Engineering Council

The IEng eBook

How becoming registered as an Incorporated Engineer (IEng) could advance your career

- The benefits of IEng
- Find out how to become professionally registered and the requirements for becoming an IEng
- Student/Apprentice? Discover what you can do now to help your future career
- Incorporated Engineers share their experiences and explain how professional registration has helped their careers
- FAQs and useful links

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Becoming an Incorporated Engineer (IEng) could advance your career

Professional registration as an IEng not only recognises your proven commitment, skills and experience as an engineer, but also identifies to employers that you have the competence, expertise and work ethic that they value. You will:

- Gain a valued badge of competence
- Enhance your employability
- Stand out from the crowd
- Enjoy greater influence within the profession
- Earn recognition from your peers
- Hold an internationally recognised title

"As it is all about competence in the job role, IEng is as important (and perhaps even more so) as an academic qualification for establishing trust in you as an engineer."

Alan McKenzie *IEng MEI*

"One of the many benefits of IEng registration has been the professional recognition of peers and management since I was awarded the qualification."

Paul Cozens *IEng CITP MBCS*

Serious about your career in engineering?

Get professional recognition

Do you have the talent to apply technology in a practical and creative way?

Do you see yourself working in an engineering role where on a daily basis it is your skills and know-how that ensure success?

If the answer in both cases is yes, then you will also want to see your professionalism recognised – an ambition you can achieve by gaining the title **Incorporated Engineer (IEng)**.

Incorporated Engineers maintain and manage applications of current and developing technology, and may undertake engineering design, development, manufacture, construction and operation. Incorporated Engineers are variously engaged in technical and commercial management and possess effective interpersonal skills.

"I attribute a lot of my success and interesting career to my professional registration. Without doubt, I have seen it as a badge of recognition of my professionalism, demonstrating that I have reached a standard acknowledged by my peers"

Diane Davy
IEng FIET MCMI

Eligibility

IEng status is attainable through demonstration of the required professional competence and commitment. These are set out in the professional standard, UK-SPEC, and are typically developed through education and work experience.

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

Not yet ready for IEng?
If you have not yet built up the required competences for IEng you may wish to consider the Engineering Technician (EngTech) qualification as a stepping stone to IEng.

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 (EngTech), 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 IEng today by completing our enquiry form.

"Being professionally registered with the Engineering Council provides independent evidence that I am academically and vocationally qualified and competent as an engineer"

***David Rogers** IEng MIMechE MSAE GCGI*

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How to become professionally registered

1 Join a Professional Engineering Institution licensed by the Engineering Council to assess candidates for IEng 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 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 join an Institution while a student, or soon after graduation, 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 also tend to retain their title throughout their working lives, and often well into retirement.

UK-SPEC competence and commitment requirements for IEng 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 Incorporated Engineers.
Incorporated Engineers must be competent throughout their working life, by virtue of their education, training and experience, to:

A Use a combination of general and specialist engineering knowledge and understanding to apply existing and emerging technology.

- A1 Maintain and extend a sound theoretical approach to the application of technology in engineering practice
- A2 Use a sound evidence-based approach to problem-solving and contribute to continuous improvement

B Apply appropriate theoretical and practical methods to design, develop, manufacture, construct, commission, operate, maintain, decommission and re-cycle engineering processes, systems, services and products.

- B1 Identify, review and select techniques, procedures and methods to undertake engineering tasks
- B2 Contribute to the design and development of engineering solutions
- B3 Implement design solutions and contribute to their evaluation

C Provide technical and commercial management

- C1 Plan for effective project implementation
- C2 Manage the planning, budgeting and organisation of tasks, people and resources
- C3 Manage teams and develop staff to meet changing technical and managerial needs
- C4 Manage continuous quality improvement

D Demonstrate effective interpersonal skills.

- D1 Communicate in English[2] with others at all levels
- D2 Present and discuss proposals
- D3 Demonstrate personal and social skills

E Demonstrate a personal commitment to professional stand-ards, recognising obligations to society, the profession and the environment.

