ICT*Tech* standard third edition – summary of key changes

Introduction

Following a detailed review of the Information and Communications Technology Technician Standard (the ICT*Tech* Standard), the third edition was published on 31 August 2021.

The third edition does not introduce any material changes. However, the ICT*Tech* Standard review working group has proposed that at the next review consideration should be given to merging the ICT*Tech* Standard into UK-SPEC. This has led to the following:

- the format of the core document now mirrors the style of UK-SPEC fourth edition
- implicit requirements have been re-stated explicitly to align with EngTech requirements in UK-SPEC and give more clarity
- some statements have been made more engineering-focused where these are equally relevant and applicable to ICTTech

The working group agreed that for some technicians working in telecommunications, or deep in ICT infrastructure, the engineering terms are just as applicable as any corresponding ICT terminology, hence their inclusion.

ICT*Tech* Learning Outcomes

ICT*Tech* Standard third edition now incorporates ICT*Tech* learning outcomes which were previously included in the Approval of Qualifications and Apprenticeships Handbook (AQAH) 2015. These three versions of learning outcomes are set out in the table below for comparison:

EngTech & ICT <i>Tech</i> learning outcomes (AQAH 1st edition, 2015)		EngTech learning outcomes (AAQA 1st edition, 2020)		ICT <i>Tech</i> learning outcomes (ICT <i>Tech</i> Standard 3rd edition, 2021)	
A Science and Mathematics Engineering is underpinned by science and mathematics, and other associated disciplines, as defined by the relevant professional engineering institution(s). Technicians will need:	A1. A descriptive, formula-based knowledge and understanding of the scientific principles underpinning relevant current technologies A2. Knowledge and understanding of relevant mathematics, including numerical and data analysis, that is necessary to support the application of technical and practical skills	Science and mathematics The study of engineering requires a substantial grounding in engineering principles, science and mathematics commensurate with the level of study.	Science, mathematics and engineering principles T1. Apply knowledge of mathematics, statistics, natural science and engineering principles to well-defined problems.	Science and mathematics The study of engineering requires a substantial grounding in engineering principles, science and mathematics commensurate with the level of study.	Science, mathematics and engineering principles ICT1. Apply knowledge of mathematics, statistics, natural science and engineering principles to well-defined ICT problems.
B Engineering analysis Engineering analysis involves the application of engineering concepts and tools to the solution of engineering or ICT problems. Technicians will need:	B1. To understand the limitations of standard tests and measurements relevant to their field of activity B2. Know-how to use the results of engineering analysis for the purpose of developing solutions to well-defined engineering or ICT problems	Engineering analysis Engineering analysis involves the application of engineering concepts and tools to analyse, model and solve problems. At higher levels of study engineers will work with information that may be uncertain or incomplete.	Problem analysis T2. Analyse well-defined problems reaching substantiated conclusions. Analytical tools and Techniques T3. Use appropriate computational and analytical techniques to solve well-defined problems.	Engineering analysis Engineering analysis involves the application of engineering concepts and tools to analyse, model and solve engineering or ICT problems. At higher levels of study engineers will work with information that may be uncertain or incomplete.	Problem analysis ICT2. Analyse well-defined problems, reaching substantiated conclusions. Analytical tools and techniques ICT3. Use appropriate computational and analytical tools and techniques to solve well-defined problems.

