

# CHARTERED & INCORPORATED ENGINEERS APPLICATION GUIDANCE

Institution of  
**MECHANICAL ENGINEERS**

Guidance notes for application to become a **Member** of the Institution of Mechanical Engineers and a Chartered or Incorporated Engineer (CEng / IEng MIMechE)

**Return your application to:**  
**Institution of Mechanical Engineers**  
1 Birdcage Walk  
Westminster  
London SW1H 9JJ

**For help with your application:**

**UK telephone:** 0845 226 9191

**Int telephone:** +44 (0)20 7304 6999

**Fax:** +44 (0)20 7233 1654

**Email:** [membership@imeche.org](mailto:membership@imeche.org)

**Web:** [imeche.org/application](http://imeche.org/application)



## About these guidance notes

This guide has been prepared to provide support, your application for Chartered or Incorporated Engineer assistance and advice to you as you compile and submit Registration and Membership of the Institution of your application for Chartered or Incorporated Engineer Mechanical Engineers.

It is important that you understand the current requirements for becoming a Chartered or Incorporated Engineer. You should be confident that you meet them before making your application. These guidance notes will clearly outline what is required and will provide useful examples for your reference. When completing your application, please ensure that you include sufficient detail that highlights where you have met the requirements for Membership and Registration.

The application process is straightforward. Please read and review these notes before starting your submission. To apply online or use the electronic PDF application form, visit [www.imeche.org/application](http://www.imeche.org/application). If you do have questions or queries at any stage of the application process, please contact our Membership Helpdesk on T: 0845 226 9191 or E: [membership@imeche.org](mailto:membership@imeche.org). International callers, please dial +44 (0)20 7304 6999.

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# Section 1: Before you apply

## Background to your application

### What is the standard?

United Kingdom Standard for Professional Engineering Competence (UK-SPEC) is the standard that governs the engineering profession. It is published by the Engineering Council, the UK regulatory authority of professional engineers and technicians. UK-SPEC provides a framework for assessment and describes the requirements you have to meet before you can register as a professional engineer, giving examples of how you can do this. The UK-SPEC document, when used in conjunction with these guidance notes, will help you to establish whether you can meet the requirements, as it explains the steps necessary to achieve Registration.

The UK-SPEC standard is used and applied by all UK-based engineering institutions.

To download a copy of the most recent version, please visit the Engineering Council website at [engc.org.uk/standards-guidance/standards/uk-spec](http://engc.org.uk/standards-guidance/standards/uk-spec)

### How is the standard assessed?

The standard is assessed in a two-part process; you need to demonstrate the required level of underpinning knowledge (academic or theoretical principles) and engineering competence (practical working, understanding and application). Competence is assessed by a written submission and at an interview.

## Eligibility

We need to check your academic profile to ensure that it meets the benchmark for Registration. You are always advised to use our **Qualification Checker** at [imeche.org/qualificationchecker](http://imeche.org/qualificationchecker) before starting your application, to confirm whether your qualifications will meet the requirements.

### How can you check if your qualifications meet the requirements?

Below you'll find a brief guide to the kind of qualification you'll need to become a Chartered or Incorporated Engineer.

#### Chartered Engineer (CEng)

Typically a four-year accredited MEng degree or equivalent OR a three-year accredited BEng (Hons) degree plus an appropriate Master's programme or period of further learning

#### Incorporated Engineer (IEng)

Typically a three-year accredited Bachelor's degree (BEng degree) or equivalent OR HND/HNC plus a period of further learning

#### We may also consider applicants with:

- Engineering Council examinations of acceptable profile
- International qualifications of an acceptable standard and profile can be considered e.g. Australia, Canada, Hong Kong, Ireland, New Zealand, South Africa, USA and Europe
- A mix of international and UK-based qualifications
- An engineering qualification accredited under previous standards or in limited circumstances through experiential learning

You may have a range of engineering qualifications that, at first glance, don't appear to meet the requirements for Membership and Registration. If that's the case, don't worry: we can review and assess your qualifications free of charge and with no commitment to Membership.

For more information or to find out if your qualifications meet the requirements, contact our Membership Team or use our qualifications checker: [imeche.org/qualifications](http://imeche.org/qualifications)

## Skills and experience

In order to make a successful application for Membership, you need to tell us what you have done and what you have achieved in your engineering career. You should be able to demonstrate that you are competent and committed to your profession.

There are five generic competence statements that you must address. Every engineer, of every discipline, is assessed against the same statements in the same way.

There are a number of subtle differences between the Chartered Engineer and the Incorporated Engineer Registrations. Take some time to think about the experience you have and the job that you do, and map these against the competence framework. You should apply for the grade of membership that best matches your skills and experience.

If you need advice on the level of Registration that's right for you, contact the Membership Helpdesk on 0845 226 9191 (international +44 (0)20 7304 6999) or [membership@imeche.org](mailto:membership@imeche.org)

### What is competence?

Professional competence is the ability to carry out a task to an effective standard. Its achievement requires the right level of knowledge, understanding and skill, as well as a professional attitude. It is part of the requirement (along with commitment) that must be demonstrated in order for an individual to be admitted to the Engineering Council's Register at the relevant level.

### What are the competence requirements?

The following descriptions provide a guide to the competences and the differences between CEng and IEng.

#### Chartered Engineers (CEng)

Develop appropriate solutions to engineering problems, using new or existing technologies, through innovation, creativity and change. Chartered Engineers might develop and apply new technologies, promote advanced designs and design methods, introduce new and more efficient production techniques, marketing and construction concepts, or pioneer new engineering services and management methods. They are variously engaged in technical and commercial leadership and possess effective interpersonal skills.

#### Incorporated Engineers (IEng)

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.

### How do you demonstrate competence?

The skills and experience you have picked up over the course of your career should help you to meet the competence requirements. Never underestimate or forget your day job.

The Institution provides guidance as to how you can demonstrate that you have met the competence requirements. By looking at the matrix shown in the Appendix (page 21 for Chartered Engineer and page 24 for Incorporated Engineer), you will see that each of the competence statements has four possible levels, where 1 is the lowest and 4 is the highest.

#### Level 1

Performs the activity with significant supervision and guidance; performs basic routine and predictable tasks; little or no individual responsibility. (This level of competence would not normally be sufficient for election to Membership).

#### Level 2

Performs the activity in a range of contexts; supervision required only in more complex circumstances; some individual responsibility or autonomy. (This indicates a minimum level of competence for election to Membership, which should be supplemented by higher levels of competence in the areas most relevant to the field of engineering in which you are employed).

#### Level 3

Performs the activity in some complex and non-routine contexts; significant responsibility and autonomy; can oversee the work of others. (This indicates a normal level of competence for election to Membership).

