Engineering Council

The EngTech eBook

How becoming a registered Engineering Technician (EngTech) could advance your career

- The benefits of EngTech
- Find out how to become professionally registered and the requirements for becoming an EngTech
- Studying engineering? Discover what you can do now to help your future career
- Engineering Technicians share their experiences and explain how professional registration has helped their careers
- FAQs and useful links

Contents

The benefits of EngTech 03

Serious about your career in engineering? Gain professional registration 04

Eligibility 05

How to become professionally registered 06

UK-SPEC competence and commitment requirements for EngTech registration 07

Studying engineering as an Apprentice or in FE? 08

EngTech case studies 09

FAQs 13

Useful weblinks 14

Becoming a registered Engineering Technician recognises your skills

Achieving EngTech status marks you out as a skilled professional. Customers – and the public more widely – are likely to have a higher level of confidence in individuals listed on a professional register. You will:

- Gain a professional title that recognises your hard work and expertise
- Enhance your employability
- Stand out from the crowd
- Enjoy greater influence within your organisation
- Have access to life-long learning resources

"Gaining EngTech has provided opportunities for career progression that were previously unavailable, enabling me to move into positions of responsibility that are more demanding, as well as being more satisfying both financially and vocationally."

Richard Griffin
EngTech MIED RCADMan

"Whilst I rely on my engineering knowledge and experience, gaining professional registration as an EngTech is proof to others that I am working at a certain level."

Andrew French
EngTech LCIBSE MBIFM

Serious about your career in engineering?

Reward your skills

Do you have the skills and experience to solve practical engineering problems?

Are you responsible for supervising staff or managing technical projects, with knowledge of how to apply safe systems of working?

Do you make a valuable contribution to the design, development, manufacture, commissioning, decommissioning, operation or maintenance of products, equipment, processes or services?

If so, then you should be seriously thinking of gaining the professional title **Engineering Technician (EngTech)**.

Engineering Technicians are concerned with applying proven techniques and procedures to the solution of practical engineering problems. They carry supervisory or technical responsibility, and are competent to exercise creative aptitudes and skills within defined fields of technology. Professional Engineering Technicians contribute to the design, development, manufacture, commissioning, decommissioning, operation or maintenance of products, equipment, processes or services. Professional Engineering Technicians are required to apply safe systems of working.

"EngTech registration has made me more employable, confirming my previous qualifications and experience. It bridged the gap when I left the military and helped my career progress."

Steve Eley
EngTech, MSOE, MIRTE

Eligibility

Recent research suggests that there are at least 600,000 people currently working as engineering technicians, who already hold the necessary qualifications, skills and/or experience that would make professional EngTech registration relatively straightforward.

EngTech status is attainable through demonstration of the required standards of professional competence and commitment. These are set out in the professional standard, UK-SPEC, and are typically developed through training/education and work experience. This could be, for example, within an approved engineering-based Advanced/Modern Apprenticeship programme. However many other qualifications may be acceptable.

Potential EngTech registrants who do not hold formal qualifications can often demonstrate that they have acquired the necessary competence through substantial working experience.

Your institution will be able to advise on the different ways in which you can meet the requirements, or please see our website for further details.

UK-SPEC

Individuals aspiring to registration need independent assessment of their competence.

The UK Standard for Professional Engineering Competence (UK-SPEC) provides the means to achieve this.

UK-SPEC describes the value of becoming professionally registered as an Engineering Technician, Incorporated Engineer (IEng) or Chartered Engineer (CEng). It describes the requirements that have to be met for registration, and gives examples of ways of doing this.

For more information see page 7

Why wait?
Apply for EngTech today by completing our enquiry form

How to become professionally registered

1 Join a Professional Engineering Institution licensed by the Engineering Council to assess candidates for EngTech registration. The institution you choose is most likely to be one that relates to your engineering discipline or area of work.

2 Record your professional development. The evidence might come through academic or vocational qualifications, an employer's training and development scheme, and/or from a personal record showing how you gained your professional competences - guidelines will be available from your institution.

