

Guidance Notes

CEng Professional Registration

The first step to completing your Professional Review
with the Institute of Highway Engineers

Guidance notes for:

Chartered Engineer

(Recognised Qualification Route and Individual Assessment
Route) Professional Registration

About this booklet

This set of guidance notes is your first step in gaining Chartered Engineer professional registration through the Institute of Highway Engineers. This booklet is essential for both Recognised Qualifications Route and Individual Assessment Route CEng professional review applications. It provides you with information and guidance to ensure the relevant paperwork is completed to the required standard as quickly and easily as possible. Please read this booklet in conjunction with the CEng application form as the two are designed to go hand in hand.

Before you begin

In order to obtain CEng registration you will need to be an existing IHE member, or a member of one of our Professional Affiliate Partners (currently the Association of Cost Engineers (ACostE) and the Institute of Traffic Accident Investigators (ITAI). Please refer to our website at www.theihe.org/membership if you need to apply for IHE membership.

To gain Engineering Council registration, engineers and technicians prove their competence and commitment in a professional review of their portfolio submission to the IHE. Chartered Engineers 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 techniques, marketing and construction concepts or pioneer new engineering services and management methods. Chartered Engineers are technical and commercial leaders and exercise effective interpersonal skills. They demonstrate a personal and professional commitment to society, to their profession, and to the environment.

Network managers, traffic engineers, transportation planners, highway designers and project managers are typical Chartered level positions. You may have broad responsibilities or may specialise in one or more aspects but the IHE reviewers are looking for rounded awareness of the bigger picture, creative problem solving and independent thinking in all cases. Remember that, although you may lead a team, the Institute wants to know what you do, and the extent of your personal responsibility.

Becoming a Chartered Engineer demonstrates a commitment to professional standards, setting you ahead of unregistered engineers and showing a pride in your achievements.

Many will have an accredited BEng (Hons) + MSc or accredited MEng degree. Others will have gained the necessary skills, knowledge and experience via a non-academic route through practical experience in the highways industry.

This application process will help the Institute of Highway Engineers assess the five requirements of CEng standard contained within the UK-SPEC of UK Standard for Professional Engineering Competence laid down by the Engineering Council. These are:

- A.** Use a combination of general and specialist engineering knowledge and understanding to optimise the application of advanced and complex systems.
- B.** Apply appropriate theoretical and practical methods to the analysis and solution of engineering problems.
- C.** Provide technical and commercial leadership.
- D.** Demonstrate effective communication and interpersonal skills.
- E.** Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment.

Completing the application form

To keep your application as clear as possible, we would request the following:

- If completing the application form by hand, please write in BLOCK CAPITALS and in black ink.
- Please complete only the relevant fields - we have included guidance as to which sections should be left blank if they are not relevant.
- You should aim to complete the application form with as much detail as possible. This will reduce the instances where we need to ask you for more information at a later date.
- Remember to include any additional documentation with your application where you see this symbol. Please tick the relevant box on the check list at the back of the application form if you are including additional evidence.



Please post your completed application form, along with your submission to:

Membership, Institute of Highway Engineers, Floor 4, Euston House, 24 Eversholt Street, London, NW1 1DB

Important: ITAI and ACostE members should send your application as described above, to the following address.

ACostE members should send your application directly to The Association of Cost Engineers:
ACostE Administration Office, Lea House, 5 Middlewich Road, Sandbach, Cheshire CW11 1XL

ITAI members should send your application directly to the Institute of Accident Traffic Investigators at:
ITAI, PO Box 16057, Solihull, West Midlands, B93 3GL

And finally

We hope you find the pathway to Chartered Engineer application a simple process. The Institute of Highway Engineers is committed to helping you achieve the career benefits that professional registration can bring. Please contact us on: 020 3874 3066 or email us at professionalreviews@theihe.org if we can provide any assistance or guidance at any stage of your CEng application.

Section A

In this section we give some general guidance and background to making your CEng submission with the IHE.

