Professional Registration



Steve Miller Shaun Dooley Liam Kidman

# **Educational Requirements**

Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
Successful completion of an apprenticeship or other work- based learning programme approved by a Licensee.	An accredited Bachelors or honours degree in engineering or technology.	An accredited Bachelors degree with honours in engineering or technology, plus either an appropriate Masters degree or engineering doctorate accredited by a Licensee, or appropriate further learning to Masters level*.
Level 3 (or above)	Level 5 (or above)	Level 7 (or above)
Ammunition Technician Class 2 Training (Level 4 Ordnance Munitions and Explosives Apprenticeship)	Ammunition Technician Class 1 Training	Explosive Ordnance Engineering Masters Degree – Cranfield University (Shrivenham). Ammunition Technical Officer Training Course Ammunition Technician Class 1 Training + Scientific Experience
Level 4 Ordnance Munitions and Explosives Apprenticeship - University of Wales Trinity Saint David (Swansea)	Level 6 Ordnance Munitions and Explosives Apprenticeship - University of Wales Trinity Saint David (Swansea) Ordnance Munitions and Explosives Honours Degree - University of Wales Trinity Saint David (Swansea)	Level 7 Ordnance Munitions and Explosives Apprenticeship - Cranfield University (Shrivenham)





#### Competence A

Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
<ul> <li>A. Knowledge and understanding</li> <li>Engineering Technicians shall use engineering</li> <li>knowledge and understanding to apply</li> <li>technical and practical skills.</li> </ul>	A. Knowledge and understanding Incorporated Engineers shall use a combination of general and specialist engineering knowledge and understanding to apply existing and emerging technology.	A. Knowledge and understanding Chartered Engineers shall use a combination of general and specialist engineering knowledge and understanding to optimise the application of advanced and complex systems.
A1. <b>Review and select appropriate techniques</b> , procedures and methods to undertake tasks.	A1. Have maintained and extended a sound theoretical approach to the application of technology in engineering practice.	A1. Have maintained and extended a sound theoretical approach to <b>enable them to develop their particular role</b> .
A2. Use appropriate scientific, technical or engineering principles.	A2. Use a sound evidence-based approach to problem-solving and contribute to continuous improvement.	A2. Are developing technological 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.





## Competence B

Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
<b>B. Design, development and solving engineering problems</b> Engineering Technicians shall <b>contribute to</b> the design, development, manufacture, construction, commissioning, decommissioning, operation or maintenance of products, equipment, processes, systems or services.	<b>B.</b> Design, development and solving engineering problems Incorporated Engineers shall apply appropriate theoretical and practical methods to design, develop, manufacture, construct, commission, operate, maintain, decommission and recycle engineering processes, systems, services and products.	<ul> <li>B. Design, development and solving engineering problems</li> <li>Chartered Engineers shall apply appropriate theoretical and practical methods to the analysis and solution of engineering problems.</li> </ul>
B1. Identify problems and apply appropriate methods to identify causes and achieve satisfactory solutions.	B1. Identify, review and select techniques, procedures and methods to undertake engineering tasks.	B1. Take an active role in the identification and definition of project requirements, problems and opportunities.
B2. Identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety, security and environmental impact.	B2. Contribute to the design and development of engineering solutions.	B2. Can <b>identify the appropriate investigations</b> <b>and research</b> needed to undertake the design, development and analysis required to complete an engineering task and <b>conduct</b> <b>these activities effectively</b> .
	B3. Implement design solutions for equipment or processes and contribute to their evaluation.	B3. Can <b>implement engineering tasks</b> and evaluate the effectiveness of engineering solutions.





## Competence C

Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
C. Responsibility, management and leadership	C. Responsibility, management and leadership	C. Responsibility, management and leadership
Engineering Technicians shall accept and exercise personal responsibility.	Incorporated Engineers shall provide technical and commercial management.	Chartered Engineers shall <b>provide technical and</b> commercial leadership.
C1. Work reliably and effectively without close supervision, to the appropriate codes of practice.	C1. Plan the work and resources needed to enable effective implementation of engineering tasks and projects.	C1. Plan the work and resources needed to enable effective implementation of a significant engineering task or project.
C2. Accept responsibility for the work of themselves or others.	C2. Manage (organise, direct and control), programme or schedule, budget and resource elements of engineering tasks or projects.	C2. Manage (organise, direct and control), programme or schedule, budget and resource elements of a significant engineering task or project.
C3. Accept, allocate and supervise technical and other tasks.	C3. Manage teams, or the input of others, into own work and assist others to meet changing technical and management needs.	C3. Lead teams or technical specialisms and assist others to meet changing technical and managerial needs.
	C4. Take an active role in continuous quality improvement.	C4. Bring about continuous quality improvement and promote best practice.