3 As soon as you feel that you are able to demonstrate the required technical and personal competences, apply for assessment by your institution.

Professional engineering registration – what's in it for me?

The Engineering Council video on YouTube explains what becoming professionally registered as an engineer means, the benefits to the individual, organisations and wider society and briefly explains how to apply for registration.

Professional Engineering Institutions

There are 36 Professional Engineering Institutions (PEIs), each covering specific engineering disciplines, so it shouldn't be difficult finding the right one for you.

Click here for a full list of licensed Institutions or go to page 14 for direct links to their websites.

There are also 19 Professional Affiliates that have agreements with PEIs to process registration applications for their members.

Start early

Many engineers and technicians join an institution while studying or training and follow the junior grades through to full membership and registration.

However, it is just as beneficial to apply for institution membership and registration at any time in your career. Professionally registered engineers and technicians also tend to retain their title throughout their working lives, and often well into retirement.

UK-SPEC competence and commitment requirements for EngTech registration

An outline of the necessary competence and commitment appears below. Examples of activities which could demonstrate that you have achieved this, can be found in the UK Standard for Professional Engineering Competence, UK-SPEC

UK-SPEC Competence and Commitment Standard for Engineering Technicians.

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

A Use engineering knowledge and understanding to apply technical and practical skills. This includes the ability to:

- A1 Review and select appropriate techniques, procedures and methods to undertake tasks
- A2 Use appropriate scientific, technical or engineering principles

B Contribute to the design, development, manufacture, construction, commissioning, operation or maintenance of products, equipment, processes, systems or services. In this context, this includes the ability to:

- B1 Identify problems and apply diagnostic methods to identify causes and achieve satisfactory solutions
- B2 Identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety and environmental impact

C Accept and exercise personal responsibility. This may include the ability to:

- C1 Work reliably and effectively without close supervision, to the appropriate codes of practice
- C2 Accept responsibility for work of self and others
- C3 Accept, allocate and supervise technical and other tasks

D Use effective communication and interpersonal skills. This includes the ability to:

- D1 Use oral, written and electronic methods for the communication in English[1] of technical and other information
- D2 Work effectively with colleagues, clients, suppliers and the public

E Make a personal commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment. In order to satisfy this commitment, they must:

- E1 Comply with the Code of Conduct of their Licensed Institution or Professional Affiliate
- E2 Manage and apply safe systems of work.
- E3 Undertake engineering work in a way that contributes to sustainable development
- E4 Carry out continuing professional development, including opportunities for this offered by their Institution, to ensure competence in areas and at the level of future intended practice

[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.

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Studying engineering as an Apprentice or in FE?

Although your immediate focus may be on completing your studies or training , it's never too early to think about 'what next?' If you are serious about a career in engineering the next important step in your career development should be attaining professional registration.

Your studies or training will provide an important part of what's needed to achieve registered status.

> *"Getting recognition of my professional achievements has always been my goal and registration as an EngTech certainly demonstrates this."*
>
> ***Willington T Charangwa***
> *EngTech ARAeS*

> *"Registration as Engineering Technician provided me with recognition of my career achievements."*
>
> ***Scott McCrae***
> *EngTech MIWater*

But there is something you can do **right now** to help your **future career**.

Professional registration is awarded through membership of a Professional Engineering Institution (PEI). Many of the institutions offer student membership at little or no cost, and joining whilst you are studying or training means you will have a head start and be able to keep up with what's happening in your field through the resources or employer networking events offered by many institutions. You might even meet your future employer at one of these events!

There are 36 PEIs, each covering specific engineering disciplines, so it shouldn't be difficult finding the right one for you. You might even want to join more than one!

In addition, many of the 19 Engineering Council Professional Affiliates have agreements with PEIs, through which their members can become professionally registered.

