# Power Engineers



## **CHARTERED ENGINEER APPLICATION**

### **CHARTERED ENGINEERS**

Chartered Engineers develop solutions to complex engineering problems using new or existing technologies, and through innovation, creativity and technical analysis.

Chartered Engineers shall demonstrate:

- The theoretical knowledge to solve problems in new and established technologies and to develop new analytical techniques
- Successful application of the knowledge to deliver innovative products and services and/or taking technical responsibility for complex engineering systems
- Responsibility for the financial and planning aspects of projects, sub-projects or tasks
- Leadership and development of other professional staff through management, mentoring or coaching
- Effective interpersonal skills in communicating technical matters
- Understanding of the safety and sustainability implications of their work, seeking to improve aspects where feasible
- Commitment to professional engineering values

### **APPLY NOW**

Use this form to apply to become an Engineering Council registered Chartered Engineer with the Institution of Power Engineers.

### HOW TO APPLY

Please complete this document fully and return to IPowerE. You will need to include an up-to-date CV, organisational chart showing your place in it, and a development plan and CPD log as part of the application.

### www.ipowere.org/ceng.html

### **BEFORE YOU APPLY**

Before you apply it is important that you understand the current Engineering Council requirements for becoming a Chartered Engineer and that you are confident you meet them.

Please make sure that you have read the relevant section of the UK-SPEC.

### www.engc.org.uk/standards-guidance/standards/uk-spec

### HELP

Should you have any questions regarding your application please contact our Registration team by emailing **enquiries@ipowere.org** or calling us on **01234 214340**.

For more information, please visit the IPowerE website https://ipowere.org/professionalregistration.html

### **SECTION 1: ABOUT YOU**

#### **A. YOUR PERSONAI DETAILS**

IPowerE Membership Number:	
Title:	
Gender:	
Family Name:	
Forenames:	
Address:	
Postcode:	
Preferred phone number:	
Preferred email:	
Date of birth:	

#### **B. EMPLOYMENT**

Name of employer:	
Department:	
Position held:	
Employment start date:	
Work address:	
Work address:	

Work email (if different to preferred):

#### **C.EDUCATION & FORMAL QUALIFICATIONS**

Please give details of up to three relevant qualifications including award title , institution and course attendance dates.

1)	Awarding education institution:	
	Title of award:	
	subject:	
	Years attended:	ΥΥΥΥ - ΥΥΥΥ
2)	Awarding education institution:	
	Title of award:	
	subject:	
	Years attended:	YYYY - YYYY
3)	Awarding education institution:	
	Title of award:	
	subject:	
	Years attended:	ΥΥΥΥ - ΥΥΥΥ

### CHARTERED ENGINEER APPLICATION FORM

### SECTION 2: SPONSOR

Your application must be supported by one sponsor. The sponsor could be your line manager HR or a professional person please contact IPowerE. The sponsor may be contacted by IPowerE for verbal confirmation of their support.

*"I support this application for Chartered Engineer status. I confirm this applicant is known to me"* 

#### SPONSOR

Title:	
Family name:	
Forenames:	
Company:	
Job Title:	
Address:	
Email:	
Phone:	
Engineering Council	
Registration (if applicable):	
(ii applicable).	

A Chartered Engineer will be able to demonstrate their competence in all the areas listed, but the depth and extent of your experience and competence will vary with the nature and requirements of your role. To be successful you will demonstrate competence and commitment in each area, (A1–E5), at a level which is consistent with your specific role. It is to be expected that you will have a higher level of competence in some areas than others and your role may provide limited experience in certain areas. However, you need to demonstrate an understanding of, and familiarity with, the key aspects of competence in all areas as a minimum requirement, while demonstrating higher levels of competence in those areas which are critical to your role. Overall, you will demonstrate an appropriate balance of competences to perform your role effectively at Chartered Engineer level.

Refer to the Engineering Council website for more information www.engc.org.uk.

This section of the form outlines each competence and provides examples of activities that could demonstrate achievement of the requirements. They are intended as examples only and the most appropriate evidence will vary with each individual role. Describe in 100 to 200 words your involvement and understanding of each of the competencies. The statements need to be written in the first person (i.e., using the word "I").

