Academic Accreditation

Information Pack for Higher Education Institutions, Academic Accreditors and Professional Engineering Institution Staff

Applicable to all Academic Accreditation activity between 1 September 2021 and 31 August 2022
Preface

This information pack brings together all of the key guidance and regulations governing IET Academic Accreditation of degree programmes in the UK and overseas. It is intended as a single point of reference for Higher Education Institutions, IET staff and volunteers involved in academic accreditation activity. The document will be reviewed and re-issued annually.

The publication of this information pack also is aligned with the Fourth Edition of Accreditation of Higher Education Programmes (AHEP) by the Engineering Council. Their website provides this document as well as supplementary guidance notes, including the changes from the previous edition. Note that each of the four types of accredited degree (Bachelor’s and Bachelor’s Honours accredited for IEng, Bachelor’s Honours programmes accredited for CEng, Integrated Master’s MEng and other Master’s) has a complete set of Learning Outcomes.

For further advice please contact IET Academic Accreditation:

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# Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>AAC</td>
<td>Academic Accreditation Committee. The Committee delegated by the IET to maintain and implement policies and procedures for the accreditation of academic programmes that either contribute to, or satisfy, the current and future educational requirements for Chartered and Incorporated Engineers, taking into account the current and future needs of industry.</td>
</tr>
<tr>
<td>Accreditation criteria</td>
<td>The principles and standards by which accreditation panels will review the programmes. These are represented by grades within the accreditation report.</td>
</tr>
<tr>
<td>ADAMS</td>
<td>ADAMS stands for the Accreditation Database and Management System. This is an online secure tool used for IET accreditation.</td>
</tr>
<tr>
<td>Condonement</td>
<td>The practice of allowing students to fail one or more modules within a degree programme yet still qualify for the award of the degree.</td>
</tr>
<tr>
<td>Compensation</td>
<td>The practice of allowing marginal failure of one or more modules, often on the basis of good overall academic performance.</td>
</tr>
<tr>
<td>Credit</td>
<td>Most higher education programmes of study are composed of a number of individual modules. A number of credits is normally assigned to each module, which indicates the amount of learning undertaken, and a specified credit level indicates the relative depth of learning involved.</td>
</tr>
<tr>
<td>Department</td>
<td>The term used in IET reports to describe the academic unit responsible for the programme(s) presented for accreditation. In practice this may be a department, school, faculty, college etc.</td>
</tr>
<tr>
<td>Immediate requirement</td>
<td>An issue raised by the accreditation panel that must be resolved before accreditation can be conferred.</td>
</tr>
<tr>
<td>Level of study</td>
<td>A programme will typically comprise one or more levels of study, generally expressed with reference to some qualifications framework (for example FHEQ in England, Wales and Northern Ireland and FQHEIS/SCQF in Scotland). The level of study will often relate to the stage or year of the programme and is an indicator of the relative complexity, demand and/or depth of learning and of learner autonomy.</td>
</tr>
<tr>
<td>Module</td>
<td>A self-contained, formally structured, learning experience with a coherent and explicit set of Learning Outcomes and assessment criteria – normally with an allocated credit rating and level of study (based on some credit framework).</td>
</tr>
<tr>
<td>Programme</td>
<td>A programme of study leading to a degree award from a Higher Education Awarding Body (i.e. an institution with the legal powers to award degrees).</td>
</tr>
<tr>
<td>Recommendation</td>
<td>An issue raised by the accreditation panel that must be considered in the Action Plan and the outcome of which does not normally impact directly on the accreditation conferred. It is intended to assist the awarding institution and is directed toward programme enhancement.</td>
</tr>
<tr>
<td>Requirement</td>
<td>An issue identified by the accreditation panel that must be addressed in the Action Plan with a specified deadline for completion of the identified task(s).</td>
</tr>
</tbody>
</table>

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1 The terms condonement and compensation are used interchangeably within Universities. This is how the IET will refer to them for the purpose of accreditation.

2 The term ‘module’ is used throughout this document rather than ‘course’, ‘unit’ etc.

3 All credit frameworks in use within the countries of the United Kingdom are based on the achievement of Learning Outcomes and a single credit represents 10 notional hours of learning.

4 The term ‘programme’ is used throughout this document rather than ‘course’ etc.

5 The IET has also defined a number of Accreditation Requirements (R1 to R10 in this document) that must be met in order for a degree programme to be accredited.
Introduction

The degree programmes accredited by the IET are as follows:

<table>
<thead>
<tr>
<th>Programme</th>
<th>Typical designation</th>
<th>Level of accreditation</th>
<th>FHEQ(^6)</th>
<th>FQHEIS/SCQF(^7)</th>
<th>ISCED(^5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher National Diploma</td>
<td>HND</td>
<td>Partial IEng</td>
<td>5</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Foundation Degree</td>
<td>FdEng, FdSc</td>
<td>Partial IEng</td>
<td>5</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>BEng, BSc</td>
<td>IEng</td>
<td>6</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Top-up Bachelor’s degree</td>
<td>BEng (top-up), BSc (Top-up)</td>
<td>Partial IEng (Further Learning)</td>
<td>6</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Bachelor’s Degree with Honours</td>
<td>BEng (Hons), BSc (Hons)</td>
<td>Partial CEng(^8) and IEng</td>
<td>6</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Integrated Master’s Degree</td>
<td>MEng</td>
<td>CEng</td>
<td>7</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Master’s Degree other than Integrated Master’s Degree</td>
<td>MSc, MRes</td>
<td>Partial CEng (Further Learning)</td>
<td>7</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Professional Doctorate</td>
<td>EngD</td>
<td>Partial CEng (Further Learning)</td>
<td>8</td>
<td>12</td>
<td>8</td>
</tr>
</tbody>
</table>

The credit values specified in this document relate to the credit frameworks in use within the countries of the United Kingdom and should be applied proportionately to any other credit scheme.

Note: The above qualifications can also form part of a Degree Apprenticeship in the UK.

Programmes are accredited for a maximum of five years and an accreditation visit is normally required to each site where the programme is delivered.

The accreditation process is necessarily rigorous and programmes are accredited against output standards set by the Engineering Council on behalf of the sector. Key reference points for academic accreditation are:

- Accreditation of Higher Education Programmes (AHEP) Fourth Edition\(^9\)
- The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies
- Engineering Subject Benchmark Statement
- Foundation Degree Benchmark Statement
- IET Guidance on how to meet the Learning Outcome requirements for Accreditation

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\(^6\) The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies

\(^7\) ISCED 2011 (International Standard Classification of Education).

\(^8\) The Engineering Council 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 so should be accredited for both Partial CEng and IEng. This arrangement is backdated to cover all such degrees accredited from intake year 1999.

\(^9\) All accredited degree programmes from 31 December 2024 must be compliant with AHEP Fourth Edition.
An accredited degree programme must meet all of the required Learning Outcomes set out in AHEP. Each type of accredited degree provides a solid foundation in the principles of engineering relevant to the discipline specialism. The five key areas of learning defined in AHEP Fourth Edition are:

- Science and mathematics
- Engineering analysis
- Design and innovation
- The Engineer and society
- Engineering practice

While ‘the weighting given to the five broad areas of learning will vary according to the nature and aims of each programme’, an accredited degree is also expected to inculcate a professional approach to engineering and must be informed by current industrial practice.

The IET, through its accreditation process and associated policy and guidance, does not wish to inhibit innovation or the ability of providers to develop programmes to meet identified local, regional, national or international needs (indeed it wishes to encourage them).