Case Studies

Martin Killcross EngTech TIChemE

(REGISTERED 2010)

Education and qualifications: City & Guilds Process Plant Operation, Halton College of Further Education, Widnes, Cheshire

Which institution are you a member of? The Institution of Chemical Engineers (IChemE)

Grade of membership: EngTech TIChemE

Job title: Manager of Commissioning

Employer: PegasusTSI Inc, USA but currently on secondment to URENCO ChemPlants, Cheshire

Length in current job: 6 years

Please describe a typical working day: I am responsible for all commissioning preparation and implementation activities, ensuring the safe and effective transition of the construction site into a functioning processing plant. In the preparation stage of a project I spend time reviewing documents and actually writing key commissioning procedures. There is a period where I will travel to witness factory tests of the main plant equipment and control systems. As the work moves to the field, much time is spent on site witnessing installation activities and executing all the prepared commissioning procedures prepared.

What is your greatest professional achievement to date? I am very proud of the way that my career has developed. Dedication to my work and my practical expertise has found me at the head of commissioning organisations on both sides of the Atlantic. I do hope my achievements will inspire others to aim high in their career aspirations. Opportunity knocks if you are prepared to learn, develop and offer a great service.

What attracted you to gain professional registration as an EngTech? Despite having significant knowledge, experience and a deep enthusiasm for my work, not having academic qualifications always left me feeling somewhat unrewarded and unfulfilled. However, I view the award of EngTech TIChemE as a long awaited recognition of my place in my chosen profession.

How has gaining EngTech helped with your career? I think registration is absolutely necessary and it's been a natural progression for me. I am now a published author in my field, dare I say even an expert, however there is no discounting the edge professional registration provides and indeed EngTech status has given me that.

What advice would you give someone considering professional registration as an EngTech? I would say do it. Even if you have academic qualifications it will complement them. However university isn't for everyone and if a person is adept within the industrial workforce they should not be restricted in their ability to be recognised.

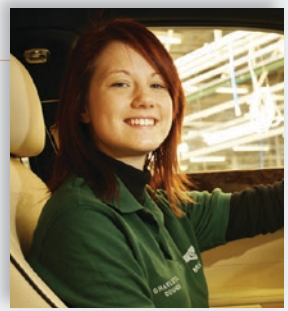
How does your employer benefit from you being professionally registered as an EngTech? Working in a world class organisation, that highly values our Chartered Engineers and expects they meet that standard is a clear demonstration of the quality of the company. Now EngTech status is available for the process related industries, we will be encouraging our operations staff to achieve this title also as it will further demonstrate our company's drive for all around excellence in what our business stands for and how we operate.

Click here to see the full case study.

Case Studies

Charlotte Gough EngTech TIET

(REGISTERED 2012)



Education and qualifications: IET approved apprenticeship scheme

Which institution are you a member of? Institution of Engineering and Technology (IET)

Grade of membership: Technician

Job title: Auto Electrical Technician

Employer: Bentley Motors

Length in current job: 5 years

Please describe a typical working day: My everyday work sees me implementing and integrating prototype electrical systems, diagnosing and rectifying electrical faults on a cars' system and developing harnesses for various projects – designing, building, testing and fitting.

What is your greatest professional achievement to date? Gaining EngTech registration, on completion of my apprenticeship.

What attracted you to gain professional registration as an EngTech? Once I finished the apprenticeship I recognised it was the next step in my own career development, as gaining professional registration as an EngTech shows that an individual is capable of working to a high standard in not just one area but several (multi-skilled). When a technician is professionally registered it also shows commitment to the profession.

How has gaining EngTech helped with your career? I believe I have gained greater recognition for my work from my peers and employer, and holding EngTech proves that as a technician my job is highly skilled.

What advice would you give someone considering professional registration as an EngTech? Apply today! Personally, I think professional registration as an EngTech is a really good idea. It allows anyone who wishes to work to a 'set' standard, and to be reassured that people will universally recognise the work and effort the individual has achieved. I also believe it is a definite plus point on a CV.

Click here to see the full case study.