1. Entry routes and requirements

Before you start compiling your CEng submission, you will need to establish which route of application you're going to take. Two routes are available to Chartered Engineers, 'Recognised Qualifications Route' and 'Individual Assessment Route'. Choosing which one is applicable to you will depend on the training and qualifications you have undertaken so far in your career. All routes will require you to demonstrate your competency in applying proven techniques to solve problems and supervise works or people.

It is not possible to cover every individual situation in this document. If your qualifications or experience are not covered in the following guidance you may still be suitable to apply for CEng. You should ask the IHE for an individual Career Assessment. Forms and guidance on what we require to undertake this process are available on our website at <https://members.theihe.org/page/formsandguidance> (log in required) Your documents will then be put to the IHE Academic Standards Panel for consideration by engineering or academic professionals. They will either confirm your eligibility or provide you with feedback and guidance on the best route for you to achieve CEng registration.

RECOGNISED QUALIFICATIONS ROUTE

These qualifications meet the requirements to pursue CEng registration via the Recognised Qualifications Route:

- Accredited BEng (Hons) plus an accredited MSc degree
- Accredited MEng
- Accredited BEng (Hons) and BSc (Hons) normally started before 1999

Your degree must be in a relevant discipline such as Engineering or Civil Engineering. You will need to ensure your degree has been accredited by the Joint Board of Moderators (of which the IHE is a member) or other licenced Engineering Council Institute as meeting the educational requirements for a Chartered engineer. You will need to refer to two sources of information to establish this:

- Engineering Council Accredited Course Search
www.engc.org.uk/education-skills/course-search/recognised-course-search/
- Joint Board of Moderators (JBM)
www.jbm.org.uk/accreditation.aspx

If you have studied overseas, a NARIC Certificate of Comparability that covers your degree should enable you to study via the Recognised Qualifications Route. You should contact NARIC directly, and obtain a Certificate of Comparability yourself before making your application. More information on this can be found on the NARIC website: <https://www.naric.org.uk/Qualifications/>

If your degree has not been accredited you may still be able to follow the Recognised Qualifications Route. If you feel your BEng, BSc, MSc or MEng are in a relevant field and fulfil the criteria for CEng registration, but are not listed, please ask the IHE for an individual Career Assessment. Forms and guidance on what we require to undertake this process are available on our website at <https://members.theihe.org/page/formsandguidance> (log in required) Your documents will then be put to the IHE Academic Standards Panel for consideration by engineering or academic professionals. If the panel take the view that your degree contains enough scientific and mathematical knowledge to fulfil the requirements for CEng registration, their approval is then taken as being equivalent to Joint Board of Moderators or Engineering Council's accreditation.

INDIVIDUAL ASSESSMENT ROUTE

If you have other qualifications which do not fulfil the Recognised Qualifications Route criteria, or none at all, but can demonstrate competence and commitment to the appropriate depth and level through your work experience, then you can be individually assessed. This is divided into three areas: Further Learning, Experiential Learning Option and the Personalised Report Option.

To obtain Chartered Engineer registration through the Individual Assessment Route you will need to demonstrate you have met the Learning Outcomes set by the Engineering Council. These Learning Outcomes are the same as those Higher Education providers need to meet in order to get JBM accreditation for their educational programme.

The Learning Outcomes you are seeking to demonstrate by Further Learning (that doesn't lead to a Recognised Qualifications Route pre-requisite qualification), Experiential Learning Option or the Personalised Report Option are listed here:

1. Science and mathematics

Engineering requires a substantial grounding in engineering principles, science and mathematics.

Chartered engineers will need the following knowledge, understanding and abilities:

1.1 Apply a comprehensive knowledge of mathematics, statistics, natural science and engineering principles to the solution of complex problems. Much of the knowledge will be at the forefront of the particular subject of study and informed by a critical awareness of new developments and the wider context of engineering.

2. Engineering analysis

Engineering analysis involves the application of engineering concepts and to analyse, model and solve problems.

