



## **Guidance Note on Academic Accreditation**

### **1. Introduction**

Paragraphs 21 to 29 of the Engineering Council's Regulations for Registration (the Regulations) set out the requirements governing the accreditation of academic programmes by Licensed Members. This guidance note covers some of the issues which have arisen since the introduction of UK-SPEC. It reflects a number of valuable discussions, especially within the Engineering Accreditation Board (EAB) and the Engineering Council's Registration Standards Committee (RSC). This note does not introduce any new regulatory requirements.

Accreditation plays a valuable role in maintaining and developing the relationship between the profession and higher education, and in ensuring appropriate standards. Part of its purpose is to stimulate and encourage programme innovation and development, and the Regulations and this Guidance Note will, it is hoped, help to enable this.

Accreditation is not intended to be a prescriptive exercise, and Licensed Members are encouraged to avoid introducing un-necessary prescription into their individual requirements. Accreditation should be viewed as a developmental process, with more of a continuing dialogue between universities and colleges and the accrediting institutions, rather than placing all the emphasis on the five-yearly visit. This approach helps to establish an understanding of the opportunities that accreditation brings and the value of the process, as well as encouraging the development of innovative provision. It would also assist degree awarding institutions that are developing new programmes.

During accreditation exercises, Licensed Members may wish to draw on the specific technical expertise of smaller professional engineering institutions or Professional Affiliates of the Engineering Council that do not hold academic accreditation licences. Under such an arrangement, the overall process and outcome remain entirely under the control of the Licensed Member. Any such input should be clearly recorded in the accreditation visit report, and universities should be encouraged to include reference to the specific input in their course literature.

This note covers the accreditation of academic programmes leading to the award of exemplifying qualifications for IEng and CEng under UK-SPEC, namely Bachelors and Honours degrees, integrated Masters (MEng) degrees, and other Masters degrees. The principles in this note are applicable to the accreditation of Foundation degrees, though the provider will be expected to provide additional information as outlined in the Statement on the Accreditation of Foundation Degrees

<http://www.engab.org.uk/media/45598/100211%20foundation%20degrees%20statement.pdf>

Separate guidance has been issued for Licensed Members on further learning, the accreditation of distance learning programmes and HNDs. These documents are available on the Engineering Council's Extranet. A definition of key terms used in the assessment of learning outcomes has been produced by the Engineering Subject Centre

<http://www.engsc.ac.uk/er/assessment/aolowg.asp>

Although this note has been prepared for use by Licensed Members, they are encouraged to share it with HEIs seeking accreditation for their programmes.

## **2. Output Standards for Bachelors, Honours, Integrated Masters and other Masters Degrees**

UK-SPEC requires graduates from these programmes to have achieved the 4 general learning outcomes and 5 specific learning outcomes set out in *The Accreditation of Higher Education Programmes*. The document states these as they apply to a Bachelors degree with Honours programme accredited for CEng, and provides supplementary statements indicating how they might be on the one hand amplified for an integrated MEng degree and for other Masters degrees, and on the other interpreted for an IEng degree, whether at Bachelors or Honours level.

<http://www.engc.org.uk/ecukdocuments/internet/document%20library/AHEP%20Brochure.pdf>

### **Does a degree programme have to deliver all the required learning outcomes as set out in UK-SPEC?**

Yes. An accredited programme must deliver all the required learning outcomes, although as UK-SPEC makes clear, the “weighting given to the different areas of learning will vary according to the nature and aims of each programme”.

### **What is the relationship between the general and the specific learning outcomes?**

The general learning outcomes describe the overall nature of the programme; delivery of the specific outcomes should contribute to a greater or lesser extent to the delivery of the general ones. For the first three general learning outcomes this should be obvious, but general transferable skills should not be overlooked.

### **Are there any other reference points for accreditation?**

Yes, the qualification level descriptors: for England, Wales and Northern Ireland see <http://www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/FHEQ08.pdf>; for Scotland see [http://www.scqf.org.uk/content/files/SCQF\\_Level\\_Descriptors\\_for\\_website\\_-\\_Feb\\_2010\(2\).pdf](http://www.scqf.org.uk/content/files/SCQF_Level_Descriptors_for_website_-_Feb_2010(2).pdf) These reference points are crucial in determining whether the programme is delivering knowledge, understanding and skills at the appropriate level.

The competence statements which licensed institutions have adopted under UK-SPEC may also be a useful reference point.

