

A1 NB The Competence statements included under the EngTech (level 3), IEng (level 6) and CEng (level 7) are taken from the draft of UK SPEC 4th edition. The suggested competence statements under levels 4 and 5 were agreed by the AQAH working group to aid progression.

A'number' is used within the consultation document as an identifier to enable respondents to comment on headings and notes. These references will be deleted from the final version of the document but other numbering will be retained.

UK SPEC Competence statements		Level 3 – EngTech/ICTTech	Level 4 – Exceeds EngTech/ICTTech	Level 5 – IEng threshold	Level 6 – IEng (with further learning required for CEng)	Level 7 - CEng
<p>A2 EngTech - Use engineering knowledge and understanding to apply technical and practical skills.</p> <p>IEng - Use a combination of general and specialist engineering knowledge and understanding to apply existing and emerging technology.</p> <p>CEng - Use a combination of general and specialist engineering knowledge and understanding to optimise the application of existing and emerging technology.</p>	A1	A3 Review and select appropriate techniques, procedures and methods to undertake tasks	A4 Propose numerous suitable techniques, procedures and methods to undertake tasks	A5 Maintain a sound theoretical approach to the application of technology in engineering practice.	A6 Maintain and extend a sound theoretical approach to the application of technology in engineering practice.	A7 Maintain and extend a sound theoretical approach to develop their particular role
	A2	A8 Use appropriate scientific, technical or engineering principles	A9 Select appropriate scientific, technical or engineering principles in specific situations	A10 Select appropriate scientific, technical or engineering concepts or ideas in specific situations.	A11 Use a sound evidence-based approach to problem-solving and contribute to continuous improvement.	A12 Develop technology solutions to unusual or challenging problems, using their knowledge and understanding and/or dealing with complex technical issues or situations with significant levels of risk.
<p>A13 EngTech - Contribute to the design, development, manufacture, construction, commissioning, operation or maintenance of products, equipment, processes, systems or services.</p> <p>IEng - Apply appropriate theoretical and practical methods to design, develop, manufacture, construct, commission, operate, maintain, decommission and re-cycle engineering processes, systems, services and products.</p> <p>CEng - Apply appropriate theoretical and practical methods to the analysis and solution of engineering problems.</p>	B1	A14 Identify problems and apply appropriate methods to identify causes and achieve satisfactory solutions.	A15 Identify and evaluate causes and propose solutions to engineering problems.	A16 Identify and evaluate causes and select techniques, procedures and methods to solve engineering problems.	A17 Identify, review and select techniques, procedures and methods to undertake engineering tasks.	A18 Take an active role in the identification and definition of project requirements, problems and opportunities.
	B2	A19 Identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety, security and environmental impact.	A20 Identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety, security, environmental impact and decommissioning.	A21 Identify, organise and use resources effectively to complete tasks, with consideration for through-life costs, quality, technology development, safety, security, maintainability, environmental impact and decommissioning.	A22 Contribute to the design and development of engineering solutions	A23 Identify the appropriate investigations and research needed to define the work required to complete an engineering task and conduct these activities effectively.
	B3	A24 N/A	A25 Contribute to the design process.	A26 Propose possible design solutions.	A27 Implement design solutions for equipment and processes and contribute to their evaluation.	A28 Implement engineering tasks and evaluate the effectiveness of engineering solutions