#### Level 4

Performs the activity in a wide range of complex and non-routine contexts; substantial personal autonomy; can develop others in the activity. (This indicates a high level of competence and suitability for election to Membership).

To be successful you will need to demonstrate, as a minimum requirement, that you can score level 2 in two of the competences and level 3 in three of them.

UK-SPEC competences for Chartered Engineers and Incorporated Engineers are shown in Appendices A and B, starting from page 11.

### Engineering specialists

The Institution recognises that throughout industry and academia there will be a number of engineers who are operating in very specialised engineering sectors; therefore Membership and Registration will also be available to those engineers who are deemed to be specialists in their chosen fields.

The Institution accepts that specialists may not be able to satisfy all five of the competence areas, particularly those concerned with leadership and management, or that a specialist may not be able to demonstrate a sufficiently broad knowledge of engineering outside the specialist areas. If this applies to you, follow the same process and make sure that you provide evidence of the following:

- In-depth knowledge with a degree of complexity of the specialist area
- Involvement in innovative design, development and research
- Broad awareness of engineering applications and transferability outside your specialist area
- Evidence of presentations to conferences, seminars, suppliers, customers, etc
- Publications, in particular referenced written papers on your specialist subject
- Recognition as an expert in your chosen field and with a record of successful consultation for your knowledge and expertise

Evidence of your leadership and management skills may be found in the relationships with colleagues and other people, and by how you might influence design, decision making or policy processes.

## Section 2: Your application

### The application process

Membership of the Institution and your registration as a professional engineer are linked. If you meet the requirements for CEng or IEng, then you will also become a Member of the Institution.

The application process is outlined below:

1. Check your qualifications
2. Complete an application form
3. Get support from two sponsors
4. Submit your application
5. Have an interview

### Completing your application form

#### General guidance

- Please either complete the online application or fill in the editable PDF using a black font. Electronic PDFs of the application form are available from the website at [imeche.org/application](http://imeche.org/application)
- Please fill in all applicable fields in this form
- There are different application forms, depending on whether you are applying to be a Chartered or Incorporated Engineer, and whether you wish to become a Member or Fellow
- Talk to your sponsors before filling it in – understand what they want to see
- Please ensure that each of the five competence statements is around 400 words – which is a paragraph or two on each sub-competence. The whole section should be approximately 2,000 words in length
- All answers should be written in the first person and exclude any company jargon and acronyms
- Include your name and membership number (if you have one)
- You can include photographs, sketches, calculations, diagrams, etc. as an appendix. If you wish **to discuss these at your interview, you must bring copies with you**
- Use an appendix for a glossary of terms if it's useful (not included in the word count)
- Please ensure that your application is proof-read before submitting
- Please ensure that you have read and familiarised yourself with the Institution's Code of Conduct, as you will be bound by these on election. This can be found at **[imeche.org/royal-charter-and-by-laws](http://imeche.org/royal-charter-and-by-laws)**
- Please be aware that your application, including personal information, will be shared with other Members and Fellows of the Institution for the purposes of assessment only

#### Guidance on the application form

Support text is shown on the application form itself at the point of need:

Support text:

You'll find helpful support text at the point of need throughout the application form. It will always appear like this.

### Section 1: About you

In this section we ask for your personal and education details, as well as industry qualifications and a career summary. You'll find all the guidance you should need within the application form.

### Section 2: Personal competence statements

In this section you need to provide evidence to demonstrate that the competence requirements, set out in UK-SPEC, have been met. The assessors will be looking for around 400 words for each competence A to E. Each competence is broken down into sub-statements and you should provide information to support each section within this word-limit, i.e. write around 400 words for each competence, which is a paragraph or two on each sub-competence.

In these sections you should provide a narrative that is supported by quantitative information where applicable, e.g. number of direct reports, size of budget, etc, as this will be of use to the assessors. You may find that some information is repeated.

Tables showing the five competences, broken down into the sub-competences for Chartered and Incorporated Engineer are shown in Appendices A and B. These give some examples of the type of information that could be included.

Exemplar sets of documents making up completed applications are available on the website in the Membership area at [imeche.org/application](http://imeche.org/application)

### Section 3: Organisation chart

We ask you to provide this to determine the level of responsibility that you hold and to demonstrate your accountability within the organisation you work for. You should highlight clearly where your role sits on the organisation chart.

### Section 4: Development action plan

Your development as an engineer will never stop: you must make a commitment to keep up to date with the profession. This document tells the Institution what you plan to do over the next few years. In other words, tell us where you are now, where you want to be and how you intend to get there.

Things you might want to consider could include: work-based learning; distance learning; special work projects, writing technical papers; mentoring; voluntary work; Institution activities or committee work; promoting engineering to young people; seminar/conference presentations; any relevant course or private study.

Since 1st January 2017, it has become a mandatory licence requirement for all Professional Engineering Institutions that they undertake an annual audit of a sample of registrants' Continuing Professional Development (CPD) records. A 5% sample of registered members will be asked to provide their CPD records each year, and if requested, will receive feedback from the Institution.

### Section 5: Sponsors

You will need two sponsors to provide their contact details and sign your application. Applicants for CEng should be sponsored by one Chartered Engineer. Applicants for IEng can be sponsored by either an Incorporated Engineer, or a Chartered Engineer. Sponsors can be registered with any Engineering Council-listed engineering institution; they don't have to be a member of the Institution. Your second sponsor could be another registered engineer, or your line manager. Your sponsor can't be a direct family member. Your sponsors should read through your application to ensure they agree with the information you have provided. Your sponsors will need to sign the PDF application or they will receive an email for verification for the online application. They are signing the form to indicate that they believe you are suitable for consideration at the level of registration you are applying for (either IEng or CEng) and as a Member of the Institution of Mechanical Engineers.

## How we can help

The Institution hosts workshops where members of staff or specially trained members provide guidance and advice regarding the compilation of your application and preparation for Professional Review Interview. There may be one happening locally or even in your company. To find out about Regional Workshops, please contact your local Business Development Manager at: [bdm@imeche.org](mailto:bdm@imeche.org)

Sample applications are available on our website. Once you have completed your application documents, please arrange to have an objective review carried out. This can be carried out by your sponsor, mentor or a colleague who's already registered. Alternatively, contact the Institution if you need additional advice.

