

Technician Member EngTech guidance for applicants

Thank you for your interest in becoming registered with IChemE as an Engineering Technician (EngTech). This guidance is to provide you with some background on what EngTech is all about, and how to go about submitting your application. This document makes reference to Engineering Council's UK-SPEC which is the UK standard for professional engineering competence. Please remember that we are available to help – you can reach us at members@icheme.org.

Who should apply for EngTech?

Are you able to:

- apply safe systems of work?
- apply proven techniques to solve practical problems
- demonstrate contribution to either the design, development, manufacture, (de)commissioning, operation or maintenance of products, equipment, processes or services?

Do you:

- have supervisory or technical responsibility?
- have effective interpersonal skills in communicating technical matters?
- show commitment to professional engineering values?

Is your job title similar to one of these?

- | | |
|---------------------------------|------------------------|
| ▪ process operator | ▪ lab technician |
| ▪ instrument technician | ▪ maintenance engineer |
| ▪ pilot/research plant operator | ▪ design technician |

If yes, then EngTech may be for you.

The three stages to professional qualification

Applicants for Technician membership and registration as EngTech have to satisfy three professional qualification stages. These are:

Stage 1 – Educational Base

Demonstrating the required underpinning knowledge and understanding. This is known as the educational base. The educational base for Technician membership and registration as EngTech can be satisfied via one of the following:

- successful completion of an IChemE approved apprenticeship at level 3 or above;
- an approved qualification in chemical engineering set at either:
 - Level 3 or above in the Regulated Qualifications Framework or National Qualifications Framework for England and Northern Ireland;
 - Level 6 (or above) in the Scottish Credit and Qualifications Framework;
 - Level 3 (or above) in the Credit and Qualifications Framework for Wales;
 - A qualification accredited by a signatory to the Dublin Accord.

Potential applicants may not have had formal training leading to recognised qualifications but are able to demonstrate that they have acquired the necessary underpinning knowledge through substantial work experience. Such applicants can have their knowledge assessed individually. Please contact members@icheme.org to register your interest.

Check your qualification - If you have a qualification at level 3 check if it's approved by IChemE using the [Engineering Council's Accredited Course Search](#). If your qualification doesn't appear on the above database, it may be recognised by the Dublin Accord - visit www.ieagreements.org/accords/dublin/signatories to see if your qualification is covered by any of the signatories. If you would like further guidance on the status of your qualification, please contact members@icheme.org

Stage 2 – Initial Professional Development (IPD)

Demonstrating the development of the required understanding, skill and professional attitude. This is known as Initial Professional Development (IPD). IPD can take place through structured training or it can be self-managed. Examples of structured training include an IChemE approved apprenticeship or an IChemE Accredited Company Training Scheme (ACTS). Applicants who have completed one of these programmes will have satisfied the requirements of Stage 2. Applicants who have not completed such a programme will need to complete an IPD assessment. The IPD assessment will not only check that you have the necessary experience, but will provide useful feedback to help with the preparation for Stage 3. If you need to complete an IPD assessment, please contact members@icheme.org to register your interest.

Stage 3 – Professional Review

Demonstrating the required competence and commitment at a Professional Review. All applicants irrespective of the ways in which they have satisfied the requirements of Stages 1 and 2 will need to undertake a Professional Review.

Some applicants will complete Stages 1 and 2 sequentially. However, there is no reason why you cannot undertake these in parallel (as with an apprenticeship) or in stages over the course of your career. You must, though, have completed and satisfied the requirements for Stages 1 and 2 before applying for Stage 3.

Once you have fulfilled the criteria for Stages 1 and 2 of the journey to professional registration, you are ready to commence Stage 3, the Professional Review, which is the final step to becoming an Engineering Technician and you will need to apply online and provide:

- a completed EngTech Competence & Commitment (C&C) Report,
- completed supporter/verification forms
- CV
- photo ID

Verifiers

You must also provide details of two supporters for your application who can:

- verify the contents of your C&C report; it is therefore important that they know your work. They will tick the elements of your report that they are verifying;
- confirm that you are of the required level to become registered as an Engineering Technician.

One of your supporters should be an engineer professionally-registered with any [Engineering Council-listed institution](#); a signatory of the [Washington Accord](#) or of FEANI. The other should be someone who knows your work very well, usually your line manager. Of course, they may also be professionally registered but this is not necessary.

