for an educational programme to be accredited are set out
4 in the following sections of this handbook and are derived from UK-SPEC.

5 UK-SPEC describes the competence and commitment requirements that have to be met for
6 professional registration; accredited programmes provide some or all of the educational
7 element for registration IEng or CEng registration.

8 The decision about whether or not to accredit a programme will be made on the basis of the
9 programme being at the right level and delivering the learning outcomes which the PEI has
10 specified. The learning outcomes are derived from the generic learning outcomes that apply
11 to all accredited engineering degree programmes, set out in this handbook. Innovative
12 provision can be accommodated within the framework of learning outcomes and examples
13 are here:

14 www.engc.org.uk/accreditation-of-innovative-provision

15 **How to apply**

16 An educational provider that believes it has a programme that would benefit from
17 accreditation by the Engineering Council should approach the relevant PEI holding a licence
18 to accredit. A summary of licenced professional engineering institutions is at:

19 www.engc.org.uk/about-us/our-partners/

20 The decision about which PEI to contact will normally be straightforward and obvious,
21 dictated by the programme's specialism or underlying content.

22 Sometimes the programme's novelty or its breadth may mean that it could be accredited by
23 a number of PEIs. Joint accreditation visits are an option and can reduce the overall costs of
24 accreditation. Visits from more than two PEIs can be organised by the Engineering
25 Accreditation Board (EAB) which acts as a single point of contact. EAB-organised visits are
26 appropriate when accreditation is sought from a number of professional engineering
27 institutions, for either mixed discipline degrees or engineering courses with commonality.

28 The Engineering Council provides the Secretariat for EAB and further information is
29 available at: <https://www.engc.org.uk/eab>

30 **What happens once accreditation is granted?**

31 Once accredited, a programme is added by the PEI to the full list of accredited degrees,
32 available at: www.engc.org.uk/courses

33 An accredited programme may also provide the basis for professional recognition by other
34 professional engineering institutions.

35 Once a programme is accredited, it normally retains accreditation for five years. However,
36 accreditation may be for a shorter period, especially in the case of new programmes where it

1 is necessary to monitor outputs. Re-accreditation is normally undertaken using the same
2 processes as the original accreditation.

3 Educational institutions are encouraged to use the 'Engineering Council accredited degree'
4 logo alongside the name of all degree programmes that have been accredited by a
5 professional engineering institution. The logo may be downloaded at:

6 www.engc.org.uk/AccreditedDegreeLogo

7

English version



Welsh version



8 Educational institutions must ensure that they provide accurate information about the
9 accreditation status of their degree programmes and the relationship to registration as IEng
10 or CEng to students and prospective students. Further guidance is provided in Annex B.
11 Higher education providers in the UK should refer to advice on consumer protection law
12 published by the Competition and Markets Authority (CMA)
13 [https://www.gov.uk/government/publications/higher-education-consumer-law-advice-for-](https://www.gov.uk/government/publications/higher-education-consumer-law-advice-for-providers)
14 [providers](https://www.gov.uk/government/publications/higher-education-consumer-law-advice-for-providers)

15 **International recognition**

16 The Engineering Council is a signatory to the EUR-ACE, Washington, Sydney and Dublin
17 Accords. The EUR-ACE, Washington and Sydney Accords provide a mechanism for mutual
18 recognition by signatory countries of accredited degrees. The Dublin Accord supports mutual
19 recognition of approved or accredited qualifications and programmes.

20 In an increasingly global market for engineering education, the opportunity of having a
21 programme recognised under an international accord offers potential benefits to HEIs
22 including:

- 23 ● They are more attractive to students who value an internationally recognised
24 qualification, particularly those who may want to work in countries where 'engineer' is
25 a legally protected title.
- 26 ● Assurance that a degree meets international standards.
- 27 ● Graduates may be more employable, helping with league table ratings.

28 The EUR-ACE® Accord, administered by the European Network for Accreditation of
29 Engineering Education (ENAE), allows educational institutions with accredited degrees
30 delivering the equivalent of at least 180 ECTS to demonstrate the international standing of
31 these awards. Programmes that carry the EUR-ACE® label are recognised within the
32 Qualifications Framework of the European Higher Education Area (QF-EHEA). Award of the