## What we look for

The application documents should highlight your experience, responsibilities and expertise. You should be able to show how each of the competences has been met. The simplest way of doing this may be to select one or two fairly recent projects that will allow you to demonstrate:

- the breadth and depth of your engineering knowledge and how you apply or have applied engineering principles
- your ability to design, develop and apply or use new and emerging technologies appropriate to the type of Registration sought
- evidence of any relevant training you may have completed (copies of training certificates are not required)
- how you have identified and resolved problems
- your level of responsibility and autonomy within the project or processes
- how your leadership skills have developed
- how you influence others

You should make a clear statement that you have read, understood and will abide by the Institution's **Code of Conduct**. It should also highlight your commitment to the profession, your willingness to support others and should mention if you are involved with the Institution or the promotion of engineering.

## Your interview

Once your papers have been processed by the Institution, you will be invited to attend a Professional Review Interview in the Region selected on your application form.

The Professional Review Interview is a mandatory part of the Membership process. Every Chartered or Incorporated Engineer, regardless of their discipline, has to attend an interview.

The interview is based on the information you provide in your application pack and is used to determine the level of competence that you demonstrate. You should prepare for your interview by reading through your application documents thoroughly.

The interviewers will focus on your most recent and relevant experience. They will make their judgements based solely on the information provided to them and your performance during the interview.

## Your interview (continued)

### Who will be there?

Two trained and experienced Institution members will conduct the interview. An Interview Facilitator will also be present. Interviewers are trained by the Institution and understand the requirements of UKSPEC and the criteria for election to Membership. They won't be matched to your market sector or area of expertise, but will give a very brief introduction of themselves for your benefit before the interview.

The Interview Facilitator is an experienced and trained Fellow, appointed by the Institution to ensure that standards are maintained and interviews are conducted fairly and consistently. They will meet and brief you before your interview and make any introductions. They are also there to answer any questions that you may have about the process.

Two trained interviewers will conduct international interviews, although an Interview Facilitator may not be in attendance.

### How long does it take?

The interview will take approximately 45 minutes.

### What is the format?

The interview is a discussion between peers, designed to evaluate and assess your level of competence. There are no trick questions and you should structure your responses to questions using "I" not "we" or "the team". The interviewers are looking to understand your personal contributions.

You are expected to play a leading role in the discussion, and provide detailed and specific answers about actual events to demonstrate the competences. You may also be asked to expand on some of your answers and highlight how processes or tasks might have been done differently.

You are encouraged to develop answers and explain things clearly and concisely. Your answers should be structured to demonstrate good communication skills. You should also avoid the use of acronyms, company jargon or slang.

You can expect a level of technical questioning. Interview panel members may take the opportunity to develop a particular technical issue or aspect of your responsibilities. This could take the form of an in-depth question-and-answer exchange of the engineering principles involved, or the development of an innovative process review to establish your theoretical understanding of the issues involved.

You can bring supporting evidence to back up any discussion, but should be aware of the time constraints. You might find items such as technical drawings, photographs, sketches, calculations and design drawings can quickly clarify a technical point, but remember, this is not a presentation.

The Institution recognises that there is an increasing use of technology within the engineering industry. When assessing someone who employs a significant amount of technology in their role, interviewers will seek evidence that the resultant technology, program or software is being applied in an engineering environment. For example design engineering, testing and assessment of equipment or processes, product development. In this case it is essential that the evidence supports the application of engineering, skills and expertise to develop the product or process. Examples can include CAD and CAE engineers, computer modellers, IT engineers, CFD specialist and stress, metallurgical or thermodynamic analysts.

The final few minutes of the interview are thrown open to you. This is your opportunity to talk about anything that you think is important to your application that has not yet been mentioned.

### What happens next?

Your assessors will make a recommendation of whether or not to elect you to Membership.

Neither the Interview Facilitator nor the interviewers are able to advise you about the decision that they make, as their recommendation must be approved by the Professional Review Committee.

If you are successful, you will receive a letter and a certificate from the Institution's President and Chief Executive confirming your achievement. Your name will then be forwarded to the Engineering Council for Registration.

Your name will appear in the Daily Telegraph newspaper on the first Thursday of the following: March, June, September or December.

If your application is not successful, we will write to you and explain the reason for the decision. You will also be given some guidance as to how you may wish to address the concerns raised, in order to resubmit an application at a later date.

Any applicant can request a copy of their interview paperwork, scores and feedback.

The Institution has an arbitration and appeals process, which can be used by applicants who are dissatisfied with the assessment of their application and they may appeal within a given timeframe.

All documentation will be made available to the Arbitration Panel for their consideration. More information about this process is available on request.

## Section 3: Your checklist

### Standard route applicants

You should keep copies of all documents submitted to the Institution, as original applications will be scanned and shredded.

Please check that you have included all the elements below before submitting your application. Incomplete applications will delay the application process and may result in your application being withdrawn.

- ☐ Signed and completed the application form
- ☐ Included your application fee
- ☐ Included your degree evidence
- ☐ Included an organisation chart
- ☐ Had the sponsor information completed by both sponsors

### Applicants on Monitored Professional Development Schemes (MPDS)

If you have completed the MPD Scheme, you should submit an application via the enhanced online application form within the Online applications section of 'My account'.

In section 2: 'Personal Competence Statements', your MPDS reports will be visible on the right hand side. Use the arrow tool to import content into the personal statements, then edit to make sure you use the best examples from all your MPDS reports to show how you have met the competence.

For more information regarding this submission, please contact the MPDS helpline on T: 0845 226 0211 or E: [mpds@imeche.org](mailto:mpds@imeche.org)

# Appendix A: Personal competence statements – CEng

## What do we mean by competence?

Professional competence is the ability to carry out a task to an effective standard. Its achievement requires the right level of knowledge, understanding and skill, as well as a professional attitude. It is part of the requirement (along with commitment) that must be demonstrated in order for an individual to be admitted to the Engineering Council's Register at the relevant level.

## What characteristics are we looking for?

Chartered Engineers are characterised by their ability to develop appropriate solutions to engineering problems, using new or existing technologies, through innovation, creativity and change.

They might develop and apply new technologies, promote advanced designs and design methods, introduce new and more efficient production techniques, marketing and construction concepts, or pioneer new engineering services and management methods. Chartered Engineers are variously engaged in technical and commercial leadership and possess effective interpersonal skills.

## How long should each part be?

Please ensure that each of the five competence statements is around 400 words – which is a paragraph or two on each sub-competence. The whole section should be approximately 2,000 words in length.

## A: Optimise the application of technology – CEng

Use a combination of general and specialist engineering knowledge and understanding to optimise the application of existing and emerging technology.

### Please give details on the following:

- A1: How have you maintained and extended a sound theoretical approach in enabling the introduction and exploitation of new and advancing technology and other relevant developments?
- A2: How have you engaged in the creative and innovative development of engineering technology and continuous improvement systems?

### You could reference your ability to:

Identify the limits of own personal knowledge and skills / Strive to extend own technological capability / Broaden and deepen own knowledge base through research and experimentation.