### 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. This competence is about the ability to understand underpinning technical principles relevant to the applicant's area of practice and applying them to develop technical solutions. This could involve technical solutions for novel problems or dealing with significant technical complexity. This may involve the integration of a range of technologies and consideration of other factors. This competence requires that an applicant is maintaining and developing their knowledge in their field of practice and not just that required for specific tasks.

You shall demonstrate that you:

A1 Have maintained and extended a sound theoretical approach to enable you to develop your particular role.

Examples of evidence: Formal training related to your role. Learning and developing new engineering knowledge in a different industry or role. Understanding the current and emerging technology and technical best practice in your area of expertise. Developing a broader and deeper knowledge base through research and experimentation. Learning and developing new engineering theories and techniques in the workplace.

A2 Are developing technological solutions to unusual or challenging problems, using your knowledge and understanding and/or dealing with complex technical issues or situations with significant levels of risk.

**Examples of evidence:** Carrying out technical research and development. Developing new designs, processes or systems based on new or evolving technology. Carrying out complex and/or non-standard technical analyses. Developing solutions involving complex or multi-disciplinary technology. Developing and evaluating continuous improvement systems. Developing solutions in safety-critical industries or applications.

B: Design, development and solving engineering problems.

Chartered Engineers shall apply appropriate theoretical and practical methods to the analysis and solution of engineering problems.

This competence is about the ability to apply engineering knowledge effectively and efficiently to the individual tasks which need to be undertaken in the applicant's role.

You shall demonstrate that you:

B1 Take an active role in the identification and definition of project requirements, problems and opportunities.

Examples of evidence: Identifying projects or technical improvements to products, processes or systems. Preparing specifications, taking account of functional and other requirements. Establishing user requirements. Reviewing specifications and tenders to identify technical issues and potential improvements. Carrying out technical risk analysis and identifying mitigation measures. Considering and implementing new and emerging technologies.

B2 Can identify the appropriate investigations and research needed to undertake the design, development and analysis required to complete an engineering task and conduct these activities effectively.

Examples of evidence: Identifying and agreeing appropriate research methodologies. Investigating a technical issue, identifying potential solutions and determining the factors needed to compare them. Identifying and carrying out physical tests or trials and analysing and evaluating the results. Carrying out technical simulations or analysis. Preparing, presenting and agreeing design recommendations, with appropriate analysis of risk, and taking account of cost, quality, safety, reliability, accessibility, appearance, fitness for purpose, security (including cyber security), intellectual property constraints and opportunities, and environmental impact.

B3 Can implement engineering tasks and evaluate the effectiveness of engineering solutions.

**Examples of evidence:** Ensuring that the application of the design results in the appropriate practical outcome. Implementing design solutions, taking account of critical constraints, including due concern for safety, sustainability and disposal or decommissioning. Identifying and implementing lessons learned •Evaluating existing designs or processes and identifying faults or potential improvements including risk, safety and life cycle considerations. Actively learning from feedback on results to improve future design solutions and build best practice.

C: Responsibility, management and leadership.

Chartered Engineers shall demonstrate technical and commercial leadership.

This competence is about the ability to plan the applicant's own work and manage or specify the work of others effectively, efficiently, and in a way which provides leadership at an appropriate level, whether technical or commercial. Leadership is not necessarily about having a formal line management role. In matrix management and other types of organisational structure, where Chartered Engineers are working within complex and varied working relationships, they will provide leadership to achieve objectives. This competence is also about the ability to consider and identify improvements to quality.

You shall demonstrate that you:

**C1** Plan the work and resources needed to enable effective implementation of significant engineering tasks or projects.

**Examples of evidence:** Preparing budgets and associated work programmes for projects or tasks. Systematically reviewing the factors affecting the project implementation including safety, sustainability and disposal or decommissioning considerations. Carrying out a task or project risk assessment and identifying mitigation measures. Leading on preparing and agreeing implementation plans and method statements. Negotiating and agreeing arrangements with customers, colleagues, contractors and other stakeholders, including regulatory bodies. Ensuring that information flow is appropriate and effective.

Enter your text here.

You shall demonstrate that you:

C2 Manage (organise, direct and control), programme or schedule, budget and resource elements of significant engineering tasks or projects.