Chartered Engineers will need:

2.1 Formulate and analyse complex problems to reach substantiated conclusions. This will involve evaluating available data using first principles of mathematics, statistics, natural science and engineering principles, and using engineering judgment to work with information that may be uncertain or incomplete, discussing the limitations of the techniques employed.

2.2 Select and apply appropriate computational and analytical techniques to model complex problems, discussing the limitations of the techniques employed.

2.3 Select and critically evaluate technical literature and other sources of information to solve complex problems.

3. Design and innovation

Design is the creation and development of an economically viable product, process or system to meet a defined need. It involves significant technical and intellectual challenges.

Chartered Engineers will therefore need the knowledge, understanding and skills to:

3.1 Design solutions for complex problems that evidence some originality and meet a combination of societal, user, business and customer needs as appropriate. This will involve consideration of applicable health and safety, diversity, inclusion, cultural, societal, environmental and commercial matters, codes of practice and industry standards.

3.2 Apply an integrated or systems approach to the solution of complex problems.

4. The engineer and society

Engineering activity can have a significant societal impact and engineers must operate in a responsible

and ethical manner, recognise the importance of diversity, and help ensure that the benefits of innovation and progress are shared equitably and do not compromise the natural environment or deplete natural resources to the detriment of future generations.

This includes:

4.1 Evaluate the environmental and societal impact of solutions to complex problems (to include the entire life-cycle of a product or process) and minimise adverse impacts.

4.2 Identify and analyse ethical concerns and make reasoned ethical choices informed by professional codes of conduct.

4.3 Use a risk management process to identify, evaluate and mitigate risks (the effects of uncertainty) associated with a particular project or activity.

4.4 Adopt a holistic and proportionate approach to the mitigation of security risks.

4.5 Adopt an inclusive approach to engineering practice and recognise the responsibilities, benefits and importance of supporting equality, diversity and inclusion.

5. Engineering practice

The practical application of engineering concepts and tools, engineering and project management, teamwork and communication skills. Engineers also require a sound grasp of the commercial context of their work, specifically the ways an organisation creates, delivers and captures value in economic, social, cultural or other contexts.

This includes:

5.1 Use practical laboratory and workshop skills to investigate complex problems.

5.2 Select and apply appropriate materials, equipment, engineering technologies and processes, recognising their limitations.

5.3 Discuss the role of quality management systems and continuous improvement in the context of complex problems.

5.4 Apply knowledge of engineering management principles, commercial context, project and change management, and relevant legal matters including intellectual property rights.

5.5 Function effectively as an individual, and as a member or leader of a team. Evaluate effectiveness of own and team performance.

5.6 Communicate effectively on complex engineering matters with technical and non-technical audiences, evaluating the effectiveness of the methods used.

5.7 Plan and record self-learning and development as the foundation for lifelong learning/CPD.

FURTHER LEARNING

There are two types of Further Learning. The first is to complete a programme of accredited JBM Further Learning, the second is to work with the IHE Academic Standards Panel to produce a Further Learning Report.

Approved Further Learning

This Further learning option consists of completing a JBM programme of accredited or accredited Further Learning, by which you will be able to demonstrate you have met the Learning Outcomes set by the

Engineering Council. This will enable you to reach the same level of technical knowledge as someone who has completed an accredited MEng degree. The Joint Board of Moderators provide a list of approved Further Learning on their website <http://www.jbm.org.uk/accreditation/accreditation-programmes/>

Further Learning Report

Further learning is the knowledge and understanding that underpins performance. Your activities should provide systematic understanding and critical awareness of current problems or insights into subjects at the forefront of professional practice. The important factor is that the learning must develop understanding of engineering principles to Masters degree level. It is not the same as training or initial development which is about performance and competence.

Your final report must indicate how, through Further Learning (that is to say, further to your HND or BSc), you have bridged the academic gap equivalent to a Masters level qualification, which forms the academic standard specified by the Engineering Council for eventual registration as a Chartered Engineer. This will be achieved through demonstrating achievement of the Masters level Learning Outcomes.