Once you have completed your C&C report send it to your chosen two supporters to review and ask them to complete the supporter/verification form and send it back to you for upload as part of your application. All

sections of your C&C report must be verified. A third approached if they are verifying certain aspects of your report.

If you have any difficulty finding a supporter, we suggest you contact your [local member group or special interest group](#), HR/personnel department within your company, or perhaps your (former) tutor. If you have exhausted these options, please contact members@icheme.org.

Competence and Commitment (C&C) Report

The EngTech Competence and Commitment Report gives you the opportunity to tell us about the way you work, and the education and training you have received. The key purpose of this report is for you to explain how the experience you have gained has made you (more) competent. We have structured it in a way to help you demonstrate your abilities against the five areas of competence required by IChemE for EngTech registration.

Every candidate must complete a Competence and Commitment report. You should write around 1500 words to demonstrate your technical knowledge and practical skills. You must show personal responsibility, prove your communication skills and demonstrate commitment to the profession.

Your report will be peer-reviewed by IChemE members who will be looking for clear evidence that you have the know-how to do the job, are able to go beyond the basic requirements and use your initiative and experience to find solutions and make improvements. IChemE uses your report to assess your eligibility to register as a qualified EngTech with Engineering Council.

Registered Engineering Technicians must be competent throughout their working life, by virtue of their training and experience. This includes education at college, on-the-job know-how and skills, courses run by your employer and activities you have arranged for yourself to improve your knowledge and skills. The last two are usually called Continuing Professional Development (CPD) which are covered in Section E but can be included in the other sections if it illustrates your case.

Experience can be gained day-to-day, through special projects and sometimes unusual situations such as recovering from plant breakdown. If you've done it and learned from it, it's experience. We therefore need to see evidence from you for each of the competences A–E.

What is competence?

- competence is the ability to carry out a task to an effective standard;
- competence requires the right level of knowledge, understanding and skill, and a professional attitude;
- competence is developed by a combination of formal and informal learning, and training and experience, generally known as initial professional development (IPD).

What is commitment?

- Engineering Technicians demonstrate a personal and professional commitment to society, their profession and the environment;
- they show that they have adopted a set of values and behaviours that will maintain and enhance the reputation of the profession.

Preparation

- record examples of your day-to-day work over a period of time, updating regularly;
- read the example for each section – it's there to help you. Make sure all answers are based on your own experience;
- ensure that you write in the first person ('me, I...') as the assessor needs to understand your contribution;
- keep answers short and concise – you don't need to write an essay for each question – and use plain English;

- include technical but not sensitive or confidential detail.

Each question on the C&C report has guidance built in; in addition, please refer to the guidance below.

Competency	Guidance
A. Evidence that you have the ability to use process related knowledge and understanding to apply technical and practical skills.	In Section A, draw from your direct experience to give evidence that you have the technical know-how to do the job and demonstrate that you use your initiative and experience to solve a process problem or improve a process.
A1. Ability to review, select and use appropriate technical techniques, procedures and methods to undertake (process or chemical engineering) tasks.	<p>For example, you should describe an instance where you have used your technical skills to select an approach that solved a process problem or optimised a process, and explain why the approach was technically appropriate.</p> <p>Do explain what went well, the choices you made and the outcome. If it didn't quite work, do explain why. What technique, procedure or method you improved upon and explain why.</p>
A2. Ability to use appropriate scientific, technical and chemical or process engineering principles.	You can provide a technical explanation of how a piece of process equipment, process system or mechanism encountered in your job works. Or you can describe how you have learnt the principles relating to an area of your work.
B. Evidence that you're able to contribute to one or more of the following: (de)commissioning, design/development, modification/refurbishment, manufacture, construction, operation/maintenance, quality assurance, cleanout, environmental/waste management of processes, systems, equipment or devices.	Do this by showing that you contribute to one or more of these activities.
B1. Ability to identify problems and apply diagnostic methods to identify causes and achieve a technical solution.	You should provide an example of how you have identified a problem and used measurement, monitoring and assessment to identify the source of the problem and provide a solution.
B2. Ability to identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety and environmental impact.	<p>Provide an example of how you have used process data, process plant, materials or people to complete work tasks/projects, such as how you make decisions about:</p> <ul style="list-style-type: none"> ▪ what information, material, component, people or plant to use ▪ or how to introduce a new method of working ▪ or what precautions you took ▪ or describe how you have introduced a new method of working to complete a task/project better.

