AN ENGINEERING STUDENT’S GUIDE TO PROFESSIONAL REGISTRATION

Making the transition from graduate to professional

www.engc.org.uk
WHY SHOULD I BECOME PROFESSIONALLY REGISTERED?

Although your immediate focus will no doubt be working hard to finish your engineering studies, it’s never too early to start to think about ‘what next?’

If you are looking to pursue a career in engineering the next important step should be achieving professional registration. This is the best way to show employers that you have made the transition from graduate to professional!

Gaining professional registration gives you a title to show employers and wider society, in the UK and abroad, that you have the knowledge, skills and attitude they value. It demonstrates that your competence and understanding of engineering principles have been independently assessed and that you have shown a commitment to keeping them up-to-date.

Whichever title you apply for, the benefits of professional registration are the same:

- Improved career prospects and employability
- Higher earning potential
- International recognition of your competence and commitment
- Greater influence within your organisation and industry
- Demonstration of work ethic valued by employers and customers
- Evidence of your expertise and hard work
- Enhanced status leading to higher self esteem

Employers value professional registration

Professional registration is now a stipulation by our customers for key personnel for our top projects.

Bill Hewlett
CEng FICE
Technical Director
Costain Group PLC

Thales maintains its reputation delivering significant and complex transportation projects in challenging environments ensuring that its engineers are professionally registered.

Paul Maynard
Operations & Transformation Director
Thales Ground Transportation Systems

WHICH TITLE SHOULD I AIM FOR?

As an engineering graduate, you have two options: Incorporated Engineer (IEng) or Chartered Engineer (CEng)1.

IEng and CEng are both well-recognised titles that provide public demonstration of your achievements. The title you apply for will depend on a number of factors.

Many engineers follow a career path that sees them using the IEng skill set, while others acquire the additional skills and competences required for CEng registration.

If you were thinking of working directly towards CEng status, you could find that you are eligible for IEng registration several years earlier than CEng. It is well worth going for the IEng title as it provides you with all the benefits of professional registration, but sooner!

The next pages outline what Incorporated and Chartered Engineers typically do, alongside a flowchart to show the academic qualifications that count towards each title. If you are still unsure, don’t worry, as you will be given lots of help and advice when you apply.

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Paul Maynard
Operations & Transformation Director
Thales Ground Transportation Systems

IEng: 90% agreed that they would recommend to other engineers that they become professionally registered

CEng: 93% agreed that they would recommend to other engineers that they become professionally registered

IEng: 88% valued their professional registration highly

CEng: 85% valued their professional registration highly

Source: Engineering Council 2013 registrant survey

1 The other titles are Engineering Technician (EngTech) and ICT Technician (ICTTech)
INTEGRATED ENGINEER
IEng

Incorporated Engineers maintain and manage applications of current and developing technology, and may undertake engineering design, development, manufacture, construction and operation.

They are able to demonstrate:
- The theoretical knowledge to solve problems in developed technologies using well proven analytical techniques
- Successful application of their knowledge to deliver engineering projects or services using established technologies and methods
- Responsibility for project and financial planning and management together with some responsibility for leading and developing other professional staff
- Effective interpersonal skills in communicating technical matters
- Commitment to professional engineering values.

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

IEng case studies are at: www.engc.org.uk/case-studies-ieng

CHARTERED ENGINEER
CEng

Chartered Engineers develop solutions to engineering problems using new or existing technologies, through innovation, creativity and change and/or they may have technical accountability for complex systems with significant levels of risk.

They are able to demonstrate:
- The theoretical knowledge to solve problems in new technologies and develop new analytical techniques
- Successful application of the knowledge to deliver innovative products and services and/or take technical responsibility for complex engineering systems
- Accountability for project, finance and personnel management and managing trade-offs between technical and socio-economic factors
- Skill sets necessary to develop other technical staff
- Effective interpersonal skills in communicating technical matters.

Although I have attained a number of high level academic qualifications I feel that CEng provides a benchmark of my competence, providing me with a stronger CV when applying for future vacancies.

CEng case studies are at: www.engc.org.uk/case-studies-ceng

Is my degree accredited?

To take a ‘standard route’ to professional registration you should have an accredited degree. You can check whether your course is accredited and learn more at www.engc.org.uk/courses. If it is not accredited, your engineering institution can carry out an individual assessment of your education and experience and advise whether you need to do more.