- E1 Comply with relevant codes of conduct
- E2 Manage and apply safe systems of work
- E3 Undertake engineering activities in a way that contributes to sustainable development
- E4 Carry out continuing professional development necessary to maintain and enhance competence in own area of practice

[2] 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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Student/Apprentice?

"By becoming a registered engineer, you are helping to build on a long and proud engineering heritage that has been forged by some of the country's most eminent engineers"

Keith Winning *BEng (Hons) MEng IEng MIED FRGS*

Although your immediate focus will no doubt be working hard to finish your engineering studies, 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 will provide an important part of what's needed to achieve registered status, but you will also need to develop further skills and competences in the workplace.

"For me, to be an IEng was the completion of a journey started during formal education - whilst creating new fresh paths to develop myself along"

Stephen Carr
IEng CITP MBCS MACS

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 a student or apprentice 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

Ikediashi Ambrose Umuodum GCGI IEng CEnv MIMechE

(REGISTERED 2002)

"Incorporated Engineer registration is truly an international award that will help you all the way."

Being registered as an Incorporated Engineer (IEng) gives me great satisfaction and a sense of belonging. It has helped me to gain the professional qualifications International Engineering Technologist IntET(UK) and Chartered Environmentalist (CEnv). Collectively these qualifications have opened doors for international jobs. Incorporated Engineer registration is truly an international award that will help you all the way.

I started my career in engineering as an apprentice with Leventis Technical Ltd through the National Directorate of Employment (1988 to 1991). During that period, I sat for WAEC Technical Examinations in Motor Vehicle Mechanics Work (Part One).

From 1990 through to 1999, I passed City and Guilds awards culminating in being awarded the City and Guilds Full Technological Certificates in Mechanical Engineering Technicians (Plant Engineering) and Motor Vehicle Technicians respectively. Between 1999 and 2001, I gained the City and Guilds Advanced Technician Diploma in Electrical and Electronic Engineering (with option in Control Systems and Power Control). In 2002, through my membership with the Institution of Incorporated Engineers (IIE), I successfully registered as an IEng with the Engineering Council.

Later that year, I became a Professional Review Assessor (Interviewer) for IEng registration, for the IIE (now the IET, following the merger of IIE and the Institution of Electrical Engineers in 2004), a role I fulfilled for two years.

In 2003, I was awarded the City and Guilds Graduateship Diploma in Engineering and transferred my membership to IMechE. In March 2009, I was admitted to the UK section of the International Register of Engineering Technologists by the Engineering Council, entitling me to use the designated letters IntET(UK) after my name. In November of the same year, I was registered as a CEnv with the Society for the Environment, through IMechE.

Having started out as a maintenance fitter over 16 years ago I am currently the Head of Facilities, Health, Safety and Environmental Management Consulting for Property Support Services Ltd in Nigeria.

Case Studies

Philip Hawtrey IEng MIET MILP

(REGISTERED 2001)

"I would encourage others to seek professional registration as it indicates a high level of expertise and a commitment to remaining at the forefront of developments within the engineering profession. This is very important for both your employers and clients."

As Technical Manager for the Lighting Division of Mouchel Group Ltd, which has 12,000 employees in the UK, I work within a team of 40 lighting designers delivering innovative solutions, environmental assessments, 'Invest to Save' strategies, lighting policies, energy procurement, inventory management and technical support.

Registered with Engineering Council as an Incorporated Engineer (IEng) since 2001, I am a member of both the Institution of Lighting Professionals (ILP) and the Institution of Engineering and Technology (IET).

For me the advantage of IEng registration is that it demonstrates third party recognition of my qualifications, experience and skills. It also enables my employer and clients to top class products. Mouchel sees professional registration as key to providing excellent service to our clients.

The emphasis registration places on continuous professional development has encouraged me to stay abreast of all the latest developments in my field and has led to my current application for CEng status via the technical report route.

Case Studies

Jayne Eyre IEng MSOE MIPlantE

(REGISTERED 1996)

"Working as both a safety engineer and now as an environmental engineer, my IEng status has helped enormously."

I currently work as the Head of Environmental Compliance for the Operations Department at Eggborough Power Station near Selby, North Yorkshire.