**Examples of evidence:** Operating or defining appropriate management systems including risk registers and contingency systems. Managing the balance between quality, cost and time. Monitoring progress and associated costs and cost forecasts, taking appropriate actions when required. Establishing and maintaining appropriate quality standards within legal and statutory requirements. Interfacing effectively with customers, contractors and other stakeholders.

### You shall demonstrate that you:

**C3** Lead teams or technical specialisms and assist others to meet changing technical and managerial needs.

**Examples of evidence:** Agreeing objectives and work plans with teams and individuals. Reinforcing team commitment to professional standards. Leading and supporting team and individual development. Assessing team and individual performance, and providing feedback. Seeking input from other teams or specialists where needed and managing the relationship. Providing specialist knowledge, guidance and input in your specialism to engineering teams, engineers, customers, management and relevant stakeholders. Developing and delivering a teaching module at Masters level, or leading a University research programme.

Enter your text here.

You shall demonstrate that you:

C4 Bring about continuous quality improvement and promote best practice.

**Examples of evidence:** Promoting quality throughout the organisation as well as its customer and supplier networks. Developing and maintaining operations to meet quality standards eg ISO 9000, EQFM. Supporting or directing project evaluation and proposing recommendations for improvement. Implementing and sharing the results of lessons learned.

D Communication and interpersonal skills.

Chartered Engineers shall demonstrate effective communication and interpersonal skills.

This is the ability to work with others constructively, to explain ideas and proposals clearly and to discuss issues objectively and constructively.

You shall demonstrate that you:

D1 Communicate effectively with others, at all levels, in English.

**Examples of evidence:** Preparing reports, drawings, specifications and other documentation on complex matters. Leading, chairing, contributing to and recording meetings and discussions. Exchanging information and providing advice to technical and non-technical colleagues. Engaging or interacting with professional networks.

Enter your text here.

You shall demonstrate that you:

D2 Clearly present and discuss proposals, justifications and conclusions.

**Examples of evidence:** Contributing to scientific papers or articles as an author. Preparing and delivering presentations on strategic matters. Preparing bids, proposals or studies. Identifying, agreeing and leading work towards collective goals.

Enter your text here.

### CHARTERED ENGINEER APPLICATION FORM

D3 Demonstrate personal and social skills and awareness of diversity and inclusion issues.

Examples of evidence: Knowing and managing own emotions, strengths and weaknesses. Being confident and flexible in dealing with new and changing interpersonal situations. Identifying, agreeing and working towards collective goals. 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 Personal and professional commitment.

Chartered Engineers shall demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment.

This competence is about ensuring that the applicant is acting in a professional manner in their work and in their dealings with others. A Chartered Engineer should set a standard and example to others with regard to professionalism.

### You shall demonstrate that you:

E1 Understand and comply with relevant codes of conduct.

**Examples of evidence:** Demonstrating compliance with IPowerE's Code of Professional Conduct. Identifying aspects of the Code which are particularly relevant to your role. Being aware of the legislative and regulatory frameworks relevant to your role and how they conform to them. Leading work within relevant legislation and regulatory frameworks, including social and employment legislation.

Enter your text here.

### You shall demonstrate that you:

**E2** Understand the safety implications of your role and manage, apply and improve safe systems of work.

**Examples of evidence:** Identifying and taking responsibility for your own obligations and ensuring that others assume similar responsibility for health, safety and welfare issues. Ensuring that systems satisfy health, safety and welfare requirements. Developing and implementing appropriate hazard identification and risk management systems and culture. Managing, evaluating and improving these systems. Applying a sound knowledge of health and safety legislation, for example: HASAW 1974, CDM regulations, ISO 45001 and company safety policies.

Enter your text here.

### CHARTERED ENGINEER APPLICATION FORM

### You shall demonstrate that you:

E3 Understand the principles of sustainable development and apply them in your work.

**Examples of evidence:** Operating and acting responsibly, taking account of the need to progress environmental, social and economic outcomes simultaneously. Providing products and services which maintain and enhance the quality of the environment and community, and meet financial objectives. Recognising how sustainability principles, can be applied in your day-to-day work. Understanding and securing stakeholder involvement in sustainable development. Using resources efficiently and effectively in all activities. Taking action to minimise environmental impact in your area of responsibility.

Enter your text here.