Establish users' needs / Assess marketing needs and contribute to the marketing strategies / Identify constraints and exploit opportunities for the development and transfer of technology within your field /

Promote new applications when appropriate / Secure necessary intellectual property rights / Develop and evaluate continuous improvement systems.

### Further guidance:

These are examples of activities which could demonstrate that you have achieved CEng criteria.

- Any post-graduate academic study you have taken to broaden or deepen your knowledge.
- Provide information about any new engineering theories and techniques that you have learnt or developed in the workplace.
- Give examples of any work you have done to broaden your knowledge of engineering codes, standards and specifications.
- Provide information and examples of work you have done to lead/manage market research and product and process research and development.
- Cross-disciplinary working involving complex projects.
- Conduct statistically sound appraisal of data.
- Use evidence from best practice to improve effectiveness.

## B: Analysis and solution of engineering problems – CEng

Apply appropriate theoretical and practical methods to the analysis and solution of engineering problems.

Please give details on the following:

B1: How have you identified potential projects and opportunities?

B2: How have you conducted appropriate research, and undertaken design and development of engineering solutions?

B3: How have you implemented design solutions, and evaluated their effectiveness?

You could reference your ability to:

Explore the territory within own responsibility for new opportunities / Review the potential for enhancing engineering products, processes, systems and services / Use own knowledge of your employer's position to assess the viability of opportunities.

Identify and agree appropriate research methodologies / Assemble the necessary resources / Carry out the necessary tests / Collect, analyse and evaluate the relevant data / Draft, present and agree design recommendations, taking account of cost, quality, safety, reliability, appearance, fitness for purpose and environmental impact / Undertake engineering design.

Ensure that the application of the design results in the appropriate practical outcome / Implement design solutions, taking account of critical constraints / Determine the criteria for evaluating the design solution / Evaluate the outcome against the original specification / Actively learn from feedback on results to improve future design solutions and build best practice.

### Further guidance:

Provide information about how you have been involved in the marketing of and tendering for new engineering products, processes and systems, or give details of when you have been involved in the specification and procurement of new engineering products, processes and systems.

Include details of when you have set targets, and drafted programmes and action plans and have been responsible for a schedule of activities.

Provide information about how you have carried out formal theoretical research, or have carried out applied research on the job.

Give examples of where you may have led design teams, or led/managed value engineering and whole life costing. Give details of when you have drafted specifications, developed options and carried out testing. Provide examples of when you have identified resource and cost options, producing concept designs, and developing these into detailed designs.

You should provide examples of when you have followed the design process through into product or service realisation and its evaluation.

Give details of when you have prepared and presented reports on the evaluation of the effectiveness of the designs.

You should also provide information about when you have managed product improvement through interpretation and analysis of performance, or when you have determined the critical success factors of a product or service.

## C: Technical and commercial leadership – CEng

### Provide technical and commercial leadership

Please give details on the following:

C1: How have you planned for effective project implementation?

C2: How have you planned, budgeted, organised, directed and controlled tasks, people and resources?

C3: How have you led teams and developed staff to meet changing technical and managerial needs?

C4: How have you brought about continuous improvement through quality management?

You could reference your ability to:

Identify the factors affecting the project implementation / Lead on preparing and agreeing implementation plans and method statements / Ensure that the necessary resources are secured and brief the project team / Negotiate the necessary contractual arrangements with other stakeholders (client, subcontractors, suppliers, etc.).

Set up appropriate management systems / Agree quality standards, programme and budget within legal and statutory requirements / Organise and lead work teams, coordinating project activities / Ensure that variations from quality standards, programme and budgets are identified and that corrective action is taken / Gather and evaluate feedback and recommend improvements.

Agree objectives and work plans with teams and individuals / Identify team and individual needs and plan for their development / Lead and support team and individual development / Assess team and individual performance, and provide feedback.

Promote quality through the organisation and its customer and supplier networks / Develop and maintain operations to meet quality standards / Direct project evaluation and propose recommendations for improvement.

#### Further guidance:

Give examples of when you have lead or managed project planning activities. This will also include activities relating to producing and implementing procurement plans, carrying out risk assessments for the project, planning programmes and delivery of tasks, and identifying resources and costs of the project. You should also include details of any collaboration with key stakeholders or where you have negotiated agreement to the project plan, as well as negotiating agreement for contracts or work orders.

Give examples of when you have taken responsibility for and control of project operations where you have managed the balance between quality, cost and time.

Give examples of managing contingency systems, project funding, payments and recovery. Provide information about where you have had to ensure that legal and statutory obligations have been satisfied. Give details of leading/ managing tasks within identified financial, commercial and regulatory constraints.

Provide examples of when you have carried out or contributed to staff appraisals or when you have planned/ contributed to the training and development of staff.

Give information about when you have gathered evidence from colleagues of the management, assessment and feedback that you have provided. Give details of any disciplinary procedures you have carried out or contributed to.

Give examples of when you have planned and implemented best practice methods of continuous improvement, eg. ISO 9000, EFQM, balanced scorecard, etc.

Give details of when you have carried out quality audits or any work to monitor, maintain and improve delivery.

Give information about when you have identified, implemented and evaluated changes to meet the quality objectives.

## D: Effective interpersonal skills – CEng

### Demonstrate effective interpersonal skills

Please give details on the following:

D1: How have you communicated in English with others at all levels?

D2: How have you presented and discussed proposals?

D3: How have you demonstrated personal and social skills?

You could reference your ability to:

Contribute to, chair and record meetings and discussions / Prepare letters, documents and reports on complex matters / Exchange information and provide advice to technical and non-technical colleagues.

Prepare and deliver presentations on strategic matters / Lead and sustain debates with audiences / Feed the results back to improve the proposals.

Know and manage own emotions, strengths and weaknesses / Be aware of the needs and concerns of others / Be confident and flexible in dealing with new and changing interpersonal situations / Identify, agree and lead work towards collective goals / Create, maintain and enhance productive working relationships and resolve conflicts.

#### Further guidance:

Give examples of when you have written reports, or taken minutes of a meeting.

You should also provide examples of communication via letters, programmes, drawings and specifications.

Give examples of presentations that you have given and discussions that you have recorded in order to provide details of their outcomes to the project team.

You should give examples of when you have taken responsibility for productive working relationships, including the application of diversity and anti-discrimination legislation.

## E: Commitment to professional standards – CEng

Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment

Please give details on the following:

E1: How have you complied with relevant codes of conduct?

E2: How have you managed and applied safe systems of work?

E3: How have you undertaken engineering activities in a way that contributes to sustainable development?

E4: How have you carried out continuing professional development (CPD) necessary to maintain and enhance competence in own area of practice?