A campus based programme that meets the knowledge and understanding requirements for professional registration at IEng or CEng and which is delivered within a degree apprenticeship, must be accredited separately in line with the AHEP 4 standards.

Accordingly, this document sets out the minimum set of requirements that must be met for a degree programme to be accredited and also provides guidance concerning good practice in the design and operation of accredited degree programmes.

The IET is fully committed to the principles of fair and equal treatment and to valuing diversity. The IET’s goal is to ensure that its commitment, reinforced by its values, is embedded in its working practices with its staff, volunteers and other stakeholders. It is expected that accredited programmes will demonstrate fair and equal treatment of their students and staff.
Published Information about Professional Body Recognition

The Engineering Council has developed statements about engineering accredited degrees for use by universities when submitting their Key Information Set (KIS) and Unistats statements regarding professional body recognition.

These statements are as follows:

**MSc/EngD**
Accredited by the Institution of Engineering and Technology on behalf of the Engineering Council as meeting the requirements for Further Learning for registration as a Chartered Engineer. Candidates must hold a CEng accredited BEng/BSc (Hons) undergraduate first degree to comply with full CEng registration requirements.

**MEng**
Accredited by the Institution of Engineering and Technology on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer.

**BEng (Hons)/BSc (Hons) – Partial CEng Accreditation**
Accredited by the Institution of Engineering and Technology on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer and partly meeting the academic requirement for registration as a Chartered Engineer.

**Top-up Bachelors**
Accredited by the Institution of Engineering and Technology on behalf of the Engineering Council as meeting the requirements for Further Learning for registration as an Incorporated Engineer. Candidates must hold a IEng accredited HND/ FDEng/ FDSc to comply with full IEng registration requirements.

**BEng/BEng (Hons)/BSc/BSc (Hons) – IEng Accreditation**
Accredited by the Institution of Engineering and Technology on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer.

**Foundation Degree/HND**
Accredited by the Institution of Engineering and Technology on behalf of the Engineering Council for the purposes of fully meeting the academic requirements for registration as an Engineering Technician and partially meeting the academic requirement for registration as an Incorporated Engineer.

UK providers are also reminded of the consumer law advice published by the Competition and Markets Authority (CMA).
IET Accreditation Criteria

Each programme considered for accreditation by the IET will be reviewed against the following criteria. To gain accreditation the programmes should meet the IET Accreditation Criteria, will need to comply with all the Requirements (on page 10) and will be expected to align, where possible with our Accreditation Guidance (on page 14).

Criterion 1 – Programme Aims, Learning Outcomes and Content:

The programme aims, Learning Outcomes, structure and content should fulfil the AHEP Learning Outcomes and align with the title of the qualification. Areas to be reviewed within this criterion are:

- Intended delivery, development and assessment of AHEP Learning Outcomes in programme aims and learning outcomes.
- Alignment of programme content, Learning Outcomes and aims with the programme title (Including compliance with Requirement 1).
- Programme Design: To ensure that all aspects of the delivery and assessment of the programme promote equality, diversity and inclusion.
- Programme Structure: balance between technical & non-technical content (Including compliance with Requirement 6 and review of alignment to Guidance note 5).
- Programme Content: demonstrating up-to-date subject content and continuing development, including engineering innovation, creativity and sustainability.
- Industrial involvement: evidence of industrial input and influence on programme design, including the maintenance of links with industry and other relevant external stakeholders.
- Impact of scholarship/research and consultation on programme design.
- Public information - how programme accreditation is integrated into all published material and the process for ensuring accuracy of such information.
**Criterion 2 – Achievement of AHEP Learning Outcomes:**

The Learning Outcomes achieved by the graduates from the programme should fulfil the AHEP output standards. Areas to be reviewed within this criterion are each of the five AHEP Learning Outcome areas as defined by AHEP4 (defined on page 5).

HEI’s should pay particular attention to the intellectual level at which the LO is expected to be met, i.e. whether graduates are required to be able to apply or simply to understand. This is especially important in design and innovation.

In addition, it should be noted that the complexity of problems expected to be solved increases through the accreditation levels i.e. they go from ‘well-defined’ to ‘broadly-defined’.

**Note:** It is important that within the AHEP learning outcomes mapping provided in the submission, that an AHEP learning outcome is only claimed where all students, at the threshold level, are assessed on the claimed AHEP learning outcome.

**Criterion 3 – Teaching and Assessment:**

Areas to be reviewed within this criterion are:

- Evidence of innovation in teaching methods, including any major changes, to delivery methods since the previous visit.
- Any non-campus-based teaching, including remote learning and support for employer-based delivery and projects.
- That the assessment standards, procedures and regulations are robust in assessing student achievement of the Learning Outcomes. *(Including compliance with Requirements 2, 3 & 5 and review of alignment to Guidance notes 1 and 4.)*
- The detection and consequences of academic misconduct (plagiarism and impersonation).
- Standard, appropriateness and challenge of examination papers and continuous assessment, including use of well-defined and transparent marking criteria. *(Including compliance with Requirement 4.)*

**Criterion 4 – Projects:**

The major project(s) should integrate and exercise the student learning obtained through the programme and should be assessed fairly and robustly. The areas to be reviewed for both individual and group projects are:

- Project selection and allocation. *(Including review of alignment to Guidance note 2.)*
- Staff supervision and management of student projects.
- Project planning and management.
- Standard and appropriateness.
- Marking and moderation. *(Including compliance with Requirement 8 and review of alignment to Guidance note 4.)*
- Where AHEP learning outcomes are claimed for a major project module it is expected that all students at the threshold level, meet and be assessed on the AHEP learning Outcome claimed.

**Note:** Innovation in teaching and assessment may remove the need for a major individual or group project, if it can be demonstrated that all the Learning Outcomes can be met by other methods.
Criterion 5 – Student Support and Staffing:
The students should be provided with support commensurate with their learning needs and the staff should have the experience and expertise to deliver teaching to the required academic standard. Areas to be reviewed within this criterion are:

- Entry route and data.
  (Including number recruited and compliance with Requirement 9.)
- Failure rates.
- Student support, including how Equality, Diversity and Inclusion within the cohort is handled.
- Industrial involvement in the student learning experience including: lectures, visits, sponsorship and training, and support for industrial placements.
- IET student awareness of professional registration and membership of PEIs, does the department have an IET Staff/Student Advisor?
- Support for development of employability of students.
- Staff recruitment, development and training.
- Use of teaching fellows, postgraduate tutors, demonstrators and visiting staff.
- Department staff numbers including academic and technical.
- Subject expertise of academic staff.
- Staff professional registration and membership of professional bodies.
  (Including review of alignment to Guidance note 6.)
Criterion 6 – Resources and Facilities:
The learning resources and laboratory facilities should be adequate and inclusive to support all students' learning experience. Areas to be reviewed within this criterion are:
- Information and learning resources (including VLEs).
- Provision of general and specialist laboratory computing facilities.
- Planned expenditure (capital and revenue).
- IT security of any virtual teaching and assessment.

Criterion 7 – Quality Assurance and Enhancement:
The programme review and monitoring procedures should operate effectively to guarantee the quality of the assessment in maintaining output standards and are effective in maintaining and enhancing the students' learning experience. Areas to be reviewed within this criterion are:
- Implementation of the action plan following the previous IET accreditation visit (or response to recommendations of Advisory Visit). *(Including compliance with Requirement 10.)*
- Programme design, approval and periodic and annual review processes.
- Continuous quality improvement processes.
- External academic audit (for example External Examiners). *(Including compliance with Requirement 7.)*

Accreditation Requirements

Graduates from an accredited programme will have met all of the required Learning Outcomes set out in AHEP.