A further learning plan will need to be agreed by the IHE and this must be followed in order to produce a Further Learning Report. Your proposed Further Learning should be pre-planned and carefully thought through as the IHE Academic Standard Panel needs to be convinced that you have given detailed thought to the learning opportunities available to you and to a realistic programme timescale that will be dependent on your personal circumstances. Further Learning achieved prior to the submission of your plan of work may be taken into account when preparing your plan. If you believe that as part of your programme you are in a position to claim credit for prior learning you must produce evidence of when that learning was achieved together with details of how and to what extent it meets the Learning Outcomes.

Once you have completed your agreed Further Learning plan, your report will then be assessed by the IHE against the Engineering Council Learning Outcomes. The IHE ASP will not expect to be overwhelmed with a massive portfolio containing evidence of everything you have ever done during your training but rather selective and appropriate evidence of how you have met the Learning Outcomes, as initially defined in, and developed from, your learning plan. The key principle is that it must represent learning at Masters level and there must be evidence that formal, documented assessment of learning has taken place. The completion of all the agreed training or courses detailed on your Further Learning plan is not in itself an indication that you have met the requirements of Further Learning no matter how well executed your training programme was. Further Learning and training are not the same thing although elements of training can contribute to a Further Learning programme. In judging any submission the ASP will need to be convinced that learning, and appropriate assessment of that learning, has taken place and it is to Masters level, in order to satisfy the Engineering Council Learning Outcomes.

The IHE Academic Standard Panel will need to work with you step by step throughout. Therefore, your first step should be to ask the IHE for an individual Career Assessment stating that you wish to apply for CEng via the Further Learning option. Forms and guidance on what we require to undertake this process are available on our website at <https://members.theihe.org/page/formsandguidance> (log in required) Your documents will then be put to the IHE Academic Standards Panel for consideration by engineering or academic professionals.

Your report is concerned with your learning since completing your undergraduate studies and can draw on formal academic learning, short courses, work-based learning or all three. By its very nature, Further Learning will be very specific to you as an individual, so the Career Assessment is the essential first step. The following advice on content and structure of your Further Learning Report is intended to help, but it is not mandatory.

1. Qualifications and career summary

List your formal academic qualifications and summarise your career to date (key posts and responsibilities) and describe your current position. Attach certified copies (signed by your current Line Manager) of your certificates, list of units or modules and an abstract of any dissertation.

2. Learning Outcomes

Against each Learning Outcome, list any relevant formal training and provide details of syllabuses for all formal qualifications and courses explaining how they contribute to meeting the outcome. You will need to provide some background on how the Learning Outcome has been achieved. Summarise the technical nature of the learning, the technical objective of the scheme and support your explanation with relevant calculations, results, conclusions and recommendations.

3. Evidence

To support your report, include clear details of the activities and assignments used to test your knowledge and understanding of the learning undertaken. This can be details of assessment transcripts, copies of drawings or reports or witness testimonials. Records of oral and other assessments that have taken place in the workplace can be used and these records should contain the names, qualifications and job details of those carrying out the assessments. You should include sufficient supporting evidence, but please be selective and don't include unnecessary information.

4. General advice

To produce a successful Further Learning Report, you should ensure the completed document:

- Captures your involvement on significant engineering projects or schemes.
- Explains, not describes.
- Provides analysis, not discussion.
- Provides evaluation, not opinion.
- Explicitly refers to engineering knowledge not in your initial qualifications.
- Is not a review of your experience or employment responsibilities.
- Is not concerned with your managerial or organisational competency or experience.
- Is a separate, standalone document from your professional review report.
- Is driven by quality not quantity, particularly when it comes to including supporting evidence.

Further Learning depends on achieving the Learning Outcomes and not on adding up time spent on various activities.