UK-SPEC

The UK Standard for Professional Engineering Competence (UK-SPEC) describes the requirements that have to be met for professional registration as an EngTech, IEng or CEng and gives examples of ways to do this. Visit www.engc.org.uk/ukspec

Standard Routes to Professional Registration

Standard route applications provide the simplest path to registration, but you can opt for an individual assessment of your education and understanding.

- Bachelors Degree or Bachelors (Honours) Degree accredited for IEng registration
- Bachelors (Honours) Degree accredited as partially meeting the educational requirement for CEng
- Accredited Integrated Masters (MEng) Degree
- Professional Development and Work Experience to IEng Standard
- Professional Development and Work Experience to CEng Standard
- Professional review for IEng
- Professional review for CEng

As your career progresses it is possible to develop your competences and move from one title to another.

Elements here are not necessarily sequential and some may be undertaken concurrently.

Stephen Carr
IEng CITP
MBCS MACS

Dr Caroline Lowe
BSc MSc PhD
CEng MIExpE
WHAT CAN I DO NOW TOWARDS BECOMING PROFESSIONALLY REGISTERED?

In your first year - join a professional engineering institution

Join one or more of the 36 professional engineering institutions as soon as you can. The earlier you join the sooner you can start to benefit from the support offered. The engineering institution(s) you choose may have accredited your degree and should relate to your area of study. Many offer student membership at little or no cost and signing up will make sure that you keep up with what’s happening in your field. The job market is tough and every little helps. Refer to the rear cover for more information about membership benefits and a link to a list of engineering institutions.

In your second/third year - keep a record of your professional development

Start to record your professional development as soon as possible – your institution can provide guidelines and many have online tools to help you to do this. Part of your professional development could take place while at university, including through industrial placements. If you haven’t already, start to make the most of the activities run by your engineering institution.

In your final year - stay in touch

Don’t forget to let your institution know your new contact details when you graduate to avoid losing touch and missing out on membership benefits! Remember that your engineering institution may be able to help you with job hunting and that your membership will show potential employers that you are serious about your career.

It is definitely worth the effort of going through the application process, as being an IEng demonstrates that you are a valued professional engineer within the industry.

Michael Clifford
BEng (Hons) IEng
FiFireE

Now I am consulting, being professionally registered as a CEng means I can work at a higher pay scale and on projects where clients require the consulting capability of people that are at the top of their profession.

Nikki Barker
CEng MIMechE
MIGEM

WHAT WILL I NEED TO DO WHEN I FINISH UNIVERSITY?

Once graduated - develop your competence

This generally involves workplace experience and some further training (also known as professional development) - see UK-SPEC for more information (link on page 5). You will need evidence from your employer’s training and development scheme or from a personal record of how you gained your professional competences. Your engineering institution can assist so let them know you’re aiming for professional registration – they could even help you find a mentor.

Once experienced - professional review

As soon as you feel that you have built your competence to a level where you meet the requirements for IEng or CEng, your institution will help you to prepare for the final stage of your registration application: the professional review.

Anyone looking to pursue a career in engineering should seriously consider professional registration. From our clients’ point of view, it provides an independent endorsement that the people working on their projects have the necessary skills and that they follow a professional code that endorses high levels of accountability. From an employer’s perspective, it gives us increased confidence that the individuals can successfully manage the higher levels of risk that are demanded by our most technically challenging and complex projects.

CEng has allowed me to progress beyond contract management and into strategic leadership of technical management. I am currently on the Executive Board of my company and I don’t feel I would have achieved this without CEng registration.

Greg Markham
CEng FIHEEM
MIET MBIFM

Mark Jones
Director of Learning & Development
Atkins

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Joining a professional engineering institution is your first step towards professional registration. Membership benefits that will help you with your studies and professional development include:

- Careers advice and access to lifelong learning
- Support for professional development and registration
- Access to technical events, seminars and conferences
- Journals, newsletters, technical publications and other study resources
- Networking opportunities where you could meet future employers
- Website access to ‘members only area’
- Professional status, which may include letters after your name

Institutions are listed at www.engc.org.uk/institutions

What does the Engineering Council do?

As the UK regulatory body for the engineering profession, and in consultation with the profession, the Engineering Council sets and maintains internationally recognised standards of professional competence and ethics. It also sets the standards for accredited engineering degrees.

The organisation holds the national register of professional engineers and technicians, with over 235,000 individuals currently registered. Licences are granted by the Engineering Council to professional engineering institutions, allowing them to assess candidates for inclusion on the register and to accredit degree programmes.