E5: How have you exercised responsibilities in an ethical manner?

You could reference your ability to:

Comply with the rules of professional conduct of the Institution / Lead work within all relevant legislation and regulatory frameworks including social and employment legislation.

Identify and take responsibility for own obligations for health, safety and welfare issues / Ensure that systems satisfy health, safety and welfare requirements / Develop and implement appropriate hazard identification and risk management systems / Manage, evaluate and improve these systems.

Operate and act responsibly, taking account of the need to progress environmental, social and economic outcomes simultaneously / Use imagination, creativity and innovation to provide products and services which maintain and enhance the quality of the environment and community, and meet financial objectives / Understand and secure stakeholder involvement in sustainable development.

Undertake reviews of own development needs / Prepare action plans to meet personal and organisational objectives / Carry out planned (and unplanned) CPD activities / Maintain evidence of competence development / Evaluate CPD outcome against action plans / Assist others with their own CPD.

Apply ethical principles as specified in the Engineering Council's Statement of Ethical Principles / Show how you have applied/ upheld ethical principles as defined by your organisation or company.

### Further guidance:

All candidates should come to their interview with at least one example from their professional experience to discuss at interview, that shows how they have applied at least one of the ethical principles given on page 33 of the UK-SPEC document.

You should give examples of working with a variety of conditions of contract. You should also read the Institution's **Code of Conduct** and demonstrate initiative and commitment to the affairs of the Institution.

You should provide examples of any formal H&S training that has been undertaken.

Give information about how you work within the H&S legislation and best practice, eg. HASAW 1974, CDM regs, OHSAS 18001:2007 and company safety policies. Give examples of any safety audits you have carried out and when you may have identified and minimised hazards. Give information about how you assess and control risks. Provide information about when you may have evaluated the costs and benefits of safe working and delivered strategic H&S briefings and inductions.

You should provide examples of when you have carried out environmental impact assessments, or environmental risk assessments. You should also give information about when you have planned and implemented best practice environmental management systems, eg. ISO 14000, to show that you work within environmental legislation.

You could also give examples of when you have adopted sustainable practices to achieve a 'triple bottom line' ie. social, economic and environmental outcomes.

You should provide examples of how you keep up to date with national and international engineering issues.

As part of your application you will need to demonstrate short, medium and long-term development plans. You should give evidence of your development through on-the-job learning, private study, in-house courses, external courses and conferences.

You should give examples of how you have applied/upheld ethical principles as defined by your organisation or company, which may be in its company and brand values.

# Appendix B: Personal competence statements – IEng

## What do we mean by competence?

Professional competence is the ability to carry out a task to an effective standard. Its achievement requires the right level of knowledge, understanding and skill, as well as a professional attitude. It is part of the requirement (along with commitment) that must be demonstrated in order for an individual to be admitted to the Engineering Council's Register at the relevant level.

## What characteristics are we looking for?

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.

## How long should each part be?

Please ensure that each of the five competences is around 400 words – which is a paragraph or two on each sub-competence. The whole section should be approximately 2,000 words in length.

## A: Apply existing and emerging technology – IEng

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

Please give details on the following:

A1: How have you maintained and extended a sound theoretical approach to the application of technology in engineering practice?

A2: How have you used a sound evidence-based approach to problem solving, and contributed to continuous improvement?

You could reference your ability to:

Identify the limits of own personal knowledge and skills / Strive to extend own technological capability / Broaden and deepen own knowledge base through new applications and techniques.

Examples of activities that could demonstrate you have achieved the IEng criteria:

- engage in formal learning
- learn new engineering theories and techniques in the workshop, at seminars, etc
- broaden your knowledge of engineering codes, standards and specifications

Establish users' requirements for improvement / Use market intelligence and knowledge of technological developments to promote and improve the effectiveness of engineering products, systems and services / Contribute to the evaluation and development of continuous improvement systems / Apply knowledge and experience to investigate and solve problems arising during engineering tasks and implement corrective action.

Examples of activities that could demonstrate you have achieved the IEng criteria:

- Manage/contribute to market research and product and process research and development
- involvement with cross-disciplinary working
- conduct statistically sound appraisal of data
- use evidence from best practice to improve effectiveness
- apply root cause analysis

## B: Application of theoretical and practical methods – IEng

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

Please give details on the following:

B1: How have you identified, reviewed and selected techniques, procedures and methods to undertake engineering tasks?

B2: How have you contributed to the design and development of engineering solutions?

B3: How have you implemented design solutions, and contributed to their evaluation?

You could reference your ability to:

Select a review methodology / Review the potential for enhancing engineering products, processes, systems and services using evidence from best practice / Establish an action plan to implement the results.

Examples of activities that could demonstrate you have achieved the IEng criteria:

- contribute to the marketing of and tendering for new engineering products, processes and systems
- contribute to the specification and procurement of new engineering products, processes and systems
- develop decommissioning processes
- set targets; draft programmes, action plans
- schedule activities

Contribute to the identification and specification of design and development requirements for engineering products, processes, systems and services / Identify potential operational problems and evaluate possible engineering solutions, taking into account cost, quality, safety, reliability, appearance, fitness of purpose, and environmental impact / Contribute to the design of engineering solutions

Examples of activities that could demonstrate you have achieved the IEng criteria:

- contribute to theoretical and applied research
- manage/contribute to value engineering and whole life costing
- work in design teams
- draft specifications

Secure the resources required for implementation / Implement design solutions taking account of critical constraints / Identify problems during implementation and take corrective action / Contribute to the evaluation of design solutions / Contribute to recommendations for improvement and actively learn from feedback on results

Examples of activities that could demonstrate you have achieved the IEng criteria:

- follow the design process through into product manufacture
- operate and maintain processes, systems, etc
- contribute to reports on the evaluation of the effectiveness of the designs
- contribute to product improvement
- interpret and analyse performance
- contribute to determining critical success factors
- develop and test options
- identify resources and costs of options
- produce detailed designs

## C: Technical and commercial management – IEng

### Provide technical and commercial management

Please give details on the following:

C1: How have you planned for effective project implementation?

C2: How have you managed the planning, budgeting and organisation of tasks, people and resources?

C3: How have you managed teams and developed staff to meet changing technical and managerial needs?

C4: How have you managed continuous quality improvement?

You could reference your ability to:

Identify the factors affecting the project implementation / Prepare and agree implementation plans and method statements / Secure the necessary resources and confirm roles in project teams / Apply the necessary contractual arrangements with other stakeholders (client, subcontractors, suppliers, etc.).