EngTech & ICTTech, (AQAH, 2015), cont.	EngTech, (AAQA, 2020)	, cont.	ICTTech, (ICTTech Star	ndard, 2021), cont.
B Engineering analysis (Continued.)	B3. To apply appropriate solutions to well-defined engineering or ICT problems using methods specific to their field of activity	Engineering analysis (Continued.)	Technical literature T4. Select and use technical literature and other sources of information to address well-defined problems.	Engineering analysis (Continued.)	Technical literature ICT4. Select and use technical literature and other sources of information to address well-defined engineering or ICT problems specific to their field of activity.
C Design Design at this level involves the awareness of an economically viable product, process or system to meet a defined need. Technicians will need:	C1. Awareness of business, customer, and user needs C2. Awareness of constraints on the design process including environmental and sustainability limitations; ethical, health, safety, security and risk issues; intellectual property; codes of practice and standards C3. Knowledge that supports design for the purpose of developing solutions to well-defined engineering or ICT problems C4. Know-how to contribute to the design and/or the design process C5. Know-how to communicate their work to technical and non-technical audiences	Design and innovation Design is the creation and development of an economically viable product, process or system to meet a defined need. It involves significant technical and intellectual challenges commensurate with the level of study.	T5. Contribute to design solutions for well defined technical problems and assist with the design of systems, components or processes to meet business, customer or user needs as appropriate. This will involve consideration of applicable health and safety, diversity, inclusion, cultural, societal and environmental matters, codes of practice and industry standards. Integrated/systems approach T6. Apply a systematic approach to the solution of well-defined problems.	Design and innovation Design is the creation and development of an economically viable product, process or system to meet a defined need. It involves significant technical and intellectual challenges commensurate with the level of study.	Design ICT5. Contribute to design solutions for well-defined engineering or ICT (technical) problems and assist with the design of systems, components or processes to meet business, customer or user needs as appropriate. This will involve consideration of applicable health and safety, diversity, inclusion, cultural, societal and environmental matters, codes of practice and industry standards. Legal/contractual ICT6. Demonstrate awareness of relevant legal requirements governing engineering or ICT activities, including personnel, health and safety, contracts, intellectual property rights, product safety and liability issues.

EngTech & ICT <i>Tech, (</i>	AQAH, 2015), cont	EngTech, (AAQA, 2020)	, cont.	ICT Tech, (ICT Tech Star	dard, 2021), cont
D Economic, legal,	D1. Understanding the	The Engineer and	Sustainability	The engineer and	Sustainability
social, ethical and	need for a high level of	Society	T7. Evaluate the	society	ICT7. Understand the
environmental	professional and ethical	Engineering activity can	environmental and	Engineering activity can	requirement for
context	conduct in engineering or	have a significant	societal impact of	have a significant	engineering or ICT
	ICT and a knowledge of	societal impact and	solutions to well-defined	societal impact and	activities to promote
Engineering or ICT	professional codes of	engineers must operate	problems.	engineers must operate	sustainable developmen
activity can have	conduct	in a responsible and		in a responsible and	
mpacts on the		ethical manner,	Ethics	ethical manner,	Ethics
environment, on	D2. Knowledge of the	recognise the	T8. Apply ethical	recognise the	ICT8. Understand the
commerce, on society	commercial, economic and	importance of diversity,	principles and recognise	importance of diversity,	need for a high level of
and on individuals.	social context of the	and help ensure that	the need for engineers to	and help ensure that	professional and ethical
	engineering or ICT	the benefits of	exercise their	the benefits of	conduct in engineering o
Technicians therefore	processes	innovation and	responsibilities in an	innovation and	ICT and demonstrate a
need the skills to		progress are shared	ethical manner and in	progress are shared.	knowledge of profession
manage their activities	D3. Understanding the	equitably and do not	line with professional		codes of
and to be aware of the	requirement for	compromise the natural	codes of conduct.		conduct.
arious legal and	engineering or ICT	environment or deplete			
ethical constraints	activities to promote	natural resources to the	Risk		Risk
under which they are	sustainable development	detriment of future	T9. Identify, evaluate and		ICT9. Identify, evaluate
expected to operate,	-	generations.	mitigate risks (the effects		and mitigate risks (the
ncluding:	D4. Awareness of relevant		of uncertainty) specific to		effects of uncertainty)
-	legal requirements		their field of activity.		specific to their field of
	governing engineering or		-		activity.
	ICT activities, including		Security		-
	personnel, health & safety,		T10. Adopt a holistic and		Security
	contracts, intellectual		proportionate approach		ICT10. Adopt a holistic
	property rights, product		to the mitigation of		and proportionate
	safety and liability issues		security risks.		approach to the mitigation
					of security risks.
	D5. Awareness of risk		Equality, diversity and		-
	issues, including health &		Inclusion		Equality, diversity and
	safety and environmental		T11. Recognise the		inclusion
	risk		importance of equality,		ICT11. Recognise the
			diversity and inclusion in		importance of equality,
			the workplace.		diversity and inclusion in
					the workplace.