My career has developed over more than 20 years, starting with a mechanical engineering apprenticeship. I then worked my way through the ranks, from being a maintenance team leader to an engineer in charge of a production line. I attained IEng status in 1996.

Not having taken an academic route through university, I wanted a recognisable qualification to demonstrate my abilities and experience. I submitted my application and had to write a technical report on a project I had led, which I then presented to an Institution of Plant Engineers (IPlantE) registration interview panel.

For me, attaining IEng status was not influenced by working in a male-dominated environment, or by a need to prove my worth. I was fortunate enough to spend my apprenticeship and early-qualified years working amongst engineers who accepted me as just another engineer. Their expectation was that I would naturally progress to join IPlantE, which is a Professional Sector of the Society of Operations Engineers (SOE), and consequently register with the Engineering Council.

I have maintained my IEng status whilst working in a variety of safety roles and, more recently, environmental management. In 2008 I achieved a NEBOSH Diploma in Environmental Management.

However, I consider myself an engineer primarily. Working as both a safety engineer and now as an environmental engineer, my IEng status has helped enormously. My career was built on a solid, traditional foundation. The IEng status, along with my experience and technical knowledge, underpin my more 'fashionable' environmental qualifications.

Case Studies

Andrew Houston IEng MIWater

(REGISTERED 2010)

"For me, the Institute of Water is the benchmark for the industry and Incorporated Engineer registration was the right route to accreditation and professional recognition."

I have enjoyed the many projects I have been involved in over the years and have developed into areas out of my original field of expertise. After undertaking further studies in Health & Safety and being accepted as a Technical Member of IOSH (Institute of Safety & Health) I was looking for a new challenge within the water industry.

For me, the Institute of Water (IWater) is the benchmark for the industry and Incorporated Engineer registration was the right route to accreditation and professional recognition.

I initially thought the process of being recognised professionally would be out of my reach (because I have an HND not a degree) but this route places considerable emphasis on appropriate experience rather than simply qualification.

I had accepted a job offer to work in Perth, Western Australia, specialising in Infrastructure projects and it was important for me to gain registration as it would effectively demonstrate my technical capabilities as an engineer, as well as my ability to manage budgets and personnel. The Institute was extremely accommodating and approachable throughout the whole process. The Professional Review Interview is completely different to a job interview - the focus is on relevant experience the applicant has stated that they have in the industry.

The feedback from the process has also been invaluable, identifying areas that I need to develop more effectively and allowing me to redefine my CPD goals for the immediate future. More importantly, this feedback has made me re-assess the way in which I record and evaluate my CPD experiences, in order to develop effectively in my role with Georgiou for the future.

Since gaining IEng via IWater I have further enhanced my development and professional recognition by tackling and being awarded:

- International Engineering Technologist via IWater
- IEng via the Institution of Mechanical Engineers

With my combined registration I have been granted Chartered Engineering Technologist in Australia via Engineers Australia to bolster my Australian career; however the professional recognition I hold in the UK is what is globally accepted and recognised.

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.

I can't afford the time away from work to study. How can I become registered?

New flexible work-based Bachelors degrees in Professional Engineering have been developed, which lead to IEng or CEng status. These provide the opportunity to learn while earning, making IEng status achievable for all eligible practising engineers. Tailored programmes, designed around UK-SPEC, integrate learning in the workplace with supervised work-based professional development. More details can be found at: http://www.engc.org.uk/education--skills/engineering-gateways

What is an accredited degree?

Accredited degrees partially or fully satisfy the educational requirement for IEng and CEng registration.

How do I find out if my degree is accredited?

The Engineering Council has a searchable database of engineering degrees that have been accredited by one or more of the Professional Engineering Institutions. The database can be found at: http://www.engc.org.uk/courses

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 over-seas compare to the UK's national qualification frameworks.

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Useful weblinks

Engineering Council

Engineering Council Website

EngTech

IEng

CEng

Engineering Council Newsletter

International recognition of UK qualifications

UK-SPEC

Accredited course search

Benefits of registration

Information for employers

Information for students

Work-based degrees

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)