- Identifies which parts are yours if your documents were produced jointly with others.
- Maintains a focus on demonstrating your academic knowledge and understanding of the principles that underpin your work. Including key calculations, engineering drawings and diagrams as appendices.
- Includes appropriate references to back up your analysis or conclusions.

PERSONALISED REPORT OPTION

This option opens up a pathway to Chartered Engineer registration for any suitable candidate, regardless of academic background. The purpose of the Personalised Report Option is to establish your knowledge of engineering principles and therefore your report must be technical - a management-based report is not acceptable. The Personalised Report is a self-contained, standalone report that provides an ordered and critical account of your technical competencies and it should show what you have learned. This is not a general report of your work experience or your professional or managerial ability because you are seeking to demonstrate your knowledge of underpinning engineering principles and how you apply them. You should explain clearly in your report the activities you did or were responsible for.

Your Personalised Report should demonstrate not just what you did, but explain why and what engineering principles you considered and applied. Your report should not exceed 10,000 words, although

5,000 words are normally sufficient to set out the key aspects of your technical competence. It must give details of a technical aspect (or aspects) of highway engineering practice in which you have played a major part and it must show how you resolved technical problems using engineering principles and how your knowledge meets the Engineering Council Learning Outcomes. You should include the successes and failures in relation to the application of engineering principles and the lessons you learned, importantly, your Personalised Report shouldn't include examples of your professional competence such as management skills and commercial awareness.

Before you start your Personalised Report you must submit a synopsis to the IHE for approval. This will be assessed by the IHE Academic Standard Panel and you cannot proceed without their approval. In your Personalised Report Synopsis you need to set out clearly how you intend to demonstrate your technical knowledge and understanding by identifying the engineering principles involved rather than just describing the projects on which you have been working. Set out the project or scheme and the strategy you adopted to address the problem, outline the structure of your proposed report and the type of evidence you will submit. The synopsis should be approximately two pages long and on the right-hand side, you should cross reference the synopsis to the Engineering Council Learning Outcomes.

You should then email your completed Personalised Report Synopsis to professionalreviews@theihe.org asking for it to be approved. Your documents will then be put to the IHE Academic Standards Panel (ASP) for consideration by engineering or academic professionals. We aim to grant Personalised Report Synopsis approval within about eight weeks, but in some circumstances it may take longer. Do not write your Personalised Report until you have received written confirmation from the IHE that your synopsis has been approved. Once the IHE ASP has approved your synopsis, you can begin writing your Personalised Report.

Write about one or two significant projects that you undertook relating your application of engineering principles to an engineering project. You should offer an ordered and critical exposition of a subject or project, clearly demonstrating your contribution, explaining the development aims and the problems you encountered and demonstrate how they were resolved or achieved by applying engineering principles and knowledge. You should demonstrate that you investigated the situation, critically evaluated options and interpreted results. Where applicable, you should include calculations and refer extensively to engineering principles and back up your analysis with references to supporting evidence. The project must be complex and you must demonstrate originality and creativity as theoretical and historical studies are not appropriate.

The report can include, or be largely based on, a technical report or design study written as part of your normal job, provided you add a commentary identifying how the work contributed to your learning and development as well as highlighting how you applied engineering principles to solving problems. Throughout the report, you should cross reference in the right-hand margin against the Engineering Council Learning Outcomes. Do not confuse managerial responsibility with technical responsibility, the project(s) chosen must be technical to allow you to demonstrate knowledge of the fundamentals in your discipline and an ability to apply those principles to a particular problem. A suggested framework for your Personalised Report is as follows:

1. Title Page

2. List of contents

3. Summary

Provide a brief summary of main conclusions or findings and achievements.

4. Introduction

What the paper is about (one page) indicating main topics and points to be covered.

5. Background

Aim of the project/study.

6. Main body of the report

Explain the whole project, use engineering principles to interpret and evaluate data, explain your contribution. Cross reference your Personalised Report in the right-hand margin to the EC Learning Outcomes. It is also helpful to cross reference your supporting documentary evidence to the Learning Outcomes in a matrix or grid.