EngTech & ICTTech	, (AQAH, 2015), cont.	EngTech, (AAQA, 2020)	, cont.	ICTTech, (ICTTech Star	ndard, 2021), cont.
E Engineering practice (Continued.)		Engineering practice (Continued.)	Teamwork T16. Function effectively as an individual and as a member of a team.	Engineering practice (Continued.)	Teamwork ICT15. Function effectively as an individual and as a member of a team.
			Communication T17. Communicate effectively with technical and non-technical audiences.		Communication ICT16. Communicate effectively with technical and non-technical audiences.
			Lifelong learning T18. Plan and record self-learning and improve performance, as the foundation for lifelong learning/CPD.		Lifelong learning ICT17. Plan and record self-learning and improve performance, as the foundation for lifelong learning/CPD.
F Additional general skills Technicians must have developed transferable skills, additional to those set out in the other learning outcomes, and that will be of value in a wide range of situations, including the ability to:	F1. Apply their skills in problem solving, communication, information retrieval, working with others and the effective use of general IT facilities F2. Plan self-learning and improve performance, as the foundation for lifelong learning/CPD F3. Plan and carry out a personal programme of work F4. Exercise personal responsibility, as an individual or as a team	[NB: Additional ger	neral skills learning outo	comes from AQAH hav mes under this review]	e been subsumed into

ICT*Tech* Competences

The overall approach in redrafting UK-SPEC (fourth edition, 2020) aimed to increase clarity, making the requirements (ie the Standard itself) more understandable. This included providing better examples of how applicants might provide evidence of having met the Standard. The third edition of the ICT*Tech* Standard (2021) mirrors these changes. As a result, there are significant differences in the examples of evidence between the ICT*Tech* Standard second and third editions.

The latest edition of the ICT*Tech* Standard has been drafted with an emphasis on accessibility, clarity of structure and internal consistency with other standards documents. The text was edited with accessible language principles in mind (using active tenses and keeping sentences under 25 words where possible). This was balanced with the need to not change the precise meaning of technical, engineering and regulatory terms.

For ease of reference: competences B2, B3 and B4 have been merged, and a new competence D3 has been added.

ICT Tech Standard, 2 nd edition	n, 2016	ICT Tech Standard, 3 rd edition, 2021		
Α.		A. Knowledge and understanding		
Use ICT knowledge and under	erstanding when applying technical,	ICT Technicians shall use ICT knowledge and understanding to apply		
practical and systems skills.		technical, practical and systematical	ems skills.	
	e the know-how to do a job involving ICT and		ing knowledge of the technologies, standards and	
are able to use your experience	e in ICT to solve a problem or to improve a	· ·	ant's area of work and having evidence of	
process.		maintaining and applying this k		
Competence	Examples of evidence include:	Competence	Example of evidence	
A1. Apply ICT principles in	For a piece of ICT equipment, software or	A1. Apply ICT principles in	 Evaluating potential methods of carrying out 	
an analytical and systematic	system, which you have worked on:	an analytical and systematic	an engineering task and selecting the most	
approach, to solve problems	explain how it works	approach, to solve and	appropriate solution	
and contribute to continuous	 or describe your involvement in the 	review problems and	 Recognising a difficulty and then identifying an 	
improvement.	solution to a problem	contribute to continuous	approach to resolve it	
	 or describe how you were involved in 	improvement	 Identifying an improvement in a technique, 	
	continuous improvement		procedure, process or method	
	 or describe your involvement in improved customer service. 		Interpreting and carrying out test procedures	
A2. Review, select and use	Describe how you chose and applied specific	A2. Review, select and use	Drawing on your technical knowledge to	
appropriate techniques,	technical knowledge of tools, applications	appropriate techniques,	complete a task	
procedures and methods to	and systems relevant for your own area of	procedures and methods to	 Performing calculations using standard 	
undertake activities.	ICT systems.	undertake activities.	formulae	
			 Analysing performance or test data or 	
			comparing performance information with	
			published material	
			 Applying knowledge of modelling packages 	
			and an ability to use them to solve problems	

