

## Guidelines for Academic Programme of Study meeting the educational requirements for Engineering Technician (EngTech) registration

The JBM is licensed by the Engineering Council to approve programmes of study which could be accepted as a qualification for EngTech as per UKSPEC. The academic level is a programme that is at level 3, or SCQF level 6.

The Competence and Commitment Standard for Engineering Technicians is outlined in pages 19 to 23 of the Engineering Council publication UK Standard for Professional Engineering Competence ([UK-SPEC](#)) 4<sup>th</sup> edition. The Engineering Council has also defined a number of Learning Outcomes that the content of an academic programme designed to meet the educational requirements for EngTech must be mapped against.

Please refer to the guidance document [Approval and Accreditation of Qualifications and Apprenticeships](#).

This document sets out the **learning outcomes** that must be met, the **requirements for approval** and the **evidence** that professional engineering institutions should seek in order to confer approved status.

Competences are covered on pages 19 to 23 of [UK-SPEC](#), but in addition the JBM are looking for core or essential subjects to be studied as part of the programme.

Approved academic programmes should contain some engineering subjects that relate to the five member professional bodies that the JBM represents, the core subjects are the same as in the JBM document **Guidelines for Developing Degree** programmes in so much that **30%** of the content should be from list A and B of the IEng, CEng guidelines as follows: -

Group A - geotechnics, materials, structures

Group B - fluid mechanics (hydraulics), surveying (geomatics and measurement); highways and transport engineering, public health, construction management, environmental engineering and architectural technology.

Mathematics should be taught to at least level 3/SCQF level 6.

Within the programme there should be an emphasis on the application of knowledge and development of skills needed to meet the demands placed on a technician in the construction and civil engineering industry.

Practical work should be included, such as laboratory experiments, hand drawing and sketching, the introduction to CAD and the measurement of the landscape or superstructure.

Throughout the programme, the areas of Health, Safety and Risk Management, Sustainability, and Professionalism, Ethics, Diversity, and Inclusion must be embedded where appropriate. They should not be delivered as stand-alone modules but must be evidenced in student work.

Assessments should be varied and combine both a selection of unseen examinations, coursework, In class assessments, presentations and laboratory reports and where possible group work.