- 1 EUR-ACE® label shows that a programme is recognised by ENAEE as a first cycle degree
2 (Bachelors degrees) or second cycle degree (Integrated Masters (MEng), MSc, etc). For
3 further details see: www.engc.org.uk/eurace
- 4 The [Washington Accord](#) was first signed in 1989. It recognises that professional engineering
5 education programmes accredited by the signatories deliver outcomes that meet or exceed
6 the Washington Accord [Graduate Attributes](#) (learning outcomes). In the UK, Washington
7 Accord programmes are degrees accredited for the purpose of [Chartered Engineer](#) (CEng)
8 registration.
- 9 The [Sydney Accord](#) was first signed in 2001. It recognises that engineering technologist
10 education programmes accredited by the signatories deliver outcomes that meet or exceed
11 the Sydney Accord [Graduate Attributes](#) (learning outcomes). In the UK, Sydney Accord
12 programmes are degrees accredited for the purpose of [Incorporated Engineer](#) (IEng)
13 registration.
- 14 The [Dublin Accord](#) was first signed in 2002. It recognises that the educational base for
15 Engineering Technicians approved or accredited by the signatories delivers outcomes that
16 meet or exceed the Dublin Accord [Graduate Attributes](#). In the UK, Dublin Accord
17 programmes are ones approved for the purpose of [Engineering Technician](#) (EngTech) or
18 [ICT Technician](#) (ICTTech) registration.
- 19 The Washington, Sydney and Dublin Accords apply to accreditation or approval by a
20 signatory of programmes delivered by higher education institutions within the national or
21 territorial jurisdiction of that signatory. In the case of the Engineering Council, this recognition
22 applies to programmes approved or accredited for providers in England, Scotland, Wales
23 and Northern Ireland only.
- 24 Note that international recognition only applies to programmes (or combinations of
25 programmes) that are approved or accredited against all the learning outcomes for a
26 relevant professional title.
- 27 For further details, including links to lists of current signatories, see:
28 www.engc.org.uk/international

1 Learning outcomes for accredited degrees

2 Accredited engineering and technology programmes provide the exemplifying levels of
3 underpinning knowledge and understanding for professional registration.

4 The learning outcomes set out here therefore need to be read in the context of the generic
5 statements of competence and commitment for Incorporated Engineers and Chartered
6 Engineers in UK-SPEC: www.engc.org.uk/ukspec

7 The following qualifications exemplify the required knowledge and understanding for:

8 Incorporated Engineer (IEng)

- 9 ● An accredited Bachelors or Honours degree in engineering or technology
- 10 ● or a Higher National Diploma or a Foundation Degree in engineering or technology,
11 plus appropriate further learning to degree level
- 12 ● a qualification or apprenticeship at the appropriate level that have been approved or
13 accredited in line with the Approval and Accreditation of Qualifications and
14 Apprenticeship Handbook

15 Chartered Engineer (CEng)

- 16 ● An accredited Bachelors degree with Honours in engineering or technology, plus
17 either an appropriate Masters degree or Doctorate (e.g. EngD) accredited by a
18 licensed professional engineering institution, or appropriate further learning to
19 Masters level
- 20 ● a qualification or apprenticeship at the appropriate level that have been approved or
21 accredited in line with the Approval and Accreditation of Qualifications and
22 Apprenticeship Handbook

23 Types of degree

24 This handbook sets out the learning outcomes expected from each of the six types of
25 degree:

- 26 ● Foundation degrees and equivalent qualifications accredited as partially meeting the
27 underpinning knowledge and understanding requirement for IEng registration
- 28 ● Bachelors and Bachelors (Hons) degrees accredited as meeting in full the
29 underpinning knowledge and understanding requirement for IEng registration
- 30 ● Bachelors (Hons) degrees accredited as partially meeting underpinning knowledge
31 and understanding requirement for CEng registration
- 32 ● Integrated Masters (e.g. MEng) degrees accredited as meeting in full the
33 underpinning knowledge and understanding requirement for CEng registration
- 34 ● Other Masters degrees accredited as meeting the further learning requirement for the
35 underpinning knowledge and understanding requirement for CEng registration
- 36 ● Doctoral programmes accredited as meeting the further learning requirement for the
37 underpinning knowledge and understanding requirement for CEng registration

1 Any of these programmes may be accredited for delivery in a variety of modes, including for
2 delivery within a degree apprenticeship. Accreditation for another mode of study does not
3 mean that an apprenticeship is accredited for delivery within an apprenticeship. Accreditation
4 of a degree that sits within a degree apprenticeship must be in line with this handbook,
5 however consideration can also be given to additional accreditation or approval of the
6 degree apprenticeship as delivering some or all of the competences required for registration,
7 in line with the [Approval and Accreditation of Qualifications and Apprenticeships Handbook](#)
8 ([AAQAH](#))

9 It is important to note that the listing of different learning outcomes does not imply a
10 compartmentalised or linear approach to learning and teaching. Throughout each
11 programme, different learning outcomes are likely to be delivered concurrently, through, for
12 example, project work. The process of accreditation will include an assessment of whether
13 graduates are achieving these outcomes.

