The ICT Technician Standard (ICTTech)
Professionally registered Information and Communications Technology Technicians (ICTTech) work in a variety of environments. These include, but are not limited to: offices, development labs, data and operational centres, field environments, customer premises and manufacturing.

They support a range of functions which utilise ICT solutions, and hardware and software components. Examples of functions include, but are not limited to: design, development, implementation, installation, operation, problem solving and security of ICT applications, products, services and/or infrastructures.

Information and Communications Technology Technicians must be competent throughout their working life, by virtue of their education, training and experience, to:

A Use ICT knowledge and understanding when applying technical, practical and systems skills.

This includes the ability to:

A1 Apply ICT principles in an analytical and systematic approach, to solve problems and contribute to continuous improvement.

The examples given below are intended to help you identify activities you might quote to demonstrate the required competence and commitment for ICTTech registration. These are not exhaustive. Moreover, you are not required to give multiple examples to demonstrate competence and commitment.

Provide evidence that you have the know-how to do a job involving ICT and are able to use your experience in ICT to solve a problem or to improve a process.

Examples of evidence include:

For a piece of ICT equipment, software or system, which you have worked on:

- explain how it works
- or describe your involvement in the solution to a problem
- or describe how you were involved in continuous improvement
- or describe your involvement in improved customer service.
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<tr>
<th>A2</th>
<th>Review, select and use appropriate techniques, procedures and methods to undertake activities.</th>
<th>Describe how you chose and applied specific technical knowledge of tools, applications and systems relevant for your own area of ICT systems.</th>
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<td>B</td>
<td>Contribute to the design, development, configuration, testing, commissioning, installation, deployment, operation, migration or maintenance of ICT solutions, products, processes, systems, services or applications.</td>
<td>Say how you have contributed to the organisation of your work and to the necessary resources to complete tasks.</td>
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<td>B1</td>
<td>Identify and/or respond to problems with ICT solutions, services or infrastructure and apply suitable methods to seek the causes and to guide the development of satisfactory solutions.</td>
<td>Illustrate how you have used established procedures to measure and monitor the performance of an ICT system or component; explain how you identified the sources of a problem in the operation or commissioning of an ICT system or component and describe the measures you proposed and helped take to fix and improve the system.</td>
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<td>This includes the ability to:</td>
<td>Describe how you have used diagnostic methods to identify causes and achieve satisfactory solutions.</td>
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<td>Describe how you have used tools or techniques to diagnose and, where appropriate, address programming errors, software development errors or bad practices to improve the reliability, security and resilience of application components.</td>
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<td>Describe how you have used proven programming or software development techniques to meet a design specification.</td>
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<td>B2</td>
<td>Select, organise and use resources effectively to complete ICT tasks, with consideration for factors such as cost, performance, confidentiality, security, quality and availability of service, health, safety and environmental impact.</td>
<td>Describe how you plan, schedule and monitor your own work competently within limited deadlines.</td>
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<td>Describe how you selected, organised or used resources in an ICT task.</td>
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<td>Describe how you made your choice of software, hardware, solutions, ICT services, or contracted skills to help you complete the task, and how your choice contributed to the task.</td>
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<td>Explain how your choice contributed to the quality of the result for the users.</td>
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<td>Describe how you have contributed to the organisation of your work and to the necessary resources to complete tasks.</td>
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</table>
B3 Configure or maintain ICT systems to provide techniques, procedures and methods to undertake activities.

Give an example of how you have configured an ICT solution, system, hardware or software to establish or maintain efficiency, quality of service or performance.

Describe your involvement in ensuring service level agreements are not breached, and agreed service levels are achieved and maintained.

Give an example of when issues should be escalated to a higher level.

Give examples where you have ensured that company work instructions, end-to-end processes and system documents in your own area of work are up to date and adhered to.

B4 Secure and protect ICT systems from intrusion, damage, attack or data loss.

Provide examples of how you contribute to the continuing integrity of an ICT system by detecting and rectifying potential failures or identifying risks.

Demonstrate that appropriate measures are taken, within your own area of work, to ensure your employer, colleagues, customers and the public are protected; this can include security, performance, change control, user accessibility and health and safety measures.

Describe how you have undertaken data protection, risk assessments, security measures to prevent intrusion, etc.

C Accept and exercise personal responsibility.

This includes the ability to:

Show that you have accepted personal responsibility for the completion of a task which either achieved the agreed targets or led you to identify omissions or contingencies that prevented the attainment of targets.

Examples of evidence include:

C1 Work reliably and effectively on ICT tasks without close supervision and by adhering to the job instructions or best practice.

Demonstrate how you were personally identified with what had to be done in an ICT task and how agreement was reached on the specification of the task, including the standards of the work and work practices. Give an indication of the outcomes.

Describe when and how you escalated an issue to a higher level.

If relevant in your role, give an example of how you have relied on others to help you complete a task, how you described what they had to do and how you asked them to account for their work.
C2  Accept responsibility for work of self or others.