Examples of activities that could demonstrate you have achieved the IEng criteria:

- manage/contribute to project planning activities
- produce and implement procurement plans
- contribute with key stakeholders
- plan programmes and delivery of tasks
- identify resources and costs
- prepare and agree contracts/work orders

Operate appropriate management systems / Work to the agreed quality standards, programme, and budget, within legal and statutory requirements / Manage work teams, coordinating project activities / Identify variations from quality standards, programmes and budgets, and take corrective action / Evaluate performance and recommend improvements

Examples of activities that could demonstrate you have achieved the IEng criteria:

- manage/contribute to project operations
- manage the balance between quality, cost and time
- manage contingency processes
- contribute to the management of project funding, payments and recovery
- satisfy legal and statutory obligations
- manage tasks within identified financial, commercial and regulatory constraints

Agree objectives and work plans with teams and individuals / Identify team and individual needs and plan for their development / Manage and support team and individual development / Assess team and individual performance and provide feedback

Examples of activities that could demonstrate you have achieved the IEng criteria:

- carry out/contribute to staff appraisals
- plan/contribute to the training and development of staff
- gather evidence from colleagues of the management, assessment and feedback that you have provided
- carry out/contribute to disciplinary procedures

Ensure the application of quality management principle by team members and colleagues / Manage operations to maintain quality standards / Evaluate projects and make recommendations for improvement

Examples of activities that could demonstrate you have achieved the IEng criteria:

- promote quality
- manage/contribute to best practice methods of continuous improvement, eg. ISO 9000, EFQM, balanced scorecard
- carry out/contribute to quality audits
- monitor, maintain and improve delivery
- identify, implement and evaluate changes to meet quality objectives

## D: Effective interpersonal skills – IEng

### Demonstrate effective interpersonal skills.

Please give details on the following:

D1: How have you communicated in English with others at all levels?

D2: How have you presented and discussed proposals?

D3: How have you demonstrated personal and social skills?

You could reference your ability to:

Contribute to, chair and record meetings and discussions / Prepare letters, documents and reports on technical matters / Exchange information and provide advice to technical and non-technical colleagues.

Examples of activities that could demonstrate you have achieved the IEng criteria:

- reports
- minutes of meetings
- letters
- programmes
- drawings
- specifications

Prepare and deliver appropriate presentations / Manage debates with audiences / Feed the results back to improve the proposals

Examples of activities that could demonstrate you have achieved the IEng criteria:

- presentations
- records of discussions and their outcomes

Know and manage own emotions, strengths and weaknesses / Be aware of the needs and concerns of others / Be confident and flexible in dealing with new and changing interpersonal situations / Identify, agree and work towards collective goals / Create, maintain and enhance productive working relationships and resolve conflicts

Examples of activities that could demonstrate you have achieved the IEng criteria:

- records of meetings
- evidence from colleagues of your personal and social skills
- contribute to productive working relationships
- apply diversity and anti-discrimination legislation

## E: Commitment to professional standards – IEng

Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment.

Please give details on the following:

E1: How have you complied with relevant codes of conduct?

E2: How have you managed and applied safe systems of work?

E3: How have you undertaken engineering activities in a way that contributes to sustainable development?

E4: How have you carried out continuing professional development (CPD) necessary to maintain and enhance competence in own area of practice?

E5: How have you exercised responsibilities in an ethical manner?

You could reference your ability to:

Comply with the rules of professional conduct of the Institution / Manage work within all relevant legislation and regulatory frameworks, including social and employment legislation.

All candidates should come to their interview with at least one example from their professional experience to discuss at interview, that shows how they have applied at least one of the ethical principles given on page 33 of the UK-SPEC document.

Identify and take responsibility for own obligations for health, safety and welfare issues / Manage systems that satisfy health, safety and welfare requirements / Develop and implement appropriate hazard identification and risk management systems / Manage, evaluate and improve these systems.

Examples of activities that could demonstrate you have achieved the IEng criteria:

- Undertake formal H&S training
- Work with H&S legislation and best practice, e.g. HASAW 1974; CMD regs; OHSAS 18001:2007 and company safety policies
- Carry out safety audits
- Identify and minimise hazards
- Assess and control risks
- Deliver H&S briefings and inductions

Operate and act responsibly, taking account of the need to progress environmental, social and economic outcomes simultaneously / Provide products and services which maintain and enhance the quality of the environment and community, and meet financial objectives / Understand and encourage stakeholder involvement in sustainable development.

Examples of activities that could demonstrate you have achieved the IEng criteria:

- Carry out/contribute to environmental impact assessments
- Carry out/contribute to environmental risk assessment
- Work within environmental legislation
- Adopt sustainable practices
- Contribute to the “triple bottom line” (I.e. social, economic and environmental) outcomes

Undertake reviews of own development needs / Prepare action plans to meet personal and organisational objectives / Carry out planned (and unplanned) CPD activities / Maintain evidence of competence development / Evaluate CPD outcome against action plans / Assist others with their own CPD

Examples of activities that could demonstrate you have achieved the IEng criteria:

- Keep up to date with national and international engineering issues
- Maintain CPD plans and records
- Involvement with the affairs of your professional body
- Evidence of development through on-the-job learning, private study, in-house courses, external conference and courses

You should give an example of: Where you have applied ethical principles as specified in the Engineering Council’s Statement of Ethical Principles / Where you have applied/upheld ethical principles as defined by your organisation or company, which may be in its company or brand values.