You shall demonstrate that you:

**E4** Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in your own area of practice.

**Examples of evidence:** Undertaking reviews of your own development needs. Planning how to meet personal and organisational objectives. Carrying out planned and unplanned CPD activities. Maintaining evidence of competence development. Evaluating CPD outcomes against any plans made. Assisting others with their own CPD.

E5 Understand the ethical issues that may arise in your role and carry out your responsibilities in an ethical manner.

Examples of evidence: 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 Engineering Council's Statement of Ethical Principles. Giving an example of where you have applied or upheld ethical principles as defined by your organisation or company.

### SECTION 4: PERSONAL COMMITMENT

The Code of Professional Conduct can be viewed via the IPowerE website https://ipowere.org/howtojoin.html Submitting the completed application form acts as confirmation of your agreement to adhere to the Institution of Power Engineers Code of Professional Conduct. Please indicate your acceptance using the declaration below.

Declaration and Data Protection: I have read the IPowerE Code of Professional Conduct and declare that I will adhere to the Code and will endeavour to uphold these principles. I also confirm I understand that the information contained in this form will be processed in accordance with the data protection principles enshrined in the 2018 Data Protection Act and associated GDPR principles. I also understand that my data will be passed to Engineering Council, and they will become joint controllers of my data with IPowerE for the purposes of registering me.

Our data and GDPR policy can be found online at https://ipowere.org/privacypolicy.html

Name: Date:

### SECTION 5: CHECKLIST AND SUBMISSION

Below is a checklist of all documentation required for attachment and submission of your application? Please complete this list prior to submission and ensure you keep copies of all documents you submit.

- Application form completed.
- Academic qualification evidence (certificates, transcripts etc.) attached and verified by a sponsor as true copies of the originals. The sponsor could be a professional person or, alternatively an HR or senior manager at your place of work.
- □ IPowerE Continuing Professional Development (CPD) Policy has been read and CPD records submitted. Please visit https://ipowere.org/cpd.html for the CPD policy.
- □ Current CV.
- □ Up to date organisational chart.
- □ Career Development plan.

Once you have all the items on the checklist complete, please apply, or complete your existing registration online at https://ipowere.org/ceng.html, you will also be able to find information on current fees and pay.



### **SECTION 6: WHAT HAPPENS NEXT?**

#### PROFESSIONAL REVIEW INTERVIEW AND SOE MARKING PANEL

Your application will firstly be reviewed by IPowerE staff to ensure it is complete. If the evidence you have supplied is sufficient, your academic qualifications will then be reviewed. If you possess Recognised Qualifications (an accredited integrated Master's degree or a combination of accredited Bachelors and Masters degrees), your application will then undergo assessment against the UK-SPEC standard of competence. If you on to possess Recognised Qualifications then your application will be subject to Individual Assessment, during which your qualifications and any other relevant learning, will be reviewed against the Engineering Council requirements of Accreditation of Higher Education Programmes. To support this, you may be asked to provide further information on your qualifications and relevant learning, or possibly to a write a technical / experiential report and attend an associated interview. Following a successful Individual Assessment, your application will then be assessed against the UK-SPEC standard of competence.

The assessment against the UK-SPEC standard of competence is undertaken in two stages. In the first stage your application will be submitted to a panel of suitably qualified and registered IPowerE members for peer review (Professional Review of Competence and Commitment). We will then either invite you to a Professional Review Interview or contact you if we need further information. The Professional Review Interview is the second stage of the process, in which your portfolio of evidence against the requirements will be tested by a panel of suitably qualified and registered SOE members (a minimum of two). The panel will then make a recommendation as to whether you meet the requirements for registered Engineer.

Finally, the recommendations from the assessors will be reviewed by the SOE Registration Committee. This is the SOE committee which is ultimately responsible for registration at the SOE. If they confirm the recommendations, you will be informed by the SOE Registration certificate, and you will be goes soon as possible. If successful, Engineering Council will be informed of your application and our recommendation, they will then issue you with a welcome pack, including a registration certificate, and you will formally be able to use your new post nominal letters. If you have not received your welcome pack within four weeks of notification, please contact us. If unsuccessful, we will write to you and explain the reason for this decision, including recommendations and further advice. You will be guided on how to resubmit your application at a later date. The SOE has an appeals process where applicants who are not satisfied with the process, may appeal. More information can be obtained from IPowerE on request.