ICT Tech Standard, 2 nd editio	n, 2016	ICT <i>Tech</i> Standard, 3 rd edition, 2021		
B. Contribute to the design, development, configuration, testing, commissioning, installation, deployment, operation, migration or maintenance of ICT solutions, products, processes, systems, services or applications. Say how you have contributed to the organisation of your work and to the necessary resources to complete tasks.		B. Design, development and solving ICT problems ICT Technicians shall contribute to the design, development, configuration, testing, commissioning, installation, deployment, operation, migration or maintenance of ICT solutions, products, processes, systems, services or applications. This competence is about the ability to apply ICT knowledge effectively and efficiently to the individual tasks which need to be undertaken in the applicant's role.		
Competence	Examples of evidence include:	Competence	Example of evidence	
B1. 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.	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. Describe how you have used diagnostic methods to identify causes and achieve satisfactory solutions. 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. Describe how you have used proven programming or software development techniques to meet a design specification.	B1. Identify and/or respond to problems with ICT solutions, services or infrastructure and apply suitable methods to seek the causes and to achieve the development of satisfactory solutions	Using knowledge to identify a problem or an opportunity for improvement Investigating a problem to identify the underlying cause Identifying a solution to a problem or an improvement opportunity Contributing to the design of an item or process	

ICT Tech Standard, 2 nd edition	n, 2016	ICT Tech Standard, 3rd edition	n, 2021
Competence	Examples of evidence include:	Competence	Example of evidence
B2. 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.	Describe how you plan, schedule and monitor your own work competently within limited deadlines. Describe how you selected, organised or used resources in an ICT task. 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. Explain how your choice contributed to the quality of the result for the users. Describe how you have contributed to the organisation of your work and to the necessary resources to complete tasks.	B2. Identify, 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. or Configure or maintain ICT systems to provide satisfactory performance and quality of service. or Secure and protect ICT systems from intrusion,	 Balancing these factors in selecting appropriate materials Identifying precautions as a result of evaluating risks and other factors Considering how waste can be minimised, recycled or disposed of safely if recycling is not possible Contributing to best practice methods of continuous improvement Improving the quality of an operation or process Ability to tailor and run simulation and other models Ability to solve software and/or related technical problems under general guidance from more senior staff Knowledge of LAN/WAN: installing equipment and software, upgrading, configuration, testing System administration tasks in line with
B3. Configure or maintain ICT systems to provide satisfactory performance and quality of service.	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.	damage, attack or data loss.	manufacturers requirements

ICT <i>Tech</i> Standard, 2 nd edition	n, 2016	ICT Tech Standard, 3rd edition	n, 2021	
Competence	Examples of evidence include:	Competence	Example of evidence	
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 persona	al responsibility.	C. Responsibility, managem ICT Technicians shall accept	ent and leadership and exercise personal responsibility.	
	personal responsibility for the completion of a agreed targets or led you to identify omissions d the attainment of targets.		ability to plan and manage the applicant's own work also about the ability to consider and identify ity in their work.	
Competence	Examples of evidence include:	Competence Example of evidence		
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.	C1. Work reliably and effectively on ICT tasks without close supervision and by adhering to the job instructions or best practice	 Completing challenging tasks successfully within your area of work Identifying issues which fall outside of your current knowledge and seeking advice Identifying standards and codes of practice relevant to a new task 	

ICT <i>Tech</i> Standard, 2 nd edition	n, 2016	ICT <i>Tech</i> Standard, 3 rd edition, 2021		
Competence	Examples of evidence include:	Competence	Example of evidence	
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.	C2. Accept responsibility for the work of themselves or others	 Fully understanding drawings, permits to work, instructions or other similar documents after appropriate checking, and identifying issues Inspecting work carried out by others Checking the status of equipment, the work environment and facilities and taking appropriate actions before commencing work 	
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.	C3. Accept, allocate or supervise technical and other tasks	 Ensuring that the scope of a task is clear before accepting and/or allocating it to others Querying any aspect of a task which is not clear and/or providing an explanation if a query is raised by others Learning from your own experience and/or providing constructive feedback when supervising or working with others 	
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.	C4. Be aware of and/or involved in continuous quality improvement.	 Demonstrate how you have contributed to relevant quality audits and where you have delivered against a quality improvement action Examples of where you have reported a problem which has subsequently improved a process 	