7. Discussion

Draw together the arguments in the report. From a summary of the main points, develop how these led to a particular view or course of action.

8. Conclusion

Conclude with a critical evaluation of your work. Identify any lessons learned and recommendations for further work.

9. References

10. Bibliography

11. Glossary

12. Appendices

Your Personalised Report should include sufficient supporting evidence documents. These should be included as appendices and may include calculations, diagrams/drawings/documents etc. Choose key documents that show your engineering knowledge and understanding, but these need to be chosen carefully.

Once your report has been approved, the two-stage interview will be conducted by at least two reviewers. In the first interview the focus is on testing the academic relevance of your knowledge and understanding against the Engineering Council Learning Outcomes. You will be expected to give a presentation of approximately twenty minutes in which you will expand upon your Personalised Report and the reviewers will aim for a balance of discussion that will enable you to fully demonstrate you have met the Engineering Council's expectation, identified through achievement of the Masters level Learning Outcomes. On completion of this interview the reviewers will confer privately and make a decision as to whether or not you have successfully demonstrated the Learning Outcomes. There will be a short break between the two interviews and if you have not satisfied the reviewers that you have met the Learning Outcomes, they will explain and will not hold the second interview. If the reviewers are satisfied that you have achieved the Learning Outcomes then you will proceed to a second presentation and interview, which will look at your professional competence in the same manner as that of a Recognised Qualifications Route applicant. More information on this is detailed in the 'Your Professional Review' section of this guidance booklet.

EXPERIENTIAL LEARNING OPTION

Knowledge and understanding are important components of professional competence and formal education is not the only way of demonstrating the necessary knowledge and understanding required to become a Chartered Engineer. The Personalised Report Option allows most potential CEng engineers to demonstrate their competence if they do not hold the exemplifying Recognised Qualifications Route qualifications, and you should look to use this route of application wherever possible. It may be that your circumstances mean you are unable to follow either the Further Learning or the Personalised Report routes and, if this is the case, then you may be able to pursue CEng registration via an assessment of Experiential Learning.

This option is intended for applicants who are involved in a variety of highway engineering related activities. They will have an in-depth experience of operating in a professional and technical capacity over a number of years (typically in excess of ten years) but now have a managerial, leadership or strategically focused role. The fact that they are now removed from day-to-day direct application of engineering principles might make it difficult to put forward suitable activities to evidence knowledge and understanding as required under the Personalised Report Option. Equally, formalised Further Learning

may not be an option due to the demands of their job role.

The process of assessing Experiential Learning seeks to establish that applicants have a level of knowledge and understanding that meets the Engineering Council Learning Outcomes (equivalent to a Masters level degree) and can demonstrate the competence and commitment standards set by the Engineering Council for Chartered Engineer Professional Registration.

Applying for CEng via the Experiential Learning Option is a two-stage process. The Engineering Council 'Regulations for Registration' set out the first stage for this process. It states that "Applicants will submit details of their education and career history including any records of experiential learning to a licensed institution." We therefore require applicants to undertake an IHE individual Career Assessment before applying for the Experiential Learning route to CEng. Forms and guidance on what we require to undertake this process are available on our website at <https://members.theihe.org/page/formsandguidance> (log in required) Your documents will then be put to the IHE Academic Standards Panel for consideration by engineering or academic professionals. Once you have received confirmation from the IHE Academic Standards Panel that you may pursue this option you should now make your formal application.

2. Getting started

Help and support – Mentors

Getting the right help and support is crucial to ensuring you are successful in achieving CEng registration.

You are responsible for your own development and pathway to producing your CEng submission, but support from a colleague or mentor enables you to try out ideas and keep a focus on objectives. Good mentors will try to ensure that the engineers they work with gain confidence and independence as a result of their one-to-one relationship, and are empowered to take full and effective responsibility for themselves.

The Institute of Highway Engineers has produced a short booklet explaining the roles and responsibilities of both mentors and applicants. Please refer to our website at <https://members.theihe.org/page/formsandguidance> (log in required) for more information.