Additionally, in order for a degree programme to be accredited:

**R1: Programme Title**
The title of the accredited degree programme must not be identical to an unaccredited programme awarded by the same Higher Education Institution. For programmes which are delivered through a collaboration arrangement at other locations, e.g. franchise arrangements, international campuses, the title may be the same as an accredited programme as long as the certificate shows the location of study for all locations.

Alternatively the transcript may be used if the degree certificate shows that a transcript is provided.

NB: Identical programme titles for accredited and non-accredited programmes at the same location are never permitted; this includes top-up programmes, whether they are accredited or not.

Rationale: This is necessary to ensure a clear and transparent record of accredited degree programmes.
R2: Condonement

All modules must be passed or receive a compensated pass (subject to the limits on use of compensation set out in R3) in order for a student to graduate with the named degree award. Compensation down to zero will be viewed as a condonement. **Thus condonement is not acceptable.**

**Rationale:** A pass (or compensated pass) in every module will ensure all intended Learning Outcomes are achieved by a graduate from the accredited programme.

R3: Compensation

R3a: The following limits will apply for compensation of marginal failure for students from 2022 intakes (in line with Engineering Council policy). Please refer to our Compensation Policy on page 16 for further details:

A maximum of 30 credits\(^\text{10}\) in a Bachelor’s or Integrated Master’s degree programme can be compensated.

A maximum of 20 credits\(^\text{10}\) in a Master’s degree other than the Integrated Master’s degree can be compensated.

The minimum module mark for which compensation is allowed is 10% below the nominal module pass mark\(^\text{11}\) (or equivalent if a grade-based marking scheme is used).

R3b: Major projects (group and individual) must not be compensated.

R3c: If HEIs are not currently compliant with the above compensation requirement prior to the 2022 intake, they will be expected to meet the previous IET compensation rules as defined in the Compensation Policy on Page 16 of this document.

**Rationale:** Limits are imposed on the amount of compensation to provide assurance that all intended Learning Outcomes are achieved by a graduate from the accredited programme.

Further guidance can be found within the Compensation Policy on Page 16.

R4: Pass mark for Postgraduate Modules

It is expected that postgraduate modules delivered as part of an Integrated Master’s degree and also as part of a Master’s degree other than Integrated Master’s will have the same pass threshold – i.e. modules delivered to MEng and MSc students must have the same pass threshold, normally 50% or 40% (or equivalent if a grade-based marking scheme is in use).

**Rationale:** It is recognised that some institutions use different pass thresholds for undergraduate and postgraduate modules (in such cases a pass mark of 40% is common for undergraduate modules and a higher pass mark of 50% for postgraduate modules). The IET is not prescriptive about use of a particular marking or grading scale but expects that postgraduate modules shared between MEng and MSc will have the same threshold academic standards (and hence pass mark or grade).

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\(^{10}\) Or the equivalent in other academic programme structures such as ECTS.

\(^{11}\) Hence for a normal module pass mark of 40% compensation is allowed only when the aggregate module mark is at least 30% and for a normal module pass mark of 50% compensation is allowed only when the aggregate module mark is at least 40%.
R5: Progression Within or Transfer to Integrated Master’s
A level average of at least 50% is required for students to transfer from Bachelor’s Degree with Honours to Integrated Master’s or to pass through a progression gateway on an Integrated Master’s degree.

Rationale: BEng/MEng programmes typically feature a common curriculum for the first one, two or even three levels of study. A minimum 50% progression threshold is required for students wishing to transfer from BEng to MEng or progress to the final stage(s) of MEng in order to preserve the high academic standing of the MEng degree.

R6: Postgraduate credit for Master’s Degrees other than Integrated Master’s
At least 150 of the 180 credits must be at postgraduate level (i.e. there should be no more than 30 credits of bridging material).

Rationale: This is to comply with sector-wide expectations and safeguard the overall standard of the postgraduate award.

R7: External Academic Auditors (External Examiners) or other External Peer Review
Each accredited programme must have one or more External Examiner(s) as prescribed in Chapter B7 of the UK Quality Code for Higher Education or other external peer review. External Examiners must have detailed oversight of all modules that contribute to the overall degree classification and be involved in the moderation of all assessments (coursework and examination papers) that contribute more than 30% to the overall module mark.

Rationale: The higher education community has a shared view of the fundamental importance of external peer review to maintaining academic standards and assuring and enhancing quality; this is a view shared by the IET and it is an expectation for all accredited degree programmes, even in countries that do not traditionally make use of an External Examiner system prescribed in the UK Quality Code for Higher Education (see Guidance on the role of External Academic Audits).

R8: Assessment of Major Projects (Group and Individual)
R8a: All major project reports (group and individual) must be marked independently by two separate assessors and without knowledge of the other’s marks and comments (blind double marking). A reconciliation process is then required to agree the final mark for the project report (normally with the approach dependent on the difference between the marks awarded by the two assessors).

In addition, a robust moderation process will ensure consistency in project assessment and maintenance of threshold academic standards. The assessment of group projects must allocate differentiated marks to individual students within the group.

Rationale: Double marking and moderation will ensure rigour and transparency in the assessment of major project reports, while the allocation of differentiated marks to individual students within the group project will ensure that the intended Learning Outcomes are rigorously assessed for all members of the group.

R8b: Some providers prefer a major final year group project rather than an individual project.
The following additional guidance is provided for group projects in such cases:

Group projects need to be structured such that each student has a clearly defined brief against which to be assessed, in addition to any group mark. The setting of this brief may well be part of the group project activity itself. As such:

- Each student must have clearly specified aims and objectives for the individual’s part of the project.
- The project must contain a series of assessment points allowing assessment of each individual performance and contribution.
- Each student must produce a written report detailing exactly what their contribution to the project has been.

It is the responsibility of the institution seeking accreditation to demonstrate that students graduating via this route meet the AHEP Learning Outcomes, including those usually delivered via group projects.

The appropriateness of the use of this solution in IET accredited programmes will be judged on a case-by-case basis by Visit Panels and the AAC.

The individual contribution to the project should constitute at least 40% of the overall project mark.

**R9: Direct Entry to the Final Year of an IET Accredited Degree Programme**

The Final Year Direct Entry Policy must be complied with in full.

Rationale: The IET policy on Direct Entry to the final year of an accredited degree programme has been devised to ensure that all relevant Learning Outcomes are achieved by a graduate from the programme.

**R10: Reporting Major Changes to programmes and completing the Annual Report**

All departments/faculties/schools offering accredited programmes are expected to engage with the IET at least annually via the annual report to provide an update on the Action Plan as well as communicating any major changes.

The IET must be advised of any changes that may affect the accredited programmes or their delivery.

Failure to inform the IET of other sites that deliver the accredited programmes will jeopardise the accreditation awarded to them, unless they are suitably distinguishable.

Rationale: The IET accreditation is based on the submission and visit; any changes may affect the validity of the accreditation.
Accreditation Guidance

The following is considered good practice for accredited degree programmes:

G1: Component Thresholds

Where modules include two assessment modes (coursework and examination) that assess different Learning Outcomes a pass threshold should be adopted for each mode that contributes more than 30% to the overall module mark, with this pass threshold no more than 10% below the normal module pass mark.