14 Each type of accredited degree provides a solid foundation in the principles of engineering
15 relevant to the discipline specialism. What were previously referred to as 'additional general
16 skills' have been integrated within the five engineering-specific areas of learning. The five
17 key areas of learning are:

- 18 ● Science and mathematics
- 19 ● Engineering analysis
- 20 ● Design and innovation
- 21 ● The Engineer and society
- 22 ● Engineering practice

23 The different types of accredited engineering programmes provide the exemplifying levels of
24 underpinning knowledge, understanding and skills for specific registrant titles. To reflect this,
25 there are some important differences between the degrees.

26 Each type of degree is described in these terms in a preamble and a set of learning
27 outcomes for each specific degree. For ease of comparison, the preambles for the six types
28 of accredited degree are presented together as a matrix in Annex A.

29 The level at which the learning outcomes will be delivered is that expected from the relevant
30 qualifications as they are described in The Frameworks for Higher Education Qualifications
31 of UK Degree-Awarding Bodies (www.qaa.ac.uk). The frameworks include qualification
32 descriptors for Foundation degrees, Bachelors degrees, Bachelors degrees with honours,
33 Masters degrees including the Integrated Masters, and Doctoral degrees.

34 A glossary of terms is included as Annex C

- 1 ***Learning outcomes will be inserted here, but are presented as a separate table for***
- 2 ***consultation. Note that the versions included in the consultation are informed by UK-***
- 3 ***SPEC 3rd edition, so changes are likely to reflect changes to UK-SPEC.***
- 4 Note these may be a useful reference for PEIs looking to approve or accredit IPD schemes.

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- 1 **Annex A**
- 2 *Defining characteristics of accredited degree programmes will be inserted here, but*
- 3 *are presented as a separate table for consultation.*

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1 **Annex B**

2 Published information about professional body recognition.

3 The Engineering Council has developed statements about engineering accredited degrees
4 for use by universities in print and digital marketing material and, for education institutions in
5 the UK, when submitting their Key Information Set (KIS) and Unistats statements regarding
6 professional body recognition.

7 Your university will be provided with a set of statements that name the specific professional
8 engineering institution such as 'Institution of Mechanical Engineers' or the 'Royal
9 Aeronautical Society', that is licensed by the Engineering Council to accredit degrees. In
10 many cases, several professional engineering institutions accredit a degree, and you will be
11 able to choose the statements that apply to your courses.

12 These statements are as follows, with XXX relating to the individual professional engineering
13 institution:

14 MSc/EngD

15 Accredited by the XXX on behalf of the Engineering Council as meeting the requirements for
16 Further Learning for registration as a Chartered Engineer. Candidates must hold a CEng
17 accredited BEng/BSc (Hons) undergraduate first degree to comply with full CEng registration
18 requirements.

19 MEng

20 Accredited by the XXX on behalf of the Engineering Council for the purposes of fully meeting
21 the academic requirement for registration as a Chartered Engineer.

22 BEng/BSc (Hons)

23 Accredited by the XXX on behalf of the Engineering Council for the purposes of fully meeting
24 the academic requirement for registration as an Incorporated Engineer and partially meeting
25 the academic requirement for registration as a Chartered Engineer.

26 BEng/BSc (with or without honours)

27 Accredited by the XXX on behalf of the Engineering Council for the purposes of fully meeting
28 the academic requirement for registration as an Incorporated Engineer.

29 Foundation Degrees

30 Accredited by the XXX on behalf of the Engineering Council for the purposes of fully meeting
31 the academic requirements for registration as an Engineering Technician and partially
32 meeting the academic requirement for registration as an Incorporated Engineer.

33 You will also be provided with a link to the Engineering Council website, where potential
34 students may take the opportunity to find out more about degree accreditation:

1 www.engc.org.uk/informationfor/students-apprentices-and-graduates/higher-education-he-
2 [students](http://www.engc.org.uk/informationfor/students-apprentices-and-graduates/higher-education-he-students)

3 You may wish to alert potential students to this page as to their future prospects, and further
4 links to the professional engineering institutions themselves for student membership

5 and pathways to professional registration.