Engineering Council



## Competence D

Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
D. Communication and interpersonal skills	D. Communication and interpersonal skills	D. Communication and interpersonal skills
Engineering Technicians shall use effective communication and interpersonal skills.	Incorporated Engineers shall demonstrate effective communication and interpersonal skills.	Chartered Engineers shall demonstrate effective communication and interpersonal skills.
D1. Communicate effectively with others, at all levels, in English.	D1. Communicate effectively with others, at all levels, in English.	D1. Communicate effectively with others, at all levels, in English.
D2. Work effectively with colleagues, clients, suppliers or the public.	D2. Clearly present and discuss proposals, justifications and conclusions.	D2. Clearly present and discuss proposals, justifications and conclusions.
D3. Demonstrate personal and social skills and awareness of diversity and inclusion issues.	D3. Demonstrate personal and social skills and awareness of diversity and inclusion issues.	D3. Demonstrate personal and social skills and awareness of diversity and inclusion issues.





## Competence E

Engineering Technician (EngTech)	Incorporated Engineer (IEng)	Chartered Engineer (CEng)
E. Personal and professional commitment	E. Personal and professional commitment	E. Personal and professional commitment
Engineering Technicians shall demonstrate a personal commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment.	Incorporated Engineers shall demonstrate a personal <b>commitment to professional standards</b> , recognising obligations to society, the profession and the environment.	Chartered Engineers shall demonstrate a personal <b>commitment to professional standards</b> , recognising obligations to society, the profession and the environment.
E1.Understand and comply with relevant codes of conduct.	E1.Understand and comply with relevant codes of conduct	E1.Understand and comply with relevant codes of conduct
E2.Understand the safety implications of their role and apply safe systems of work.	E2.Understand the safety implications of their role and manage, apply and improve safe systems of work.	E2.Understand the safety implications of their role and manage, apply and improve safe systems of work.
E3.Understand the principles of sustainable development and apply them in their work.	E3.Understand the principles of sustainable development and apply them in their work.	E3.Understand the principles of sustainable development and apply them in their work.
E4.Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice.	E4.Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice.	E4.Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice.
E5.Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner.	E5.Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner.	E5.Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner.





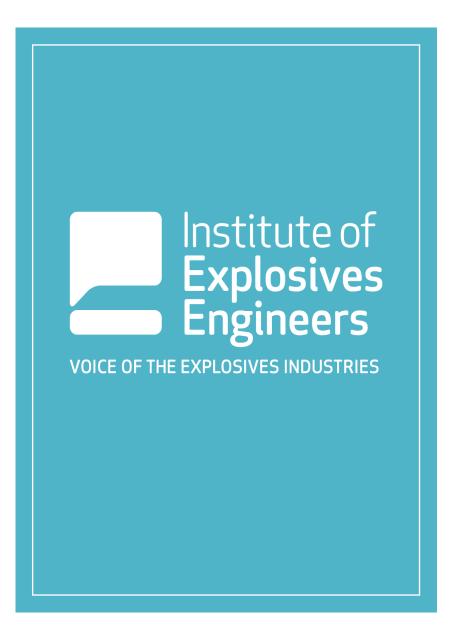
#### Summary

#### **Question to Ask Yourself:**

- Do I meet the Educational Requirement for the Professional Registration level sought?
  - Qualification Certificates, Additional Training, Technical Paper.
- Can I demonstrate the required Competencies for the Professional Registration level sought?
- What Professional Registration level best describes my current Role and Responsibilities?
- Am I being Honest with myself about my Competency/Experience?
  - Send in an appropriate application.
  - Don't aim for the Moon and Miss!









Telephone 01785 594136

#### Address

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#### General Enquires & Professional Registration

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