# Appendix C: Competence level guidance – CEng

| Competence levels – CEng                 |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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|                                          | LEVEL 1                                                                                                                                                                                                                                                                                  | LEVEL 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | LEVEL 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | LEVEL 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Chartered Engineer – competence A</b> | <p>Little or no evidence beyond initial qualifications gained of broadening and deepening applicant's initial knowledge and skills. May have moved into a sales/management role not requiring in-depth knowledge. Does not use or implement technology that is new to their company.</p> | <p>Evidence of broadening or deepening knowledge following academic formation. Evidence of researching the market for technology or process improvements. May only be involved on the periphery of making a case for the adoption of an improved technology for their company. Able to provide examples of putting forward creative solutions to problems to colleagues, customers and/or suppliers for acceptance. Able to put forward reasoned justification and explanations for decisions.</p>           | <p>Evidence of continuing personal academic development by broadening or deepening knowledge of engineering principles. Clear evidence of use of, and possibly development of, new technology or process improvements within their role. Able to give examples of recent market research where they have been able to put a case forward for the adoption of a new technology in their company. Evidence of using creative thought processes to identify and then justify solutions to problems. Involvement in developing internal and external customer support solutions on behalf of the company. Has considered all possible outcomes for the resultant product. Has identified and met/exceeded customer needs for the product, whether new developments or enhancement to existing developments. Has developed changes to processes and techniques, which enhance productivity/quality.</p> | <p>Clear evidence of continuing to broaden or deepen knowledge and understanding of mechanical engineering analysis, techniques and standards. Uses and develops new technologies, materials or process that are new to their company. Has clearly identified and assessed the product's target audience or process requirements with involvement in developing marketing strategies on entering new market sectors. Has clearly deepened and broadened their knowledge within the context of their responsibilities as a mechanical engineer and to their employer. May be evidence of contributing/sharing ideas to external authorities. If management, must demonstrate a clear understanding of the technical issues which may occur within their remit.</p> |
| <b>Chartered Engineer – competence B</b> | <p>Little or no evidence of involvement in problem solving, life cycle analysis or specification/tender development. Does not use modelling techniques. May have moved into a purely administrative role.</p>                                                                            | <p>Able to justify decisions and explain reasons for solutions. Identifies learning points and takes them forward. Clear logical approach to problem solving. Key involvement or responsibility for producing tender documentation, mechanical engineering designs, feasibility reports or technical specifications. Knowledge of, and partial responsibility for, commissioning/decommissioning procedures for equipment, etc. Has some responsibility for development of corporate engineering policy.</p> | <p>Able to provide recent examples of the solution of engineering problems. Able to delegate tasks and identify and resolve problems before they occur. Has responsibility for approving and evaluating design drawings. Evidence of producing tender documentation, feasibility studies or technical specifications. Responsibility for commissioning/decommissioning equipment. Has responsibility for corporate engineering policy. Evidence of applying mechanical engineering knowledge to design, feasibility studies, commissioning and problem solving.</p>                                                                                                                                                                                                                                                                                                                                | <p>Clear evidence of prime responsibility for the investigation and successful solution of engineering problems, the initiation of major design studies, the introduction of new products and/or services, the production of specifications/tenders for new/retrofit plant and the development of corporate engineering policy. If management, must demonstrate a clear understanding of the technical issues associated with the above, which may occur within their remit. Evidence of applying creative/innovative solutions to mechanical engineering problems and presenting them to customers, colleagues and/or suppliers.</p>                                                                                                                             |

## Competence levels – CEng (continued)

|                                          | LEVEL 1                                                                                                                                                              | LEVEL 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | LEVEL 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | LEVEL 4                                                                                                                                                                                                                                                                                                                                                                     |
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| <b>Chartered Engineer – competence C</b> | <p>Little or no evidence of management or supervisory skills. A team member, not a team leader.</p>                                                                  | <p>Team leader, project team leader, external activities may contribute to competence development, evidence of growing responsibility in near future if limited at present, delegation of tasks to a small group of individuals. Considers and manages parts of the project life cycle. Where evidence of leading a project (or part of a project) is missing, the individual must be able to demonstrate a level of autonomy. Interviewers should explore the interface between the applicant, their supervisor and work colleagues. Active contribution to the development of improved processes and value engineered solutions.</p> | <p>Responsible for a number of technical and non-technical staff either as a line manager or within a project management environment, staff development, problem-solving and probably limited budgetary control. Responsible for managing a project though its entire life cycle, the project may be small or more complex. Planning and personal supervision of team-based projects in research and/or development programmes or problem investigation. Such teams are likely to be multi-disciplinary and may include personnel from outside the company. Active participation in design review. Active contribution to the development of improved processes and value engineered solutions. The in-house training and development of technicians, skilled craftsmen and/or engineering graduates, possibly on a project-by-project basis. Evidence of planning and co-ordinating a multi-disciplinary project, without direct line management responsibility for the staff involved, is also acceptable.</p> | <p>Clear evidence of line management and/or project management, responsible for technical and non-technical staff, significant budgetary control, staff development and training, delegation, problem-solving, clear understanding of quality, risk assessment, etc.</p>                                                                                                    |
| <b>Chartered Engineer – competence D</b> | <p>Little or no evidence of communication or presentation skills. Professional Review Report not well written or presented. Poor response to questioning at PRI.</p> | <p>Evidence of leading and contributing to team discussions, negotiations with customers and possibly suppliers; Professional Review Report clearly written. Able to present their case clearly at interview with examples/evidence.</p>                                                                                                                                                                                                                                                                                                                                                                                               | <p>Able to communicate effectively and concisely both verbally and in writing. Reasonable justification for decisions with technical content contained in report. Evidence of presentations to colleagues, customers and suppliers; verbal and written papers to conferences. Evidence of established working relationships internally and externally. Ability to articulate ideas and proposals and obtain agreement from others. Preparation of tender documents and technical specifications. Responsibility for developing small teams of people within a project or line management environment.</p>                                                                                                                                                                                                                                                                                                                                                                                                        | <p>Good, clear, effective communication and presentation skills. Evidence of presentations and negotiations with customers, suppliers and/or colleagues. Presentations to conferences, seminars, etc, and evidence of published papers. Has established strong working relationships internally and externally. Responsibility for development and management of teams.</p> |

## Competence levels – CEng (continued)

|                                          | LEVEL 1                                                                                                                                                                                        | LEVEL 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | LEVEL 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LEVEL 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chartered Engineer – competence E</b> | <p>Little or no evidence of commitment to the profession or understanding of the ethical and behavioural aspects of the profession. Not aware of the Institution's <b>Code of Conduct</b>.</p> | <p>General awareness and understanding of the issues within the remit of their responsibilities and role within the organisation; able to identify health and safety issues and the potential problems which may arise; awareness of the Institution's <b>Code of Conduct</b> and its importance; awareness of the ethical and behavioural aspects of the profession. Probably little or no evidence to date of involvement in the Institution or other Institution activities or the promotion of mechanical engineering. Limited career development plan for the future.</p> | <p>Good evidence of understanding health and safety issues within the remit of their responsibilities; consideration given to environmental risk and disaster recovery; understanding of the professional <b>Code of Conduct</b>; awareness of sustainable practices and legislative issues; understanding of the ethical and behavioural aspects of the profession. Good understanding of how they wish their career to develop in the medium term. Probably some evidence of external activities, in the Institution or the promotion of young engineers.</p> | <p>Clear evidence of understanding of health and safety issues, environmental risk factors, legislative issues, sustainable practices, ethical and behavioural aspects of the profession and the professional <b>Code of Conduct</b>. Evidence of actively promoting engineering, eg. mentoring, training, presentations to young engineers and an active involvement in the Institution or other Institution activities. Has a clear commitment and plan for their future career development.</p> |