UK SPEC Competence statements		Level 3 - EngTech	Level 4 – Exceeds EngTech/ICTTech	Level 5 - IEng threshold	Level 6 – IEng (with further learning required for CEng)	Level 7 - CEng
A29 EngTech - Accept and exercise personal responsibility. IEng - Provide technical and commercial management CEng - Demonstrate technical and commercial leadership	C1	A30 Work reliably and effectively without close supervision, to the appropriate codes of practice.	A31 Work reliably and effectively without supervision, to the appropriate codes of practice.	A32 Assist in the planning for effective project implementation	A33 Plan the work and resources needed to enable effective implementation of engineering tasks and projects	A34 Plan the work and resources needed to enable effective implementation of a significant engineering task or project.
	C2	A35 Accept responsibility for work of self or others.	A36 Manage tasks and people.	A37 Manage tasks, people and resources.	A38 Manage (organise, direct and control) programme or schedule budget and resource elements of engineering tasks or projects.	A39 Manage (organise, direct and control) programme or schedule, budget and resource elements of a significant engineering task or project.
	C3	A40 Accept, allocate and supervise technical and other tasks	A41 Manage teams to meet technical and managerial needs	A42 Manage teams to meet changing technical and managerial needs	A43 Manage teams or the input of others into own work and assist others to meet changing technical and managerial needs	A46 Lead teams or technical specialisms and assist staff to meet changing technical and managerial needs.
	C4	A47 N/A	A48 Identify where continuous quality improvement has been used.	A49 Contribute proactively to continuous quality improvement	A50 Take an active role in continuous quality improvement	A51 Bring about continuous improvement and promote best practice
A52 EngTech - Use effective communication and interpersonal skills. IEng - Demonstrate effective communication and interpersonal skills CEng - Demonstrate effective communication and interpersonal skills	D1	A53 Communicate effectively in English with others at all levels	A54 Communicate effectively in English with others at all levels.	A55 Communicate in English with others at all levels.	A56 Communicate effectively in English with others at all levels.	A57 Communicate effectively in English with others at all levels.
	D2	A58 Work effectively with colleagues, clients, suppliers or the public, demonstrating an awareness of diversity and inclusion issues	A59 Work effectively with colleagues, clients, suppliers or the public, and be responsive to the needs and concerns of others, especially where related to diversity and equality.	A60 Present and discuss proposals.	A61 Present and discuss proposals, justifications and conclusions clearly.	A62 Present and discuss proposals, justifications and conclusions clearly.
	D3	A63 N/A	A64 Demonstrate personal and social skills	A65 Demonstrate personal and social skills	A66 Demonstrate personal and social skills and awareness of diversity and inclusion issues	A67 Demonstrate personal and social skills and awareness of diversity and inclusion issues

UK SPEC Competence statements		Level 3 – EngTech/ICTTech	Level 4 – Exceeds EngTech/ICTTech	Level 5 - IEng threshold	Level 6 – IEng (with further learning required for CEng)	Level 7 - CEng
A68 EngTech - Demonstrate a personal commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment. IEng - Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment. CEng - Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment. environment.	E1	A69 Understand and comply with relevant codes of conduct.	A70 Understand and comply with relevant codes of conduct.	A71 Understand and comply with relevant codes of conduct.	A72 Understand and comply with relevant codes of conduct.	A73 Understand and comply with relevant codes of conduct.
	E2	A74 Understand the safety implications of their role and can apply safe systems of work.	A75 Understand the safety implications of their role and can apply safe systems of work.	A76 Understand the safety implications of their role and can apply safe systems of work.	A77 Understand the safety implications of their role and can apply safe systems of work.	A78 Understand the safety implications of their role and can apply safe systems of work.
	E3	A79 Understand the principles of sustainable development and apply them in their work.	A80 Understand the principles of sustainable development and apply them in their work.	A81 Understand the principles of sustainable development and apply them in their work.	A82 Understand the principles of sustainable development and apply them in their work.	A83 Understand the principles of sustainable development and apply them in their work.
	E4	A84 Carry out and record Continuing Professional Development (CPD) necessary to maintain and enhance competence in own area of practice	A85 Carry out and record Continuing Professional Development (CPD) necessary to maintain and enhance competence in own area of practice	A86 Carry out and record Continuing Professional Development (CPD) necessary to maintain and enhance competence in own area of practice	A87 Carry out and record Continuing Professional Development (CPD) necessary to maintain and enhance competence in own area of practice	A88 Carry out and record Continuing Professional Development (CPD) necessary to maintain and enhance competence in own area of practice
	E5	A89 Understand the ethical issues which may arise in their role and carry out their responsibilities in an ethical manner.	A90 Understand the ethical issues which may arise in their role and carry out their responsibilities in an ethical manner.	A91 Understand the ethical issues which may arise in their role and carry out their responsibilities in an ethical manner.	A92 Understand the ethical issues which may arise in their role and carry out their responsibilities in an ethical manner.	A93 Understand the ethical issues which may arise in their role and carry out their responsibilities in an ethical manner.