Case Studies

Dan Massey EurAg EngTech MIAgrE

(REGISTERED 2004)

Education and qualifications: Level 2 & 3 City and Guilds Service Engineering, John Deere Ag Tech Diploma, John Deere LTA 4 Master Technician

Which institution are you a member of? Institution of Agricultural Engineers (IAgrE)

Grade of membership: Associate Member

Job title: Agricultural Service Technician

Employer: J.E Buckle Ltd (part of the Tuckwell group)

Length in current job: 13 years

Please describe a typical working day: On a daily basis I am given tasks by my service manager in order to support the customers within my designated expertise, however during the course of the day I am required to attend breakdowns and respond as quickly as I can to resolve problems in order to reduce machine down time. This occurs more frequently during the busy period of harvest time and I am often required to work extra hours in order to complete my work.

What is your greatest professional achievement to date? My greatest achievement was receiving the award 'Agricultural Technician of the year' in 2011. This recognised my commitment to the industry and the hard work I have demonstrated throughout my career.

What attracted you to gain professional registration as an EngTech? For me, the reason I strived to gain professional registration was because I wanted to demonstrate my passion for my career. In addition, I wanted to promote professionalism within the industry as the EngTech requirements are 'to provide a sound understanding and ability' of the trade in order to 'maintain a professional level'.

How has gaining EngTech helped with your career? Becoming an EngTech with the Engineering Council via IAgrE provides reassurance to my customers, as it demonstrates that I am trained to the highest level and am recognised by a professional engineering body. It also shows my commitment to agricultural engineering and I am therefore given more opportunities to develop my career. In addition, I have been elected a member of IAgrE's council, a role that provides me with the opportunity to share my expertise.

What advice would you give someone considering professional registration as an EngTech? Make it a priority within you career, as it demonstrates that you are committed to being a professional service technician.

How does your employer benefit from you being professionally registered as an EngTech? My employer benefits as it is able to sell my services, reassuring customers that any job will be completed to a high standard and it reinforces the organisation's reputation.

Click here to see the full case study.

Case Studies

Richard Vann EngTech AIExpE AIDE

(REGISTERED 2011)

Education and qualifications: A Levels and professional qualifications (IExpE and IDE)

Which institution are you a member of? Institute of Explosive Engineers (IExpE)

Grade of membership: Associate

Job title: Managing Director

Employer: RVA Group

Length in current job: 20 years

Please describe a typical working day: The beauty of this job is that there is no such thing! The only certainty is the day will start and end at midnight. What happens in between varies on a daily basis. My role at RVA Group sees me travelling the length and breadth of the country, sometimes overseas, to discuss engineering solutions and general business advice with a range of clients. When project managing large sites we also supervise the work of demolition and dismantling contractors, having played a role in their selection too, and we liaise with varied third parties including emergency services, utilities providers and local communities.

What is your greatest professional achievement to date? To have worked hard for 20 years to get to the position where RVA Group is working with some of the largest and most well-known organisations in the world. To have an audience comprising companies of that stature feels like a very significant achievement indeed.

What attracted you to gain professional registration as an EngTech? I believe we must continually develop our knowledge and expertise within this arena, to ensure we can provide clients with the safest and most robust and innovative engineering solutions possible. I recognised EngTech registration as a way to further advance my skills within what is a very specialist discipline, and also network with like-minded professionals.

How has gaining EngTech helped with your career? It is a little early to say, but even at this stage I think it has added another stamp of credibility to my professional skills and knowledge, which will in turn give clients greater confidence in the RVA team.

What advice would you give someone considering professional registration as an EngTech? If you are active in a discipline of engineering, and if you are confident in your knowledge but you want to continuously develop your expertise, then I would seriously recommend applying for professional registration with the Engineering Council. To be associated with an organisation of this stature cements your commitment to raising standards of engineering excellence within your field.

How does your employer benefit from you being professionally registered as an EngTech? With EngTech registration, RVA Group now has the added advantage of being able to demonstrate to potential clients and other organisations, such as enforcing authorities, that the team is made up of knowledgeable professionals that are appropriately trained, skilled and equipped to provide value-adding engineering expertise.

Click here to see the full case study.

FAQs

How much is registration and how do I pay?