6 Within this student information page those degrees with accredited status can be checked
7 via our publicly searchable database: www.engc.org.uk/acad

8 **Annex C Glossary**

9 *Note G'number' is used in this consultation document to enable glossary items to be*
10 *identified for comment, this numbering will not be retained in the final document.*

G1 Accreditation	A process of peer review of a degree programme against published learning outcomes. This usually involves a visit from a team of professional engineers nominated by professional engineering institutions to the degree awarding body.
G2 Bologna Process	<p>A non-statutory inter-governmental agreement, creating a coherent and cohesive European Higher Education Area (EHEA) and a Framework for Qualifications of the European Higher Education Area (FQ-EHEA) comprising first, second and third cycle degrees. The EHEA is a means of promoting mutual recognition of qualifications, demonstrating transparency of systems and easing the mobility of staff and students across higher education in Europe. ehea.info</p> <p>The UK has verified that its national frameworks for higher education qualifications in England, Wales and Northern Ireland and in Scotland are compatible with the FQ-EHEA: Bachelors and Bachelors (Hons) degrees as first cycle, the Integrated MEng and Masters degree as second cycle. www.qaa.ac.uk/docs/qaa/quality-code/bologna-process-in-he.pdf?sfvrsn=e04cf981_14</p>
G3 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
G4 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.
G5 Competition and Markets Authority (CMA)	The CMA works to promote competition for the benefit of consumers, both within and outside the UK. It is an independent non-ministerial department.

G7 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
G8 Educational institution	Most UK Higher Education courses are taught by universities, but many are also taught at colleges and other specialist institutions. Some 'private providers' are entering the market, and the term 'Higher Education provider' is now also used. There are around 160 universities and colleges in the UK that are permitted to award degrees.
G9 Engineering Accreditation Board (EAB)	Made up of all the professional engineering institutions that are licensed by the Engineering Council to accredit academic programmes for both Incorporated Engineer and Chartered Engineer status. The Engineering Council provides the secretariat for EAB. www.engc.org.uk/eab
G10 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
G11 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
G12 European Network for Engineering Accreditation (ENAE)	ENAE is the European network which authorises accreditation and quality assurance agencies to award the EUR-ACE® label to accredited engineering degree programmes. www.enaee.eu/
G13 EUR-ACE®	EUR-ACE® (EUROpean-ACcredited Engineer) is a quality assurance label that can be awarded to accredited engineering degree programmes. The Engineering Council is authorised by ENAE to award the EUR-ACE® label.
G14 Exemplifying qualification	An educational or vocational qualification that demonstrates the knowledge, understanding and skills to meet or partially meet the requirement for registration in a particular category. Other qualifications may be permitted if they achieve (or exceed) the same level.
G15 FEANI	The European Federation of National Engineering Associations of which the Engineering Council is the UK partner. www.feani.org
G16 Graduate Attribute	Graduate attributes form a set of individually assessable outcomes that are the components indicative of the graduate's potential to acquire competence to practise at the appropriate level. The graduate attributes are exemplars of the attributes expected of graduates from an accredited programme. Graduate attributes are clear, succinct statements of the

	expected capability, qualified if necessary by a range indication appropriate to the type of programme.
G17 Higher Education (HE)	In the UK, this refers to education that is post-school and defined in the Qualifications and Credit Framework (QCF) as being at a level between 4 and 8. It includes: Certificate of Higher Education; Diploma of Higher Education; Bachelors degrees; Masters degrees; and Doctoral degrees.
G18 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
G19 International Engineering Alliance (IEA)	Partnership of international organisations that are signatories to the international accords such as the Dublin, Sydney and Washington Accords.
G20 Learning outcome	A statement of achievement expected of a graduate from an accredited programme. In order to secure accredited status a degree must be at the correct level and address a set of associated learning outcomes.
G21 Professional Engineering Institution (PEI)	A membership organisation which is licensed by the Engineering Council to assess candidates for professional registration. Some institutions also have a licence to accredit and/or approve degrees, qualifications and apprenticeships. For a list see: www.engc.org.uk/about-us/our-partners/professional-engineering-institutions/
G22 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 they have met the profession's standards of commitment and competence. Depending on the type of accredited degree, graduates will have achieved in full or in part the academic requirements for IEng or CEng. Award of the title permits use of the relevant post-nominal.
G23 Programme	An academic programme comprising a set of courses of study that leads to the award of a degree or other Higher Education qualification.
G24 Quality Assurance Agency for Higher Education (QAA)	Safeguard standards and improves the quality of UK higher education wherever it is delivered around the world. The QAA works closely with the Engineering Council and professional engineering institutions to support the engineering disciplines. www.qaa.ac.uk
G25 Sydney Accord	As with the other Accords the signatories are committed to development and recognition of good practice in engineering education. The Sydney Accord is specifically focused on academic programmes dealing with engineering technology, hence Incorporated Engineer registration in the UK. www.ieagrements.org/accords/sydney/

G26 Threshold	The minimum standard that a programme must meet.
G27 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
G29 Washington Accord	As with the other Accords the signatories are committed to development and recognition of good practice in engineering education. The Washington Accord outlines the mutual recognition, between the participating bodies, of accredited engineering degree programmes. It also establishes and benchmarks the standard for professional engineering education across those bodies. The Washington Accord is related to Chartered Engineer registration in the UK. http://www.ieagreements.org/accords/washington/

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