- Describe an example where you have sought advice from a knowledgeable colleague to resolve an issue.
- Give an example of how you have prioritised your work whilst working under general supervision.
- If relevant to your role, describe an example where you have reviewed and accepted the work of others to an agreed specification.

C3  Accept, allocate or supervise technical and other tasks.

- Describe when and how you escalated an issue to a higher level.
- If relevant in your role, give an example of how you have relied on others to help you complete a task and how you described what they had to do and how you asked them to account for their work.

C4  Be aware of and/or involved in continuous quality improvement.

- Demonstrate how you have contributed to relevant quality audits.
- Give an example of where you have reported a problem which has subsequently improved a process.
- Demonstrate where you have delivered against a quality improvement action.

D  Use effective communication and interpersonal skills.

This includes the ability to:

- Show that you can contribute to discussions, make a presentation, read and synthesise technical information and write different types of documents.

Examples of evidence include:

D1  Communicate technical and other information effectively in English:

- Use the appropriate methods of communication to ensure technical and nontechnical information is understood by the intended audience.

- Describe your choices of communication methods and why you chose them, for example: email, text messages, letters, phone messages, work instructions, progress notes, media clips, software (including scripting) with comments, instructions to operators/users and task specifications.

- Give examples of different kinds of documents and/or presentations you have prepared or contributed to with an emphasis on those that include technical information about an ICT solution, system, process or hardware or software component.

- Give examples of where you have had to prepare documents or presentations for technical and non-technical audiences or recipients.

1 Any interviews will be conducted in English, subject only to the provisions of the Welsh Language Act 1993 and any Regulations which may be made in implementation of European Union directives on free movement of labour.
D2 Work effectively with colleagues, customers, suppliers, users and the public, ensuring that ICT tasks undertaken are effectively linked to related tasks.

Be aware of the needs and concerns of others, especially where related to diversity and equality.

Give an example of a task you have been involved in where you had responsibilities for an aspect of the ICT component of the task.

Describe the roles of the people you have liaised with and your formal relationship with them.

Describe a few ICT tasks where you had to deal with people in different roles in each project.

Give an example of how you worked effectively with department/project team members, customers or suppliers.

Provide examples to show that you understand how your ICT tasks affect, or are affected by, tasks performed, colleagues, clients, suppliers or users in an organisation, process or broader user context.

Give an example of where you applied diversity and anti-discrimination legislation.

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E Demonstrate a personal commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment.

Your commitment will be to uphold the standards to which all members of your institution subscribe. You need to show that you have read and understood your Institution’s Code of Conduct.

Examples of evidence include:

E1 Comply with the Code of Conduct of the professional engineering institution or Professional Affiliate of which you are a member.

Demonstrate that you are aware of regulatory frameworks that apply to your work; illustrate the ways in which you work to satisfy these ordinances; and indicate that you have read and understood your institution’s Code of Conduct.

E2 Manage and apply healthy, safe, secure systems of work, and be aware of appropriate hazard identification and risk management systems.

This could include an ability to:

- Identify and take responsibility for own obligations for health, safety and welfare issues
- Apply systems that satisfy health, safety and welfare requirements.

Provide examples of good practices you adopt in your work to ensure safety, security or confidentiality, or safe disposal.

List the courses and briefings you have attended that explained the regulations and practices relating to health, safety, data protection, sustainable development and security in your workplace activities and locations.

Demonstrate how you have considered safety and/or security requirements and risk management in design, installation, testing or operational activities.
### E3
Show you are aware of and apply good practices that protect other people, organisations or the environment from harm caused by the operation of ICT systems.

*Undertake ICT work in a way that contributes to sustainable development.*

Illustrate how, in your work activities, you have considered sustainability, or prevented/prevent harm and/or loss to colleagues, business, partners, customers, the public, the environment. You may have considered: loss/corruption of vital data, inappropriate access to vital data, breach of security (physical, network, system); loss of system performance; inefficient use of ICT resources and energy; proper disposal of hazardous components; inadequate testing, training, project review or risk assessment.

Demonstrate how you have considered sustainability in design, installation, testing, operational and/or risk assessment activities.

### E4
Carry out and record CPD necessary to maintain and enhance competence in ICT, including:

- Undertake reviews of own development needs
- Plan how to meet personal and organisational objectives
- Carry out planned (and unplanned) CPD activities
- Maintain evidence of competence development
- Evaluate CPD outcomes against any plans made
- Assist others with their own CPD.

Describe how you keep yourself up to date, perhaps by studying new standards or techniques, by making use of technical magazines, webinars or technical meetings (online or face to face) and so on.

If you have had the opportunity, illustrate how you have helped others to develop their understanding of ICT.

### E5
Exercise responsibilities in an ethical manner.

Give an example of where you have applied ethical principles as described in the Statement of Ethical Principles on page 16.

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.