Creating your folder

All submissions must be presented in a single ring binder or lever arch folder. You should use file dividers to enable us to easily identify the relevant parts of your evidence folder and cross reference these with the section headings in the CEng application form.

The coversheet provided in section 1 of the application form must be affixed to the front of your folder.

Please note: *Submissions presented in any other style of folder or binding, or without the coversheet affixed will be returned to you.*

3. Your Professional Review

When you have satisfied both the education and experience requirements (by whichever route), and have completed the Chartered Engineer application form, together with all the accompanying documents you should have the following ready to send to the IHE:

- Recognised Qualifications Route applicants will have a single folder that contains the CEng application form, the documents we require to support this and relevant supporting evidence you have referenced throughout your application.
- Individual Assessment Route (Further Learning and Personalised Report) applicants will have a single

folder divided into two distinct sections. The first part contains your Further Learning Report or your Personalised Report. The second part contains the CEng application form, the documents we require to support this and relevant supporting evidence you have referenced throughout your application.

- Individual Assessment Route (Experiential Learning) applicants will have a single folder that contains the CEng application form and the documents we require to support this.

Make three copies of your submission together with a digital copy on a CD or USB memory stick and keep the original for yourself. Send one hard copy and the CD or USB memory stick to the IHE and once we consider your submission to be complete, with no outstanding or missing information, we will make arrangements for two (or sometimes three, depending on the route of application) IHE Chartered reviewers (and potentially an Engineering Council representative) to assess your application. At this point we usually arrange a provisional date, time and place of your review interview. If you have any disability, special access requirements or medical problems that might affect your performance, tell the IHE in advance and we will make appropriate arrangements. You will be provided with the address of your reviewers and will be expected to post (via Royal Mail) a hard copy of your submission to them. The reviewers will assess your submission in order to decide whether or not to call you for interview and in due course you will receive a summary of their assessment and, if they are satisfied you meet the requirements for Chartered Engineer, the details of your interview. The reviewers may ask you to bring additional evidence to the interview but if they are not convinced that you have achieved the standards, you will be asked to provide further information and we will work with you during this period. Any identified weaknesses should be addressed in your interview presentation.

The format of your Chartered review interview will take one of the following:

- Recognised Qualifications Route and Individual Assessment Route (Further Learning) applicants will present (approximately 20 minutes) one or two recent projects at an interview with your reviewers. Your presentation and interview are to assess your competence against the Engineering Council UK-SPEC Competencies.
- Individual Assessment Route (Personalised Report) applicants will first present (approximately 20 minutes) their Personalised Report project to two reviewers in order to satisfy them that you have met the requirements of the Engineering Council Learning Outcomes. There will then be a short break whilst your reviewers will decide whether or not you have satisfied the CEng Learning Outcomes. If you have, then you will be invited to give a second presentation on one or two recent projects at a second interview to assess your competence against the Engineering Council UK-SPEC Competencies. If you have not been able to satisfy the reviewers you have met the Engineering Council Learning Outcomes in your first interview this second interview cannot take place. You will be provided with feedback and guidance if you wish to make another application at a later date.
- Individual Assessment Route (Experiential Learning) applicants will first present (approximately 20 minutes) one or two recent projects to your reviewers in order to satisfy them that you have met the requirements of the Engineering Council Learning Outcomes. There will then be a short break and your reviewers will decide if you have satisfied the CEng Learning Outcomes. If so, you will be invited to give a second presentation on one or two of recent projects at a second interview to assess your competence against the Engineering Council UK-SPEC. If you have not been able to satisfy the reviewers you have met the Engineering Council Learning Outcomes in your first interview this second interview cannot take place. You will be provided with feedback and guidance if you wish to make another application at a later date.