### **Which should take priority – programme or module learning outcomes?**

The decision to accredit should be based on programme learning outcomes. Thus the expectation is that accrediting panels will look at learning outcomes at the programme level. Consideration of learning outcomes at the module level may prove to be useful if further information is required but these should not be the prime source of evidence.

### **Does a degree programme have to deliver all the bullet points included under the five specific learning outcomes in UK-SPEC?**

The bullet points describe the five specific learning outcomes. They represent different aspects of the capabilities which graduates from accredited programmes should possess, rather than curriculum content. They therefore serve as indicators for accreditors when looking at student achievement, and will not be identical in every programme.

### **Can combined degrees (eg Engineering with French) be accredited and is a stipulated amount of engineering content required in these?**

Yes, they can be accredited. In discussion at the EAB, most institutions felt that generally around two thirds of total programme time would be required to deliver the required engineering outcomes. However, this is not a fixed requirement; whether a course holistically delivers the required learning outcomes is still the ultimate criterion in awarding accreditation.

**Is it a requirement for accreditation that an MEng or any other Masters degree includes a group project?**

No, not if the programme delivers all the learning outcomes. UK-SPEC has always emphasised outcomes rather than how these are achieved. There are aspects of the general and specific learning outcomes to which a group project might make a major contribution. In the absence of a group project, the accreditation panel would need to be confident that the outcomes were being achieved by some other means.

**Can a degree be accredited for both IEng and CEng registration?**

Yes. RSC agreed in 2009 that all Honours degrees accredited as partially meeting the academic requirements for Chartered Engineer registration meet the requirements for Incorporated Engineer registration and Sydney Accord recognition, and so should be accredited for both CEng and IEng. This arrangement is backdated to cover all such degrees accredited from intake year 1999.

The applicability of the specific learning outcomes to those degrees for which IEng accreditation only is being sought is described in *The Accreditation of Higher Education Programmes*.

<http://www.engc.org.uk/ecukdocuments/internet/document%20library/AHEP%20Brochure.pdf>

**Can a visit be coordinated with the university's periodic review process?**

Yes, and this is beginning to happen.

**What is meant by accreditation being viewed as a developmental process?**

Licensed Members are encouraged to provide assistance at an early stage to a degree awarding institution that is planning a new programme or that is new to the accreditation process. This approach is more likely to lead to the development of programmes that meet the required standard. After accreditation is conferred, continuing dialogue may take the form of annual reports or the sharing of notable or innovative practice. Universities and colleges should be encouraged to contact the engineering accrediting institution(s) for advice when considering the development of existing programmes.

**Can someone who only follows the final year of an accredited programme get an accredited degree on graduation?**

Yes. Historically, students had to spend at least two years on an accredited programme, but this rule does not exist under UK-SPEC. A university will have made the decision to admit someone to the final year of a programme on the basis that their previous academic experience enables them to achieve the necessary outcomes, and so a blanket rule cannot be justified. However, accrediting institutions may ask universities to demonstrate how those graduating after one year would actually achieve the required learning outcomes, and decide whether to limit accreditation in the light of the response.

This arrangement would therefore apply, for example, to holders of an HND or graduates from Foundation degree programmes who wish to follow the final year of a Bachelors or Honours programme.

**Can a student who fails a project first time, then passes, be awarded an accredited degree?**

UK-SPEC is not prescriptive about this. Licensed Members are encouraged to avoid introducing un-necessary prescription into their individual accreditation requirements, and ensure that their requirements are clearly communicated to degree awarding institutions and students, and correctly entered on the Engineering Council's accreditation database.

**What is the position of someone who, on completion of an accredited MEng programme, is awarded a BEng rather than the MEng degree?**

The person concerned will hold a non-accredited degree and any application for registration would be individually assessed. However, a BEng programme which is specifically designed as an exit point for MEng students who decide not to complete the MEng may be accredited if the Licensed Member is satisfied that it delivers the required learning outcomes

**If an MEng programme is only slightly deficient, can it be accredited with a requirement for further learning?**

No. The award of accredited status to an MEng programme means it fully meets the published requirements.