Rationale: The UK Quality Code for Higher Education places a responsibility on degree - awarding bodies to ensure that the award of credit and qualifications takes place only when the relevant Learning Outcomes have been demonstrated through assessment (Expectation A3.2). The use of pass thresholds for coursework and examination components within a module will help ensure all Learning Outcomes are demonstrated by a graduate from the accredited programme.

G2: Major Projects (Group and Individual)

Accredited degree programmes typically include major projects as follows:

<table>
<thead>
<tr>
<th>Foundation Degree</th>
<th>A group or individual final level work-based or work-related project, typically 20 to 40 credits (17% to 35% of the year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's Degree or Bachelor's Degree with Honours</td>
<td>An individual final level project, typically 30 to 45 credits (17% to 35% of the year) – see Note 1 (page 13)</td>
</tr>
<tr>
<td>Integrated Master's Degree</td>
<td>An individual project, typically 30 to 45 credits (17% to 35% of the year) A group project, typically 30 to 45 credits (17% to 35% of the year) These projects may be in the final stage/year or penultimate stage/year of the programme (normally one project in each of the final two stages/years of study)</td>
</tr>
<tr>
<td>Master's Degree other than Integrated Master's</td>
<td>An individual project, typically 60 credits (or approx. 30%) for MSc and larger for MRes</td>
</tr>
<tr>
<td>Professional Doctorate</td>
<td>Project work is expected to form the major part of the programme of study</td>
</tr>
</tbody>
</table>

Rationale: Major projects, group and individual, make a particularly effective contribution to the achievement of Learning Outcomes, notably in the areas of Design, Economic, legal, social, ethical and environmental context and Engineering practice. However, if it can be demonstrated that all the Learning Outcomes can be met by other means then a major project is not required.

G3: Assessment

Accredited programmes at all levels will normally include a range of assessment methods. A Visit Panel will welcome innovative assessment methods and will carefully examine the programme assessment strategy to ensure:

- Assessment tasks are well matched to the Learning Outcomes assessed in each module.
- An appropriate range of assessment activities is in use.
- The activities themselves are valid and reliable with robust quality assurance arrangements (see R7).
- Academic standards set and achieved by students are commensurate with the level of study.
- There are robust mechanisms in place to monitor and act on plagiarism and other academic malpractices in any assessment task.

The IET recommends that a combination of coursework and examination assessment is generally appropriate but no specific balance between the two is mandated.

G4: Assessment of Group Work (excluding major group Project)
The assessment of group work, should allocate differentiated marks to individual students within the group.

Rationale: There is considerable research evidence to demonstrate the consequences of assessing group work in a particular way, for example – ‘Allocating a single group mark to all members of a group rarely leads to appropriate student learning behaviour, frequently leads to freeloading, and so the potential learning benefits of group work are likely to be lost, and in addition students may, quite reasonably, perceive their marks as unfair.’ (Gibbs, 2009)

G5: Curriculum Design – Non-technical Content
For Master’s Degrees other than Integrated Master’s no more than 40 of the 180 credits should be non-technical. For all other programmes no more than 30% of the total credits should be non-technical.

Rationale: These limits are intended to ensure there is sufficient technical content to provide full coverage of the required Learning Outcomes.

G6: Professional Qualifications of Teaching Staff
A minimum of 50% of teaching staff should be professionally registered as either CEng or IEng, and half of these with the IET.

Rationale: This is to ensure programmes are oriented towards professional practice and also demonstrates the importance of professional registration to students.

Important Notes:
1. Any shortcomings in meeting the seven IET Accreditation Criteria or against the requirements (R1 to R10) may lead to a decision that the programme cannot be accredited as currently presented; alternatively the Accreditation Panel may set one or more ‘requirements’ or ‘immediate requirements’. The former can be addressed through the Action Plan, while immediate requirements must be resolved before accreditation can be conferred.
2. Any non-compliance with the guidance (G1 to G6) may be highlighted by the Accreditation Panel and feature as recommendation(s) in the visit report. Recommendations must be addressed through the Action Plan but do not normally impact directly on the accreditation conferred.
3. An Accreditation Panel may consider that non-compliance with one or more of the guidelines (G1-G6) is sufficiently severe to necessitate a formal Requirement in the visit report that should be addressed in the Action Plan.
Compensation Policy

First issued: 25 April 2019
Last update: 25 April 2019

Introduction
1. The Engineering Council released new Compensation Regulations in November 2018, with which HEIs will be expected to comply by the September 2022 intake (see: engc.org.uk/eab).

2. From visits in September 2019 onwards, the IET will review the HEI’s relevant academic regulations to determine whether they align with these new regulations (Requirement 3) and will require compliance by the September 2022 intake.

3. However, the IET recognises that educational institutions may require time to align with the new compensation regulations. If HEIs are unable to comply with the above compensation requirements prior to the 2022 intake, they will in the interim be expected to continue to meet the previous IET compensation rules as detailed below:

Previous IET Compensation Policy
4. The following limits will apply for compensation of marginal failure
   a) For programmes with 120 credits at each level of study (i.e. Foundation Degree, Bachelor’s Degree, Bachelor’s Degree with Honours, Integrated Master’s):
      A maximum of 20 credits in a Bachelor’s or integrated Master’s degree programme can be compensated at each level of study. The minimum module mark for which compensation is allowed is 10% below the nominal module pass mark (or equivalent if a grade-based marking scheme is used).
   b) For programmes that use only 30 credit modules:
      A maximum of 30 credits (one module) may be compensated at each level of study when the aggregate module mark is no more than 5% below the normal module pass mark (or equivalent if a grade-based marking scheme is in use).
   c) For programmes with 180 credits at each level of study (i.e. Master’s degree other than Integrated Master’s):
      A maximum of 30 credits in a Master’s degree other than the integrated master’s degree can be compensated. The minimum module mark for which compensation is allowed is 10% below the nominal module pass mark (or equivalent if a grade-based marking scheme is used).

5. Major projects (group and individual) must not be compensated.

Rationale: Limits are imposed on the amount of compensation to provide assurance that all intended Learning Outcomes are achieved by a graduate from the accredited programme.

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12 Or the equivalent in other academic programme structures such as ECTS
13 Hence for a normal module pass mark of 40%, compensation is allowed only when the aggregate module mark is at least 30%, and for a normal module pass mark of 50%, compensation is allowed only when the aggregate module mark is at least 40%.
Guidelines on the new Engineering Council Regulations

6. The Engineering Council will be providing some further guidance on adoption of the new compensation regulations which will be circulated once finalised and will be found here: engc.org.uk/eab.

A summary of these is below:

a) The new compensation regulations will not apply to Foundation years of Bachelor's and Integrated Master's programmes, or to the first year of Scottish Bachelor's and Integrated Master's programmes.

b) The statement that: 'No condonement of modules delivering AHEP Learning Outcomes is allowed' specifies that neither core nor optional engineering modules can be condoned. Condonement is only possible for non-engineering modules offered within the programme that do not cover any AHEP Learning Outcomes (for example, a language taken as an 'outside option').

Final Year Direct Entry Policy

First issued: 21 April 2010
Last update: 22 February 2018

Introduction

1. The Engineering Council has stated that it no longer considers that direct entry into the final year of undergraduate courses is an issue as long as the Accreditation of Higher Education Programmes (AHEP) Learning Outcomes can be seen to be met.

2. The IET recognises the challenges that educational institutions face in ensuring that students entering directly into the final year of a degree programme are well positioned to meet all programme learning outcomes to the required standard and does not underestimate the burden placed upon the institution's staff if they are to ensure that all such individuals have met the required learning outcomes to the appropriate standard to enable them to be judged as equivalent to their own students progressing from the previous level of study.