<p>C. Evidence of ability to accept and exercise personal responsibility.</p>	<p>In Section C, describe experiences or instances where you have had to accept personal responsibility for seeing a work process or project through to completion within agreed targets.</p>
<p>C1. Ability to work reliably and effectively without close supervision.</p>	<p>Give an example that shows how you personally planned and carried out allocated tasks, with reference to the appropriate standards.</p>
<p>C2. Ability to accept responsibility for your work and that of others.</p>	<p>You should give examples of responsible working practice through measures such as checking the standard of your completed work or that of others.</p>
<p>C3. Ability to accept, allocate and supervise technical and other tasks.</p>	<p>Give an example of having identified the content of a task, allocated resources and supervised the execution of the task to a satisfactory completion.</p>
<p>D. Evidence of use of effective communication and interpersonal skills.</p>	<p>In Section D you need to show you can contribute to discussions; make a presentation; read instructions or standards; assemble different sources of information and make sense of them; write different types of documents.</p>
<p>D1. Ability to communicate technical ideas, information and plans by means of written, electronic and oral presentation.</p>	<p>Provide some examples of your participation in meetings and/or presentations; completion of reports; and putting together and delivering instructions to groups or individuals.</p>
<p>D2. Ability to work effectively with colleagues, clients, suppliers or the public, and showed awareness of the needs and concerns of others, especially where related to diversity and equality.</p>	<p>Describe a situation where this has occurred and your role at the time. Describe your role as part of a team. Describe a situation where you put your awareness into practice.</p> <p>For example, you might be introducing trainees to equipment or systems, or briefing the management on improvements or outcomes of trials.</p>
<p>D3. Demonstrate personal and social skills and awareness of diversity and inclusion issues.</p>	<p>Describe a situation where you needed to apply your interpersonal and social skills in practice to deal with a situation or to make positive changes.</p> <p>For example, you may have had to deal with conflict within a team you are part of. You may also have taken action to improve diversity and inclusion within your team, or as part of a wider activity in your workplace.</p>
<p>E. Evidence of your personal commitment to appropriate codes of professional conduct; recognising obligations to society, the profession and the environment.</p>	<p>In Section E we are asking you to demonstrate your commitment to become part of the profession and uphold the standards to which IChemE members subscribe.</p>
<p>E1. Commitment to uphold professional Code of Conduct.</p>	<p>You need to confirm that you have read, understood and will follow IChemE's Code of Conduct. If any point is unclear, please ask a senior engineer in your</p>

	organisation or contact IChemE membership.
E2. Ability to manage and apply safe systems of work.	Provide a quality example of how you apply current safety requirements, such as risk assessment and other examples of good practice you adopt in your work. Please also briefly describe evidence of completed formal safety instruction or safety training relating to your work.
E3. Ability to undertake technical and process engineering in a sustainable way and demonstrate awareness of sustainable development.	Provide an example of a methodical assessment of risk you've made on a specific project(s) and the actions taken to minimise risk to health, safety, society or the environment.
E4. Commitment to your Continuing Professional Development (CPD). (i) CPD in the past 2 years (ii) CPD in the future	<p>Show how you actively seek to identify and address training needs in your current employment and future career development plans. This means demonstrating that you have actively sought to keep yourself up to date, perhaps by studying new standards or techniques, or made use of magazines, lectures organised by professional engineering institutions, and other opportunities to network to keep abreast of change. Describe the method used to record and evaluate your development activities.</p> <p>List a few examples of what you have done over the last two years and describe how you and your role have benefitted.</p> <p>Also list the training and experience you may need for the future and how you're going to get it.</p>
E5. Ability to conduct duties and responsibilities in an ethical manner.	<p>Give an example of where you have applied/upheld ethical principles as defined by your organisation or company, which may be in its company or brand values.</p> <p>This can be honesty and integrity such as maintaining data confidentiality.</p>

Interview stage

Once your Competence and Commitment report has been assessed, you will be informed if an interview is necessary. Interviews are not usually required but may be organised at the professional reviewer's request. Should an interview be required we will contact you directly to arrange a suitable date, time and venue/media.

If an interview is required, you will be provided with additional guidance.

More information can be found at www.icheme.org/technician.
Alternatively, please contact members@icheme.org with any questions.