ICT Tech Standard, 2 nd edition	n, 2016	ICTTech Standard, 3rd edition	n, 2021	
D.		D. Communication and interpersonal skills		
Use effective communication and interpersonal skills.		ICT Technicians shall use effective communication and interpersonal skills.		
	o discussions, make a presentation, read and in and write different types of documents.	This is the ability to work with others constructively, to explain ideas and proposals clearly and to discuss issues objectively and constructively.		
Competence	Examples of evidence include:	Competence	Example of evidence	
D1. Communicate technical and other information effectively in English.¹ 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.	D1. Communicate technical and other information effectively in English ²	 Contributing to meetings and discussions Preparing communications, documents and reports on technical matters Exchanging information and providing advice to technical and non-technical colleagues 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 nontechnical audiences or recipients 	
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.	D2. Work effectively with colleagues, clients, suppliers or the public	 Contributing constructively as part of a team Successfully resolving issues in discussions with team members, suppliers, clients and/or others Persuading others to accept suggestions or recommendations Identifying, agreeing and working towards collective goals 	

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.

² Any interviews will be conducted in English, subject only to the provisions of the Welsh Language Act 1993.

ICT Tech Standard, 2 nd editio	n, 2016	ICT <i>Tech</i> Standard, 3 rd edition, 2021		
Competence	Examples of evidence include:	Competence	Example of evidence	
D2. (continued)	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 antidiscrimination legislation.	D3. Be aware of the needs and concerns of others, demonstrate personal and social skills and awareness of diversity and inclusion issues.	 Knowing and managing own emotions, strengths and weaknesses Being confident and flexible in dealing with new and changing interpersonal situations Creating, maintaining and enhancing productive working relationships, and resolving conflicts Being supportive of the needs and concerns of others, especially where this relates to diversity and inclusion 	
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		professional conduct, recognand the environment. This competence is about ensumanner in their work and in the	estrate commitment to an appropriate code of nising obligations to society, the profession uring that the applicant is acting in a professional eir dealings with others. An ICT Technician should	
understood your Institution's C			others with regard to professionalism.	
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.	E1. Understand and comply with relevant codes of conduct and regulations/standards	 Demonstrating compliance with your Licensee's Code of Professional Conduct Working within all relevant legislative and regulatory frameworks, including social and employment legislation 	

ICT <i>Tech</i> Standard, 2 nd edition, 2016		ICT <i>Tech</i> Standard, 3 rd edition, 2021	
Competence	Examples of evidence include:	Competence	Example of evidence
 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.	 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 	 Providing evidence of applying current safety requirements, such as risk assessment and other examples of good practice you adopt in your work A sound knowledge of health and safety legislation, for example: HASAW 1974, CDM regulations, ISO 45001 and company safety policies Recognising how sustainability principles, as described in the Guidance on Sustainability, can be applied in your day-to-day work Identifying actions that you can and have taken to improve sustainability Demonstrating awareness of environmental sustainability and the general recognition of sustainability
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.	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	 Understanding the ethical issues that you may encounter in your role Giving an example of where you have applied ethical principles as described in the Statement of Ethical Principles Giving an example of where you have applied or upheld ethical principles as defined by your organisation or company

ICT <i>Tech</i> Standard, 2 nd edition, 2016		ICT <i>Tech</i> Standard, 3 rd edition, 2021	
Competence	Examples of evidence include:	Competence	Example of evidence
 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.	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.	 Undertaking reviews of your own development needs Planning how to meet personal and organisational objectives Carrying out and recording planned and unplanned CPD activities Maintaining evidence of competence development Evaluating CPD outcomes against any plans made Assisting others with their own CPD
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. 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.		[Covered in E3]