3. In order to be able to consider those students entering directly into the final year as receiving an IET accredited degree, rigorous processes will need to be utilised within the educational institution to ensure that AHEP Learning Outcomes, standards, assessment rigour and prior learning environment are commensurate with those of an accredited programme. Coupled with paragraph 2 above, this results in the IET normally only considering final year direct entry students transferring from other accredited programmes as being appropriate for consideration of being recognised as receiving an accredited degree.

Policy

4. To ensure that all programme (and AHEP) Learning Outcomes are met by all final year direct entry students, the student's learning to date must be mapped against the host institution's learning outcomes up to that point in the course. The host institution may wish to consider using the templates developed by the IET for this, though this may not be the most efficient model and is not prescribed. This could be linked with bridging activities for those without a sufficiently good match.
5. In those cases where there are multiple entrants from another course either internally or from another institution, the assessment may be approached partially en-bloc, noting that this is not a replacement for the arrangements for accreditation of franchised provision and that the host institution will also need to validate successful achievement of AHEP Learning Outcomes to the required standard on a student-by-student basis.

6. The mapping of Learning Outcomes must be backed up with suitable evidence and an appropriate audit trail. This is likely to include copies of course documentation for the prior period of study and assessment transcripts, both clearly cross-referenced to the mapping of Learning Outcomes.

Guidelines

7. The host institution will need to satisfy an accreditation team that:

   a) There is a robust and rigorous process in place and in use for the assessment of final year direct entry applicants both in terms of Learning Outcomes achieved to date and their mapping onto the host course Learning Outcomes at the point of entry.

   b) There is a robust and rigorous process in place to ensure that the Learning Outcomes achieved to date are of the appropriate standard and have been achieved within a learning environment compatible with those normally expected of an accredited programme of study.

   c) There is a robust and rigorous process in place for assessment of preparedness of direct entry applicants to benefit from the learning environment within the host organisation.

   d) That the processes of (a) (b) and (c) above are in use, as evidenced by samples of the audit trail.

8. It is noted that the existing pathway to professional registration (the individual case procedure) remains in place for those students not satisfying these criteria.

9. Where an educational institution wishes to have a regular entry into the final year from a non-accredited course the IET would be willing to discuss how such a route might be accredited; this is likely to include a visit to the source institution and an assessment of its provision.

Backdating Policy

First issued: 18 March 2014
Last update: 25 November 2020

1. The Engineering Council’s Registration Code of Practice states the following with respect to the accreditation process for educational programmes:

   Programmes shall be accredited for a fixed period of not more than five years. Exceptionally an extension may be permitted of up to one academic year and accreditation may be back dated to allow cohorts whose work has been reviewed as part of the programme accreditation exercise to benefit from the decision. Such decisions must be fully documented, transparent and auditable. (Paragraph 29).
2. The IET will consider backdating accreditation in the following circumstances:
   a) When there has been a gap in accreditation.
   b) When a programme is accredited for the first time but has already produced graduate output.
   c) When it is desirable to align periods of accreditation for multiple programmes.

3. The Panel will need to agree that they are confident the Learning Outcomes would be met by a graduate from all the intake years the backdating is to include. Evidence of graduate outputs for the intakes in question should be available to justify backdating. This will normally be project reports but may include other outputs if significant changes have been made to the curriculum or delivery methods.

4. Any backdating suggested by the visiting panel will be subject to judgement and approval by the AAC.

5. Backdating may be applied up to the first intake of the cohort in their final year at the time of the visit and to include the previously graduated cohort when the relevant output has been reviewed as part of the visit and must be fully documented in the visit report.

Policy for Accreditation of New or Recently Introduced Programmes

Previously ‘Academic Accreditation without a Graduating Cohort’

First issued: 30 May 2013
Last update: 29 February 2019

1. For programmes normally lasting one to two calendar years (e.g. MSc, FD):
   a) If documentation for a graduating output exists, proceed with the accreditation process as normal.
   b) If at least 50% of the taught phase is available for review, the IET will review the programme; however, any accreditation conferred will be subject to a First Output Review.
   c) If less than 50% of the taught phase is available for review, accreditation will not be granted, though feedback can be provided. The visit should not proceed unless other programmes which have the potential to be accredited are also under consideration.

2. For programmes greater than two calendar years (e.g. BEng, MEng):
   a) If documentation for a graduating output exists, proceed with the accreditation process as normal.
   b) If the final year of the programme is under way, and all other material including that for the penultimate year is available, the IET will review the programme; however, any accreditation conferred will be subject to a First Output Review.
   c) If the final year of the programme is not underway, accreditation will not be granted, though feedback can be provided. The visit should not proceed unless other programmes which have the potential to be accredited are also under consideration.

3. A recently introduced programme, where at least 70% of its content is shared with an existing accredited programme, may be presented for accreditation via the Commonality Review.
For new programmes which share all Learning Outcomes and assessed content with an existing programme (for example the introduction of a year in industry or study abroad), a visit may not be necessary please contact the IET Academic Accreditation staff for more information:
E: accreditation@theiet.org | T: +44 (0)1438 766510

Policy for Extension of Accreditation

First issued: 18 July 2012
Last update: 31 March 2016

1. The Engineering Council's Registration Code of Practice states the following with respect to the accreditation process for educational programmes:

   *Programmes shall be accredited for a fixed period of not more than five years. Exceptionally an extension may be permitted of up to one academic year and accreditation may be back dated to allow cohorts whose work has been reviewed as part of the programme accreditation exercise to benefit from the decision. Such decisions must be fully documented, transparent and auditable.* (Paragraph 29).

2. The following points should be considered when a request for extension of accreditation is put forward to the IET:

   a) Extension requests are only expected in exceptional circumstances.

   b) The maximum single period of extension is one year and only one extension per accreditation period will be granted.

   c) An extension will only be considered if a department has provided evidence of satisfactory progress against the Action Plan from the previous visit.

3. Reasons for an extension could include:

   a) If courses were under major restructuring during the scheduled year of the visit and the requested extension covered intakes into the programmes which remain in the same format as seen at the previous visit.

   b) If a department/school/faculty was undergoing major restructure during the scheduled year of the visit and the IET was satisfied that arrangements are in place to safeguard the experience of students.

   c) If the need arose due to a scheduled visit being cancelled through the fault of the IET or its representatives.

Note:
The IET will look at the circumstances surrounding each request for an extension of accreditation on an individual basis (the reasons listed above for an extension is not exhaustive). Any request to extend the period of accreditation must be submitted to the Engineering Council’s Registration Standards Committee (RSC) and the application must include:

- Reason for the request.
- Supporting evidence.
- Confirmation from the HEI that the programme complies with the Learning Outcomes in AHEP.
Commonality Review Process

First issued: 10 December 2013
Last update: 22 February 2018

1. To enable accreditation of programmes between accreditation visits if the programme meets the following criteria:
   a) Each level of the programme shares at least 70 percent of its content, across all levels of the programme, with another single programme within the same department which holds current accreditation with the IET.
   b) The programme Learning Outcomes are confirmed as appropriate against the programme title.
   c) The programme should align with and deliver all the required Learning Outcomes as set out in the Accreditation of Higher Education Programmes (AHEP).
   d) The programme under consideration has already enrolled its first cohort.
   e) No major changes have occurred with regards department or university resources or governance since the most recent full accreditation visit.
   f) No significant issues arise during the review process.