There will be the initial joining fee, and the annual registration fee. Amounts vary depending on your level of registration, and may be revised annually. Current Engineering Council registration fees can be found here and are paid via the institution you are registered through. Please note that you will also have to pay fees to join and retain membership of your chosen institution. A few institutions also surcharge Engineering Council fees.

Does membership of an engineering institution automatically qualify me for registration?

No. Institutions offer a variety of membership grades. Some grades enable members to apply for registration, others do not, so please make sure your chosen institution knows you wish to apply for professional registration. In addition, you will always need to go through the assessment process before being registered with the Engineering Council.

Do I need to be a member of an institution or can I register directly through the Engineering Council?

The Engineering Council does not offer direct registration. Candidates for professional registration are required to be in membership of one of the 36 licensed institutions listed.

Can I use my international qualifications to register?

Yes. The Engineering Council is the UK signatory to a number of international accords - agreements which provide a mechanism for mutual recognition between signatory bodies of engineering education accreditation processes. Further details can be found here or through the International Engineering Alliance.

I have gained a qualification outside the UK. Is there a UK equivalent?

Please contact UK NARIC, the national agency responsible for providing information and advice about how qualifications and skills from overseas compare to the UK's national qualification frameworks.

How do I find out if my qualification or programme is approved as contributing towards EngTech?

The Engineering Council has a database, listing qualifications and programmes that Professional Engineering Institutions have approved as contributing towards EngTech registration. You can search the database of technician qualifications for programmes, Apprenticeships, other employer schemes and NVQs/SVQs that may fulfil most or all of what you would need to become registered as EngTech, or vocational qualifications that may contribute towards EngTech.

How does the role of Professional Technician relate to EngTech?

The Professional Technician brand embraces all the existing technician registers in Engineering, ICT and Science. Anyone registered as EngTech, is, by definition, a Professional Technician.

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Useful weblinks

Engineering Council

Engineering Council Website

EngTech

IEng

CEng

Engineering Council Newsletter

International recognition of UK qualifications

UK-SPEC

Database of technician qualifications

Benefits of registration

Information for employers

Information for students

Registration enquiry form

International Engineering Alliance

Professional Affiliates

246 High Holborn, London WC1V 7EX

T +44 (0)20 3206 0500

F +44 (0)20 3206 0501

Professional Engineering Institutions

BCS, The Chartered Institute for IT (BCS)

British Institute of Non-Destructive Testing (BINDT)

Chartered Institute of Plumbing and Heating Engineering (CIPHE)

Chartered Institution of Building Services Engineers (CIBSE)

Chartered Institution of Highways & Transportation (CIHT)

Chartered Institution of Water and Environmental Management (CIWEM)

Energy Institute (EI)

Institute of Acoustics (IOA)

Institute of Cast Metals Engineers (ICME)

Institute of Healthcare Engineering & Estate Management (IHEEM)

Institute of Highway Engineers (IHE)

Institute of Marine Engineering, Science and Technology (IMarEST)

Institute of Materials, Minerals and Mining (IOM3)

Institute of Measurement and Control (InstMC)

Institute of Physics (IOP)

Institute of Physics & Engineering in Medicine (IPEM)

Institute of Water (IWater)

Institution of Agricultural Engineers (IAgrE)

Institution of Chemical Engineers (IChemE)

Institution of Civil Engineers (ICE)

Institution of Engineering and Technology (IET)

Institution of Engineering Designers (IED)

Institution of Fire Engineers (IFE)

Institution of Gas Engineers and Managers (IGEM)

Institution of Lighting Professionals (ILP)

Institution of Mechanical Engineers (IMechE)

Institution of Railway Signal Engineers (IRSE)

Institution of Royal Engineers (InstRE)

Institution of Structural Engineers (IStructE)

Nuclear Institute (NI)

Royal Aeronautical Society (RAeS)

Royal Institution of Naval Architects (RINA)

Society of Environmental Engineers (SEE)

Society of Operations Engineers (SOE)

The Institution of Diesel and Gas Turbine Engineers (IDGTE)

The Welding Institute (TWI)