**Against which standards should an MSc programme be considered for accreditation?**

An accredited Masters degree provides a CEng applicant holding an accredited Honours degree with the total exemplifying academic qualifications for CEng registration. When first published in 2003, UK-SPEC did not provide dedicated output standards for these programmes, because of their range and variety of type. However, building on the PEIs' experience of accrediting such degrees, learning outcomes for Masters degrees other than the MEng have been developed and were published in July 2011. These provide the principal reference point. As for other degrees, two other key reference points are the QAA/SCQF level descriptors and the competence statements derived from UK-SPEC.

**Competence statements describe what you would expect of a registrant who has had professional development as well as education. How can they be used to judge an academic programme?**

By asking whether the programme is delivering knowledge and understanding which will underpin competence, at the required level. The programme is not expected to provide full competence.

**Do they have to cover the full range of competences?**

No. Because of their specialist nature, many Masters degrees are likely to be heavily weighted towards underpinning the A and B groups of CEng competences, although in meeting the general learning outcomes, Masters degrees may also provide some important underpinning of the D and E competence groups. Some more broadly-based Masters degrees (including some MBAs) may cover those in group C:

- A - Use a combination of general and specialist engineering knowledge and understanding to optimise the application of existing and emerging technology;
- B - Apply appropriate theoretical and practical methods to the analysis and solution of engineering problems;
- C - Provide technical and commercial leadership;
- D – Demonstrate effective interpersonal skills;
- E – Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment

**How can these be evidenced?**

Through the programme's aims and objectives, and by inviting the university to complete an output standards matrix highlighting where the learning outcomes provide the knowledge and understanding underpinning competence.

**Can someone with an accredited MSc but without an accredited Honours degree be considered for registration?**

Yes, but not as a Standard Route applicant. It is important that Licensed Members encourage universities to inform students correctly about the status of graduates from accredited Masters programmes in relation to Engineering Council registration requirements.

**How much Masters level content is required within an accredited programme?**

RSC has agreed to adopt the recommendation from the Burgess Group, that for a 180-credit postgraduate Masters degree, a minimum of 150 credits must be at M Level.

**Many Masters degrees have a mixed intake with not everyone having an accredited Honours degree in engineering. Can such programmes be accredited?**

Yes. The regulations governing accreditation apply equally to the accreditation of Masters degrees. Paragraph 22 of the Engineering Council's Regulations requires Licensed Members to consider a range of evidence, including "entry to the programme, and how the cohort entry extremes will be supported." A judgement has to be made in the light of this.

**How can we accredit Masters degrees if not everyone graduating from them will have the full exemplifying qualifications. Shouldn't we just approve them?**

Accreditation of a programme and registration of an individual are two different things. If the programme is delivering the appropriate learning outcomes then it can be accredited. In the recently revised Engineering Council Regulations, 'approval' applies to Eng Tech and N/SVQ for IEng programmes, and does not apply to HE programmes.

**Is a visit required for Masters degrees?**

Yes. Paragraph 26 of the Regulations states that a visit must take place unless RSC specifically agrees otherwise, and this requirement applies equally to Masters programmes.

**Can Postgraduate Diplomas be accredited?**

Postgraduate Diplomas are not exemplifying qualifications under UK-SPEC and should not be accredited as such. They may be accepted on an individual basis as meeting part or all of further learning requirements, or as part of an integrated package of further learning and professional development. Postgraduate Diplomas accredited before 1 February 2007 will retain accredited status until the end of their accreditation period.

### **3. Compensation**

In all universities, examinations boards may decide that a strong performance by a student in one part of the programme may compensate for under-performance elsewhere. An amendment was made to paragraph 22 of the Regulations in 2006 to require Licensed Members to have regard to any university regulations on compensation, and they may impose constraints on an accreditation decision as a result of this.

The following guidelines on compensation have been formulated following discussion in EAB:

- Compensation should be allowed;
- Major projects should not be compensated
- Normally only up to 20 out of 120 credits, in the final year, could be compensated
- Compensation should not undermine the overall learning outcomes of the programme(s)

Degree programmes include varying sized modules and therefore the reference to 'normally 20 credits' is indicative; the key consideration is the final bullet point. It is recommended that in their accreditation decision letters, Licensed Members ask for notification should the compensation requirements change during the period of accreditation.

## 4. Coordinated visits

### **What is the basis for carrying out a joint accreditation visit with another institution?**

Joint accreditation visits bring considerable advantages, for example in terms of there being a single point of contact and one submission document, visit and visit report.