2. Assessment process for the Commonality Review:
   a) Occurs in response to a request from the Department to accredit programmes between visits.
   b) Request is normally reviewed by the previous chair of the visit plus one other panel member.
   c) Accreditation can only be awarded to the programmes under consideration in line with the accredited programmes they have been compared with.
   d) A visit to specifically consider the new accreditation request might be necessary.
   e) If the review of the new request reveals significant issues the decision may be deferred until the next full accreditation visit.

3. The following information will be submitted as part of the review:
   a) A rationale for starting the new programme(s) (including consideration of Learning Outcomes, projected recruitment statistics, internal validation documentation, and details of any changes to the currently accredited programmes since the most recent full accreditation visit (if relevant)).
   b) Structure of the programme.
   c) Resource implications for new modules (including staffing and equipment).
   d) Details showing the shared modules clearly demonstrating 70 percent commonality.
   e) Documentation showing how the required AHEP Learning Outcomes are delivered and assessed within the programme.
   f) Updated Action Plan from the last IET visit.

The Commonality Review cannot be used for accredited programmes at another location, e.g. Franchise arrangement/flying faculty.
Guidance on Threshold Academic Standards

First issued: 17 April 2015
Last update: N/A

Definitions of Academic Standards

This section is drawn from the UK Quality Code for Higher Education: Part A: Setting and maintaining academic standards.

1. According to the Quality Assurance Agency for Higher Education:

   **Threshold academic standards** are the minimum acceptable level of achievement that a student must demonstrate to be eligible for an academic award. For equivalent qualifications, the threshold level of achievement is agreed across the UK and is described by the qualifications descriptors set out in the national frameworks for higher education qualifications.

   **Academic standards** are the standards that individual degree-awarding bodies set and maintain for the award of their academic credit or qualifications. These may exceed the threshold academic standards.

2. Threshold academic standards for UK degree-awarding bodies are met by aligning programme learning outcomes with the relevant qualification descriptors in the national frameworks for higher education qualifications and through use of subject benchmark statements (where appropriate).

3. Individual degree-awarding bodies are also responsible for defining their own academic standards by setting the pass marks and determining the grading/marking schemes and any criteria for classification of qualifications that differentiate between levels of student achievement above and below the threshold academic standards.

Use of Threshold Academic Standards in Academic Accreditation

4. A programme presented for IET Academic Accreditation will have:

   a) Programme learning outcomes that are aligned with the relevant qualification’s descriptor and the Accreditation of Higher Education Programmes (AHEP) Learning Outcomes for the accreditation that is being sought.

   b) A curriculum design and associated module learning outcomes that will collectively ensure that a graduate from the programme will have achieved all the programme learning outcomes.

5. The UK Quality Code for Higher Education places a responsibility on degree awarding bodies to ensure that the award of credit and qualifications takes place only when the relevant learning outcomes have been demonstrated through assessment.

   Expectation A3.2

   Degree-awarding bodies ensure that credit and qualifications are awarded only where:

   a) The achievement of relevant learning outcomes (module learning outcomes in the case of credit and programme outcomes in the case of qualifications) has been demonstrated through assessment.

   b) Both UK threshold standards and their own academic standards have been satisfied.
6. When considering academic standards, an Accreditation Panel will evaluate:
   a) The programme learning outcomes.
   b) Curriculum design.
   c) Module content, learning outcomes and assessment methods.
   d) Assessment regulations that govern the award of credit and qualifications (these must comply with IET requirements).
   e) Examination papers and grading/marketing schemes (along with samples of marked scripts).
   f) Coursework briefs and grading/marketing schemes (along with samples of marked student work).
   g) Grading/marketing schemes for major projects (along with samples of assessed outputs and evidence of the moderation process).
   h) Statistical reports of student performance at module and programme level.
   i) External examiner reports.
   j) Programme approval, annual monitoring and periodic review processes and associated reports.

7. The Panel will carefully review samples of marked student work (coursework, project reports and examinations) to ensure that a mark or grade is awarded at threshold pass level only where:
   a) All relevant learning outcomes have been achieved.
   b) Threshold academic standards have been satisfied.

8. Key reference points for threshold academic standards are:
   a) Accreditation of Higher Education Programmes (AHEP) Fourth Edition
   b) The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies
   c) Engineering Subject Benchmark Statement
   d) Foundation Degree Benchmark Statement
   e) IET Guidance on how to meet the Learning Outcome Requirements for Accreditation
Guidance for Identifying Individual Contributions in MEng Projects for BEng Awards

First issued: 18 July 2012
Last update: N/A

Background

1. A small number of universities in the UK offer accredited MEng programmes with a group project in the penultimate stage/year and an individual project in the final stage/year. Individuals who embark on a MEng programme but exit early with a Bachelor’s qualification will not normally achieve an IET accredited degree if they have not completed an individual project.

2. If appropriate learning outcomes have been met it is desirable to enable such individuals to be awarded an IET accredited degree without altering the structure of the programme.

Guidance

3. Group projects need to be structured such that each student has a clearly defined brief against which to be assessed, in addition to any group mark. The setting of this brief may well be part of the group project activity itself. As such:
   a) Each student must have clearly specified aims and objectives for his or her part of the project.
   b) The project must contain a series of assessment points allowing assessment of each individual performance and contribution.
   c) Each student must produce a written report detailing exactly what their contribution to the project has been.

4. Alternatively, individuals who exit early could be required to submit an individual report equivalent to that described in point 3 above before being awarded a Bachelor’s qualification, even though this is not part of the normal MEng requirements for the programme which they are on.

5. The requirement to identify individual contributions from group projects should not compromise the achievement of group project learning outcomes.

6. It is the responsibility of the institution seeking accreditation to demonstrate that students graduating via this route meet the Accreditation of Higher Education Programmes (AHEP) Learning Outcomes.

7. The appropriateness of the use of these solutions in IET accredited programmes will be judged on a case-by-case basis by Visit Panels and the AAC.
Guidance on External Academic Audit

First issued: 23 May 2012
Last update: 18 January 2017, v.5

Background

1. It is IET policy that all Higher Education Providers (HEPs) offering IET accredited programmes must operate an external academic audit system. In the UK, external academic audit is provided through the “External Examiner” system; in other countries an alternative independent audit mechanism may exist or there may currently be no equivalent. This note is primarily for the benefit of institutions which do not traditionally have an external academic auditor type role or equivalent. It is for guidance and is not intended to fully specify the role of academic auditors. It is normal practice for accreditation panels to review the external academic audit reports as part of the accreditation visit activity.

2. Institutions appoint as academic auditors people drawn from higher education, industry and the engineering profession. Those appointed are normally highly qualified and experienced in the subject or specialism to which the appointment relates. They are external to, and therefore independent of, the appointing institution, albeit contracted by the institution to apply and monitor the institution's published assessment and examination rules and regulations.

3. To avoid any potential conflicts of interests, no external academic auditor should simultaneously hold any other paid or unpaid role at the same HEP and should not be appointed if they have previously worked at the HEP within the last 10 years.

Guidance

4. It is expected that the external academic auditors visit the HEP at least once per year; ideally at the same time as other external academic auditors for cognate programmes. At least, one member of this panel of auditors should have experience of accreditation by a Washington Accord signatory. This experience need not be as an accreditor; it could be a senior academic whose programmes are accredited.

