Subject Benchmark Statement: Computing

The Basics

This document is a summary of the Subject Benchmark Statement for Computing. It is specifically designed to provide a short and accessible overview of the main Statement for students, employers and academics. It is not intended to replace or alter the Subject Benchmark Statement, which should be referred to in the design and approval of courses and when any further detail is required.

Subject Benchmark Statements describe the nature of study and the benchmark academic standards expected of graduates in specific subject areas, and in respect of particular qualifications. They provide a picture of what graduates in a particular subject might reasonably be expected to know, do and understand at the end of their course or programme.

Subject Benchmark Statements are presented in four sections. Section 1 outlines the contextual information - providing the operational landscape, and boundaries, of subject discipline. This includes consideration of the ways in which the discipline addresses wider social goals, specifically in relation to: equality, diversity and inclusion (EDI); the requirements of disabled students; education for sustainable development (ESD); and enterprise and entrepreneurship.

Section 2 covers distinctive features of the course, including curriculum design, partnership arrangements, flexibility of delivery, progression and ongoing monitoring processes. Section 3 explains any features relevant to teaching, learning and assessment activities for the subject. Section 4 describes the benchmark standards of achievement reached by all graduates with a bachelor's degree with honours in the subject, with some subjects also including achievement at master's level.

Why study a degree in Computing?

Computing provides an intellectually rich, innovative and creative subject discipline in one of the most pervasive aspects of modern life. It requires a disciplined approach to problem-solving, and blends theory from multiple disciplines like mathematics, engineering, and graphical design with the solution of practical problems.

Courses can be theoretical, vocational, or a mix of both. It provides opportunities to explore complex systems and dynamic technologies. Many students study to improve their employment prospects in a rapidly evolving, and global, digital skills economy.

What are the main teaching and learning approaches in computing?

Teaching and learning styles in computing increasingly emphasise capability, competency and performance. They can reflect traditional workplace environments – apprenticeships, placements and live projects with clients - as well as newer approaches like online evaluations, role-playing scenarios and gig-economy/commissioned work. Practical coursework, both individual and in group, features heavily.

More focus is now being given to help students better control their own learner journeys, giving them the tools and techniques to enable them to self-regulate and to optimise their personal performance: self-reflection, performance monitoring, evaluation and feedback within learning to support a more personalised journey. Teaching and learning approaches also aim to imbue the ability to work independently.

Courses provide opportunities for applied learning in authentic or simulated work contexts, such as industrial placements or apprenticeships. Working in teams on bigger projects simulates real-world environments and exposes students to complexity. Projects can collaborate with industrial partners or research groups, enhancing learning and self-regulation and can expose students to legal or ethical issues.

How are students assessed?

The assessment of Computing courses includes varied methods that are accessible to all students. Assessments should be authentic and tied to real-world contexts and constraints, allowing students to practically demonstrate the skills they have developed.

Computing programmes often conclude with a capstone activity, which brings together knowledge and practical and analytical skills that learners have developed throughout the course. This may take the form of a traditional project or end-point assessment, but other formats can be appropriate.

Where individual students may be disadvantaged by particular assessment methods, adjustments to those assessments are considered, while ensuring fairness across the full cohort. The procedures used for assessment cover the subject knowledge, abilities and skills developed through the degree course.

Benchmark Standards

The minimum threshold standards that a student will have demonstrated when they are awarded an honours degree in Computing are outlined on **pages 19 to 21**, with postgraduate degrees on **pages 22 to 24** of the Subject Benchmark Statement. The vast majority of students will perform significantly better than the minimum threshold standards - the Statement also sets out typical and excellent standards for honours degrees, and excellent standards for the postgraduate level.

Each higher education provider has its own method of determining what appropriate evidence of this achievement will be and should refer to Annex D: Outcome classification descriptions for FHEQ Level 6 and FQHEIS Level 10 degrees. This Annex sets out common descriptions of the four main degree outcome classifications for bachelor's degrees with honours - 1st, 2:1, 2:2 and 3rd. Study at master's level requires higher level skills, with students expected to achieve according to the descriptor for a higher education qualification at Level 7 on the FHEQ and SCQF Level 11 on the FQHEIS.

The Statement was developed by a group of subject experts drawn from across the sector. Details of the Advisory Group can be found on **page 26** of the Statement.

Read the full Subject Benchmark Statement

The full Subject Benchmark Statement is available on the QAA website.

Subject Benchmark Statements are published in QAA's capacity as a membership organisation on behalf of the higher education sector.

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