## Appendix D: Competence level guidance – IEng

| Competence levels – IEng                    |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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|                                             | LEVEL 1                                                                                                                                                                                                                                                                                                   | LEVEL 2                                                                                                                                                                                                                                                                                                                                                                                                                                     | LEVEL 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | LEVEL 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Incorporated Engineer – competence A</b> | <p>Little or no evidence beyond initial qualifications gained of broadening and deepening applicant's initial engineering knowledge and skills. May have moved into a sales/management role at early stage in their career development therefore not requiring in-depth knowledge.</p>                    | <p>Evidence of having broadened and deepened engineering knowledge and skills. Able to demonstrate practical application of engineering principles as a member of a team or as an individual. Understanding of best practice. Evidence of planning and monitoring operations of products, systems and/or services in their industry. Knowledge of quality management issues and systems. Possibly a team leader.</p>                        | <p>Clear evidence of having broadened and deepened engineering knowledge and skills with good practical application of best practice and methodologies. Probably management/team leader level. Good evidence of quality assurance practice with examples of how systems, products and/or services have been improved. Able to identify, evaluate and explain problems. Aware of new and developing technologies and practices, performance and failure rate issues.</p>                                                      | <p>Probably a senior operations manager/team leader. Clear evidence of how they have deepened and broadened their engineering knowledge and skills. Highly knowledgeable about quality assurance systems and practices, evidence of practical application, evaluation and development. Good knowledge and evidence of how to measure and improve performance and failure rates, and optimisation issues.</p>                                                                             |
| <b>Incorporated Engineer – competence B</b> | <p>Task-oriented taking instructions from team leader/supervisor. Little evidence of the development and selection of techniques and procedures. Little evidence of identifying problems and solving them. Probably operates and maintains engineering products or services under direct supervision.</p> | <p>Examples: clear evidence of developing and selecting techniques, procedures and/or methods in their particular field. Able to demonstrate evidence of problem identification and problem-solving. Aware of client needs. Evidence of developing producing, installing, maintaining, constructing and/or commissioning systems, products or services. Possible evidence of having contributed to design and development requirements.</p> | <p>Clear evidence of developing and selecting techniques, procedures and/or methods in their particular field. Evidence of understanding client needs. Evidence of producing, installing, maintaining, constructing and/or commissioning systems, products or services and handling associated problems. Expect to see evidence of having contributed to design and development requirements. Clear evidence of monitoring and evaluating task processes. Probably evidence of having identified potential enhancements.</p> | <p>Probably in an operational management position in control of producing, installing, maintaining, constructing and/or commissioning products, systems or services. Good evidence of handling associated problems and evaluating possible solutions. Good understanding of client needs. Contribution to design and development requirements, evidence of having implemented new processes, products or services and supervised a team to do so. Identifies potential enhancements.</p> |

## Competence levels – IEng (continued)

|                                             | LEVEL 1                                                                                                                                                                                                                                                                                   | LEVEL 2                                                                                                                                                                                                                                                                                                                                                                                                                                                     | LEVEL 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | LEVEL 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Incorporated Engineer – competence C</b> | <p>Little or no evidence of project planning and control. Probably works within a team with little responsibility and does not demonstrate influencing skills or task scheduling. Little or no involvement in budgetary or resource control. Probably works under strict supervision.</p> | <p>Able to demonstrate evidence of involvement in project planning, control and implementation issues. Evidence of the allocation and monitoring of resources. Aware of regulatory and financial constraints. Demonstrates some evidence of influencing skills within team and possibly externally. Aware of the need to continuously improve processes and quality standards used in their field of engineering. Understanding of client requirements.</p> | <p>Demonstrates clear evidence of planning and implementing projects and co-ordinating activities of the team. Resource allocation and monitoring. Good knowledge and understanding of managing tasks within budgetary and regulatory constraints. Commercial awareness and understanding of client needs is good. Able to demonstrate evidence of monitoring processes, identifying and solving of problems. Provides evidence of having brought about continuous improvement processes, developing operations to meet quality standards. Good understanding of what the standards are.</p> | <p>Clear evidence of good leadership and management skills either as a line manager or project manager. Good commercial awareness and understanding of budgetary and regulatory constraints – probably heavily involved in the budget-setting process. Clear evidence of implementing continuous improvement processes and promoting quality standards throughout the organisation and to customers and suppliers. Clear understanding of client requirements in project lifecycle. Probably evidence of having led teambuilding activities.</p> |
| <b>Incorporated Engineer – competence D</b> | <p>Little or no evidence of clear focused communication or presentation skills. Professional Review Report not well written or presented. Evidence of ability to develop good working relationships with clients and colleagues weak. Not able to present ideas clearly.</p>              | <p>Communication skills may lack confidence and require prompting. Evidence of good working relationships with colleagues and clients. Able to present and discuss ideas in a reasonable manner but may not be entirely focused. Evidence of building teams and utilisation of negotiation skills.</p>                                                                                                                                                      | <p>Able to communicate effectively and concisely both verbally and in writing. Able to present ideas and thoughts in a clear and focussed manner. Has established good working relationships with clients and colleagues.</p>                                                                                                                                                                                                                                                                                                                                                                | <p>Good, clear, effective communication and presentation skills. Evidence of presentations and negotiations with customers, suppliers and/or colleagues. Has established strong working relationships internally and externally. Able to demonstrate evidence of building teams. Successful negotiation with both internal and external customers.</p>                                                                                                                                                                                           |

## Competence levels – IEng (continued)

|                                             | LEVEL 1                                                                                                                                                                                        | LEVEL 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | LEVEL 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | LEVEL 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Incorporated Engineer – competence E</b> | <p>Little or no evidence of commitment to the profession or understanding of the ethical and behavioural aspects of the profession. Not aware of the Institution's <b>Code of Conduct</b>.</p> | <p>General awareness and understanding of the issues within the remit of their responsibilities and role within the organisation; able to identify health and safety issues and the potential problems which may arise; awareness of the professional <b>Code of Conduct</b> and its importance; awareness of the ethical and behavioural aspects of the profession. Probably little or no evidence to date of involvement in the Institution or other Institution activities or the promotion of engineering. Limited career development plan for the future.</p> | <p>Good evidence of understanding health and safety issues within the remit of their responsibilities; consideration given to environmental risk and disaster recovery; understanding of the professional <b>Code of Conduct</b>; awareness of sustainable practices and legislative issues; understanding of the ethical and behavioural aspects of the profession. Good understanding of how they wish their career to develop in the medium term. Probably some evidence of external activities, with involvement in the Institution or the promotion of young engineers.</p> | <p>Examples: clear evidence of understanding of health and safety issues, environmental risk factors, legislative issues, sustainable practices, ethical and behavioural aspects of the profession and the professional <b>Code of Conduct</b>. Evidence of actively promoting engineering, eg. mentoring, training, presentations to young engineers and an active involvement in the Institution or other Institution activities. Has a clear commitment and plan for their future career development.</p> |