5. Awarding institutions expect their external academic auditors to provide informative comment and recommendations upon whether:

   a) The degree-awarding body is maintaining the threshold academic standards set for its awards in accordance with any relevant national or international regulations for higher education qualifications, and ideally guidance on Accreditation of Higher Education Programmes (AHEP) provided by Engineering Council (UK) or the equivalent\textsuperscript{14}.

   b) The assessment process measures student achievement rigorously and fairly against the intended outcomes of the programme(s) and is conducted in line with the degree awarding body's policies and regulations.

   c) The academic standards and the achievements of students are comparable with those in other Higher Education Institutions of which the external academic auditors have experience.

\textsuperscript{14} In the case of IET accredited programmes, this would include, but may not be limited to, any IET Accreditation requirements set following an accreditation visit.
6. Awarding institutions also expect their external academic auditors to provide informative comment and recommendations on:

a) Good practice and innovation relating to learning, teaching and assessment observed by the external examiners.

b) Opportunities to enhance the quality of learning opportunities provided to students.

c) Proposed changes to the existing modules or programmes for which they have responsibility.

7. The university retains responsibility for the standards of its awards, and for the assessment of its students. External academic auditors act as a form of quality control to this process and are asked to report annually to the university President/Vice Chancellor or their nominee on the standards of awards and the appropriateness of procedures used to determine progression and awards.

8. The principal role of an external academic auditor is to ensure that:

a) The assessment package (including all types of coursework and examinations that it includes) is appropriate to the programme component and the level and offers the students a chance to demonstrate that they have met the learning outcomes. External academic auditors must have detailed oversight of all modules that contribute to the overall degree classification and be involved in the moderation of all assessments (coursework and examination papers) that contribute more than 30% to the overall module mark.

b) The assessment processes for each element of assessment are rigorous, sound, fairly operated and in line with the university's policies and regulations.

c) Academic standards set for the university's awards, or part thereof, are appropriate and comparable with those in (some) other higher education institutions.

d) That the overall process for deciding awards is fair, consistent, and appropriately administered, usually through attendance at assessment boards.

9. To fulfil their role and to obtain evidence on which to base their judgements, external academic auditors are normally asked to consider:

a) The form and content of the assessment tasks that are used to assess students.

b) A sample of students' work that contributes to the final award, including project reports, examinations and coursework, for each programme for which they have responsibility.

c) Any processes used to decide final awards and progression through the programme.

10. External Academic Auditors should satisfy themselves that the marking of assessment tasks is at a consistent and appropriate standard. This is normally achieved by considering a sample of work across all modules, representing a range of student abilities. The emphasis is on gaining confidence in the standards and procedures adopted by the marking team. Particular attention should be paid to modules that contribute directly to the final programme Learning Outcomes, especially individual and group projects.

11. External academic auditors are not responsible for the assessment of individual students.

For more information:

For UK institutions: see the UK Quality Code for Higher Education, Part B: Assuring and enhancing academic quality, Chapter B7 External Examining
qaa.ac.uk/en/quality-code/advice-and-guidance/external-expertise

For international institutions seeking further guidance on requirements for external academic auditors please contact accreditation@theiet.org.
Guidance for the Teaching of Engineering Ethics

First issued: 27 May 2010
Last update: 31 March 2016

1. The IET has adopted the Royal Academy of Engineering (RAEng) definition of Ethics (see the Statement of Ethical Principles\(^{15}\)). It is recognised that ethical principles can be subjective and different interpretations may be allowable if a rational explanation is provided for these differences.

2. It is recommended that engineering ethics be integrated into existing modules so that the subject can be understood in context. Teaching as a separate module is also acceptable as long as it is appropriate for the programme and in context.

3. It is recommended that ethics be taught by Engineering Department staff so that the concepts can be explained in a pragmatic and practical way.

4. It is recommended that delivery of engineering ethics be performed at all levels of study so that it may be a recognisable theme throughout the programme.

5. It is recommended that the assessment of engineering ethics be integrated into existing assignments such as, coursework, discussion group exercises and project reports.

6. Examples of effective forms of delivery of engineering ethics are:
   - On an introductory level; teaching that plagiarism demonstrates unethical behaviour.
   - Inviting guest speakers from industry to provide industrial context and present case studies to illustrate the importance of ethical awareness.
   - Within all types of project work, where the student may produce a risk assessment of the ethical implications of their decisions.
   - Using visual aids such as presentations and video material.
   - By including an international context, where students are made aware that there are different definitions of ethics around the world.

7. It is recommended that the RAEng and The Higher Education Academy (HEA) be asked for further examples of teaching engineering ethics. Particular reference should be given to the engineering ethics curriculum map\(^{16}\) published by the RAEng, as well as to useful case study material by the former HEA Engineering Subject Centre.

8. Useful Resources:
   - Royal Academy of Engineering
   - Higher Education Academy

9. Appendix 1 contains a recommended reading list.

\(^{15}\) See raeng.org.uk/policy/engineering-ethics/ethics statement
\(^{16}\) See raeng.org.uk/policy/engineering-ethics/ethics teaching
Recommended Resources in Support of the Embedding of Ethics into the Curriculum

First issued: 27 May 2010
Last update: 22 February 2018

1. Royal Academy of Engineering (RAEng)
   raeng.org.uk/policy/engineering-ethics/ethics
   The Academy has undertaken a range of collaborative activities on engineering ethics, bringing together the profession to agree a set of aspirational principles and working with engineering educators to explore ways of teaching engineering ethics.
   The Academy's work on engineering ethics covers ethics in engineering education, ethics in practice and the issues surrounding emerging engineered technologies. Through events, publications and teaching resources, the Academy has sought to enrich thinking about engineering ethics and provide materials and inspiration for engineers interested in the wider impact of their work.
   - Statement of ethical principles
   - Engineering ethics in practice
   - Teaching engineering ethics
   - Ethics and emerging technologies

2. Inter-Disciplinary Ethics Applied: a Centre for Excellence in Teaching and Learning (IDEA CETL, University of Leeds)
   leeds.ac.uk/arts/info/125160/inter-disciplinary_ethics_applied_centre
   This is the website of the Inter-disciplinary Ethics Applied Centre for Excellence in Teaching and Learning (IDEA CETL). This CETL was awarded to the University of Leeds to integrate inter-disciplinary ethics into the curricula of 14 disciplines at the University and facilitate further development across the UK and beyond. The Centre collaborated with the Engineering Subject Centre during its first year to support the teaching of ethics to engineers.

3. An introduction to Ethical Thinking: A Customisable Teaching Package
   academia.edu/9533645/Introduction_to_Ethical_Thinking_Tutor_Notes
   Authored by Dr Nafsika Athanassoulis, this teaching resource introduces students to ethical thinking and is suitable for students in any academic discipline who may not have been taught any ethics before. It can be used either by tutors who are new to teaching ethics, or those who have more experience but want some further ideas and inspiration.
   This is a flexible and customisable resource, which can be tailored to suit the needs of your discipline and provides all the support materials required. Tutors can pick just one or two sessions and include them as part of another module, or choose to run all ten as a module in its own right.
   Each session comes with easy-to-use Tutor Notes, which suggest a variety of possible teaching methods and include suggestions for specific disciplines (for example, Business, Life Sciences, Engineering, Journalism etc.), further readings and assessment exercises.
4. Other: Teaching Engineering Ethics - A Case Study Approach
onlineethics.org/cms/5939.aspx

This resource, edited by Michael Pritchard, presents more than 30 cases which address a wide range of ethical issues that can arise in engineering practice. There are some broad categories in terms of which many of the cases can be arranged. However, it should be noted that many cases fall into several of these categories; and many cases raise issues for which no special category is listed. A special feature of the case studies is that they are accompanied by a set of commentaries. The realistic case studies enable students to reflect and can provide helpful preparation for dealing with ethical issues they are likely to face once they enter engineering practice.