The EAB organises joint visits involving several professional engineering institutions. For a joint visit, there should be sufficient commonality amongst the programmes being put forward. Therefore, in general, EAB visits may not be appropriate for programmes that span a range of departments or for very large numbers of programmes, unless the commonality can be clearly defined. Further information about EAB is available at:

<http://www.engab.org.uk/>

## 5. Accreditation Decisions

Paragraph 27 of the Regulations sets out four possible outcomes of an accreditation assessment:

- the programme is accredited as fully meeting the educational requirement for registration;
- the programme is accredited as partially meeting the educational requirement for registration;
- either of the above, provided specified constraints are met and/or specified modifications are made within a set timetable;
- the programme is not accredited.

Qualifying phrases such as ‘provisional accreditation’ and ‘partial accreditation’ are no longer used.

### **Does this mean that we cannot provisionally accredit new programmes?**

Paragraph 28 of the Regulations states that programmes which do not have an output cohort at the time of accreditation may be accredited. This would be on the basis of their anticipated output standards. Licensed Members must however monitor the output and review their accreditation accordingly, and they may accredit a new programme for a shorter period. Should they decide to withdraw the accreditation, the first graduates and those students already on the programme would still have accredited degrees. This maintains the previous practice; it is simply the term ‘provisional accreditation’ which has been withdrawn.

RSC encourages Licensed Members to work with degree awarding institutions during new programme development, offering on-going advice and support to help to ensure that UK-SPEC requirements are understood and that innovative provision is encouraged.

### **Are programmes still able to be ‘partially accredited’?**

The term is no longer used. Programmes may be accredited as partially meeting the requirements. This means that a programme delivers the learning outcomes required of it (for example an Honours degree for CEng) but that a further qualification is required to meet the full requirements for registration.

### **What are the consequences for students and graduates of a decision not to award accreditation?**

It is an accepted principle across the profession that individuals who embark on a programme that is accredited should not be disadvantaged by a future decision to remove accreditation before the end of the original accreditation period. This also applies to graduates, should a decision to remove accreditation be back-dated.

Licensed Members should remind universities that public information about the accredited status of their degree programmes must be correct, and that the publication of inaccurate information can be referred by the Engineering Council to the QAA under its 'Cause for Concern' procedure. Licensed Members are encouraged to check the accuracy of statements about accredited status as part of the accreditation exercise.

A Licensed Member that is considering the removal of accreditation before the end of the original accreditation period must inform the Engineering Council as soon as possible in their decision-making process.

### **Can programmes be accredited for EngTech?**

No. Accreditation is on the basis of delivering specific learning outcomes derived from the statements in AHEP. AHEP deals specifically with programmes accredited for IEng and CEng, and there are no specified learning outcomes for EngTech programmes. Regulations 19 and 31-36 deal with the approval of programmes for EngTech registration.

### **What is the situation regarding the accreditation of HNDs?**

There is no requirement for Licensed Members to accredit HNDs, such accreditation confers no advantage for an individual seeking registration, and accredited HNDs are not recorded on ACAD. Further details are in a guidance note for institutions on the extranet:

<http://www.engc.org.uk/extranet.aspx>

### **Do HEIs have to advise of changes to accredited programmes during the accreditation period?**

UK-SPEC does not explicitly state this requirement, however, it is expected that programmes will change over time. In their accreditation decision letters, institutions should require degree awarding bodies to notify them of any proposed major changes to a programme to ensure that changes do not affect delivery of the required learning outcomes.

### **Is there a minimum requirement about professional qualification of academic staff?**

UK-SPEC is not prescriptive about this. However, RSC encourages Licensed Members to support engineering departments and their staff to increase the levels of professionally qualified engineering academics. This provides role models for their students and provides a mechanism for active engagement with the profession.

## **6. Backdating Accreditation**

The Regulations state that accreditation shall be for a fixed period of no more than five years, except that accreditation may be backdated to allow cohorts on the programme at the time it is accredited to benefit from the decision.

## **7. Charging for accreditation**

There is no common policy on charging. The Engineering Council believes that it is a matter for an individual Licensed Member to decide whether or not to make a charge for accreditation, in accordance with its own business plans. Should a decision to charge be made, the Engineering Council's Regulations require this to be specified in an institution's accreditation procedures, and made clear to a university at an early stage. Up-to-date charging details should be forwarded to the EAB Secretariat. If an institution wishes to introduce charging, an EAB working group has recommended an annual affiliate scheme as best practice.