Accreditation of Higher Education Programmes (AHEP) fourth edition: summary of key changes

Introduction

This report summarises the main changes made to AHEP during the course of the Standards Review programme 2018-2020, both in terms of general changes to the document and specific changes, additions and removals with respect to the previous version of AHEP (3rd Edition).

General changes

The AHEP Working Group aimed to produce a document that:

- Uses language that is accessible outside the higher education community and defines terminology such as ‘well defined problems’, ‘broadly defined problems’ and ‘complex problems’.
- Primarily uses the terminology from AHEP (3rd Edition). Where changes of terminology occur, this is to make the document accessible to broader audiences and ensure consistency across the Engineering Council Standards (eg reference to ‘Licensee’ rather than ‘professional engineering institution’).
- Encourages development of innovative programmes and pedagogy.
- Makes clear that industry involvement in programme design and delivery is expected.
- Encourages promotion of equality, diversity and inclusion.
- Encourages use of both the UN Sustainable Development Goals and Engineering Council Guidance on Sustainability in programme design and delivery.
- Retains a focus on the accreditation of higher education. Recognition of other higher-level programmes, including higher apprenticeships, is addressed by the Approval and Accreditation of Qualifications and Apprenticeships (AAQA) with common learning outcomes.
- Explicitly supports accreditation of programmes for partial IEng and further learning for IEng.
- Fully incorporates accreditation of doctoral programmes (including but no longer limited to EngDs).
- Aligns with key reference points such as UK-SPEC, the Washington and Sydney Accords, EUR-ACE® Framework Standards and Guidelines (EAFSG), and the Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies.
- Reduces the number of learning outcomes and reduces duplication.

Specific changes

A table of (revised) Defining characteristics of approved and accredited programmes and a table of (revised) Learning outcomes have been produced. Characteristics and learning outcomes for higher level programmes are common to both AHEP and AAQA. These include descriptors and learning outcomes for Foundation degrees (and equivalent qualifications) for partially meeting the requirements for IEng and learning outcomes for top-up degrees for further learning to IEng. This represents a return to a tabular presentation with numbering of learning outcomes.
The learning outcomes have been revised for the fourth edition of AHEP. They now have a sharper focus on inclusive design and innovation, and the coverage of areas such as sustainability and ethics. The coverage of equality, diversity and inclusion is also strengthened to reflect the importance of these matters to society as a whole and within the engineering profession. To reflect a reality of modern society, there is now explicit treatment of security and the mitigation of security risks.

The fourth edition of AHEP has reduced the total number of learning outcomes in order to focus attention on core areas, eliminate duplication and demonstrate progression between academic levels of study.

The learning outcomes continue to demand a substantial grounding in engineering principles, Science and Mathematics, and well-developed quantitative analytical skills commensurate with the level of study.

Learning outcomes covering ‘additional general skills’ have been subsumed within the main learning outcomes. The learning outcomes now cover five main areas:

- Science and Mathematics
- Engineering Analysis
- Design and Innovation (referred to in AHEP 3rd Edition as Design)
- The Engineer and Society (referred to in AHEP 3rd Edition as Economic, legal, social, ethical and environmental context)
- Engineering Practice.

Learning outcomes have been added related to: security risks; diversity and inclusion.

A separate document compares learning outcomes from AHEP 3.0 and AHEP 4.0.

Reference is now made to the European Credit Transfer System (ECTS) credit values and the International Standard Classification of Education (ISCED) to ensure clarity as to the level of qualifications that can be accredited.

A number of sections have been added from the Guidance Note on Academic Accreditation to AHEP (version to support AHEP 3rd Edition), including:

- Compensation and condonement
- Location of delivery
- Guidance on wording to be used to describe the accreditation status of programmes.

A section of alternatives to campus-based provision has been added, informed by the Guidance Note on Academic Accreditation annex on distance learning, and AAQA.

Some details of information reviewed during accreditation have been moved or duplicated from the Registration Code of Practice (RCoP) to AHEP, so that they are presented in the more externally facing document.