Guidance for Planning and Completing an ADAMS Submission

First issued: 22 February 2018
Last update: 22 February 2018

Full guidance can be found in the ADAMS submission guidance document which is available via ADAMS or on the IET website.

1. Planning Stage
   a) Time allocation

   For the average submission (10 programmes with little commonality) we advise that you will need to allocate a full time resource (or equivalent) over a 3 month period to input data. The planning and collation of data should start at least 6 months before the visit date. Some of the data input is clerical but it does require input from academic staff, such as module leaders and programme leaders.
b) 

**Submission Coordinator**

It is recommended that a Senior Academic member of staff takes the lead and coordinates input and collation of information. This person should be the ‘Accreditation Contact’ within ADAMS.

c) 

**Consult and stay in regular contact with your IET Staff contact**

We can advise on how to use ADAMS to create your submission in a way that suits your institution (within reason). For example, if you have programmes with a significant amount of commonality but have different titles we can advise on how to limit the amount of duplicate entries you may have to make. If in doubt, please ask.

2. Check your Alignment with the IET’s Requirements and Guidelines

These can be found within this Pack. You can flag any concerns or queries to your IET staff contact.

3. Changes to Programmes

Please discuss, with your IET staff contact, how to present information within ADAMS if you are planning major changes to the programmes the year of the visit, e.g. a re-validation event.

Usually the visit can go ahead as planned but it is dependent on whether sufficient data is available for the new versions of the programmes. The submission should be based on the new version of the programmes, although assessment examples and student work from a predecessor will be accepted for new modules where appropriate. Sight of an ‘old to new’ mapping document would be very useful for the accreditation panel should this be the case.

If there is not going to be sufficient documentation readily available by the time of the submission deadline then it may be that the best option is to postpone the visit until the following academic year or later on in the current academic year. You may be entitled to an extension of accreditation depending on your circumstances.

4. New Programmes

The IET can only consider programmes for accreditation once they are in their final year of operation, unless they share 70 per cent commonality (across all levels) with programmes currently accredited by the IET, though we are happy to provide advice. It may be that it is appropriate to carry out an Advisory Visit, particularly if there are a number of new programmes or indeed the programmes are at a different level to those previously accredited within the department.

Only create a new programme entry in ADAMS for new titles with significant differences in content (more than 30% each level) from an existing record. It is possible to use the ‘copy’ function against a similar programme to use as a basis for a new programme. The copy function is often used for ‘new streams’ of a programme, for example where there is an ‘Electrical Engineering programme’ and a ‘Power Systems pathway’ is created with the introduction of some Power Systems modules, making the programme title Electrical Engineering (Power Systems) or similar.

You should not create a new programme entry for title changes where there is no significant change to the content (less than 30% each level).
Engineering Council's Compensation and Condonement Policy

First issued: 29 February 2019  
Last update: 29 February 2019

The following is the Engineering Council’s Compensation and Condonement Policy as published in November 2018. Further information and guidance can be found at engc.org.uk/standards-guidance/standards/accreditation-of-higher-education-programmes-ahep/

Many UK universities’ examination board rules include some allowance for compensation or condonement17 of limited failure in one or more modules, where this is compensated by a stronger performance across the programme as a whole. Paragraph 23 of the Registration Code of Practice requires accrediting institutions to consider the awarding institution’s regulations regarding progression. They may impose constraints on an accreditation decision as a result of this.

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

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

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

- Evidence that all AHEP learning outcomes are met by all variants of each programme must be provided before accreditation can be granted.
- No condonement of modules delivering AHEP learning outcomes is allowed.
- A maximum of 30 credits in a Bachelors or integrated Masters degree programme can be compensated, and a maximum of 20 credits in a Masters degree other than the integrated Masters degree.
- Major individual and group-based project modules must not be compensated.
- The minimum module mark for which compensation is allowed is 10% below the nominal module pass mark (or equivalent if a grade-based marking scheme is used).

The key consideration in the rules above is to ensure that graduates of accredited engineering degree programmes have met all the programme learning outcomes specified in the Engineering Council’s AHEP (Accreditation of Higher Education Programmes) specification.

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17 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.
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We are The Institution of Engineering and Technology (IET) and we inspire, inform and influence the global engineering community to engineer a better world. As a diverse home across engineering and technology, we share knowledge that helps make better sense of the world in order to solve the challenges that matter. It’s why we are uniquely placed to champion engineering.

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E5821008/PDF/0621
Guidance for dealing with the impact of a pandemic on assessment and delivery of programmes 2021-22 academic year and beyond.

Background
Following the outbreak of the Covid-19 pandemic in 2020, universities have had to adapt to different methods of assessment and delivery of programmes. To ensure that the changes made do not adversely affect the accreditation status, accredited faculties, departments, and schools have been asked to complete an Impact Report for the 2019-20 and 2020-21 academic years and submit this to the PEIs for approval.

The review of these Impact Reports has identified 5 policies that must be adhered to so as not to impact a programme’s accredited status.

The following policies also apply to accredited programmes beyond this time.

The Policies

Summary
1. EngC (and IET) Compensation and Condonement rules to be met in full
2. 4-hour time limit on online ‘closed book’ examinations and 24-hour examinations should be conducted and designed as ‘open-book’.
3. Extrapolation of coursework marks due to cancellation of examinations is not acceptable
4. Academic misconduct checks must be robust for online assessment
5. Substantial changes to structure, delivery and assessment must be reported to the IET

The Detail
1. EngC (and IET) Compensation and Condonement rules to be met in full
   Notwithstanding any ‘no detriment’ policies applied in 2019-20 and 2020-21, the Engineering Council will expect Compensation and Condonement rules to be met in full in 2021-22, and for the department to obtain a derogation from the University to ensure that the Compensation and Condonement arrangements agreed at the last accreditation visit are reinstated if required. This derogation should be agreed before the end of the 2020-21 academic year, to provide suitable notice to all affected students.

2. 4-hour time limit on online ‘closed book’ examinations and 24-hour
   Online exams of up to 4 hours conducted as traditional closed-book exams with additional time allowed only for downloading papers and uploading completed exam scripts are acceptable for accreditation purposes. If any traditional exams for accredited programmes were replaced by extended online exams of 24 hours or more, these should be conducted as open-book exams with examiners advised and exam papers drafted accordingly.

3. Extrapolation of coursework marks due to cancellation of examinations
   It is not acceptable for accreditation purposes to cancel examinations and extrapolate coursework marks to represent 100% of module assessment. This is because there is a risk that an AHEP learning outcome is not assessed as claimed.

4. Academic misconduct checks must be robust for online
   It is expected that given the steep rise in the use of online assessment and decrease in student on-campus presence, robust checks for plagiarism, collusion, impersonation or other forms of academic misconduct is applied to prevent and detect cheating in coursework and/or exams submitted online for accredited programmes.

5. Unreported / approved substantial changes to structure, delivery and assessment
   It is expected that substantive changes to accredited programme structures, programme delivery or programme assessment introduced in 2020-21 compared with previous years (which may
affect achievement of AHEP Learning Outcomes or infringe the 70% commonality rule) are reported and approved by the IET. This may trigger a more formal review or visit to the HEI.