At the interview, the reviewers will expect you to lead a discussion of about one hour during which the reviewers will test your knowledge, competence and judgement in order to satisfy themselves that you meet the EC standards. They may also ask about other projects and responsibilities described in your submission and discuss commitment issues under Competence and Commitment requirement E of Engineering Council UK-SPEC 'Personal and professional commitment.' We try to match candidates and reviewers in the same discipline and area of practice in the highways field to ensure a rigorous and fair interview.

After your interview, the reviewers will prepare a holistic assessment of your competence and commitment and submit a recommendation for the next IHE Membership and Qualifications Portfolio Group meeting.

If you are successful, you will receive a letter within a week of the M&Q meeting notifying you of your election as an Chartered Fellow and IHE will then register you with the Engineering Council. If you are unsuccessful in your application, you will be given detailed reasons and advice in a letter but the IHE are always happy to provide further help.

If you wish to appeal, ask the IHE Membership team about the procedures and reply within six weeks after receipt of your notification. You can appeal if there were unforeseen events or if you are dissatisfied with the way the review was conducted (Eg. If the format, procedure or structure of the review significantly compromised your ability to convince the reviewers that you meet the Institute's published requirements). It is unlikely that appeals based around the reviewers' assessment of engineering competence will be pursued. Advice is not available during an appeal.

A Chartered Engineer professional review is a holistic assessment, hence if you wish to re-sit you will be required to undertake the whole process again. You should take care to ensure that your new submission addresses the original reviewer's concerns. In the re-sit you will have to satisfy new reviewers (unaware of the previous review) that you can demonstrate all the competences, not just those that caused the original failure.

Section B

In this section we will guide you through completing the IHE CEng application form. The application form pulls together your personal details, aims to assess some of your skills and knowledge, as well as providing a checklist for your additional documents.

Guidance on all sections of the application form is detailed below.

1. The coversheet

Please complete the coversheet in section 1 at the front of the application form. This *must* be affixed to the front of your folder.

All submissions must be presented in a single ring binder or lever arch folder. You should use file dividers to enable us to easily identify the relevant parts of your evidence folder. These should cross reference with the relevant sections of this form.

Please note: *Submissions presented in any other style of folder or binding, or without the coversheet attached will be returned to you.*

2. Your details

Please complete all fields in this section.

3. Current employment details

Please complete all fields in this section.

4. Area of specialism

Please tick *one* of the listed categories of highway specialism that best describes the specialist area of your CEng submission. This information is essential for us to identify reviewers in your field that can assess your submission.

5. Route of application

Use this section to indicate if you hold the necessary qualifications to apply via the Recognised Qualifications Route, Individual Assessment Route (Further Learning or Personalised Report) or Individual Assessment Route (Experiential Learning).

6. Your CV

We require an up-to-date copy of your CV covering your employment, academic and training history. This CV should be no more than two pages in length, although it may be longer for Experiential Learning applicants.

7. Higher and further education

Please complete this section in chronological order as per the instructions on the application form.

8. Your qualifications

We require copies of your certificates for the further and higher education courses you have listed in section 7. These should be authenticated (signed and dated) by either your Line Manager, Proposer or Secunder who can confirm that these are true copies of your original certificates. Do not send us original certificates as these will not be returned to you.

9. Career history

Please complete this section in chronological order as per the instructions on the application form.

10. Your current job

We require a copy of your current Job Description to be attached with your application. Self-employed applicants should produce a one page document describing your direct clients.

11. Mapping your organisation

You should supply the IHE with a clear organisation chart that identifies the structure of your organisation. This organigram should be of a hierarchical design and you should clearly highlight your own position on it. Self employed applicants do not need to complete this section.

12. Continuing Professional Development

Continuing Professional Development is the systematic maintaining, improving and broadening of your knowledge and skills and the development of personal qualities necessary for the execution of professional duties throughout your working life. Most employers require you to keep a personal CPD record and you can submit this as evidence in your folder. If your employer does not require this, a blank CPD record form can be downloaded from the members area of our website at <https://members.theihe.org/page/cpdhub> (log in required)

The IHE recommends you record your CPD using the Engineering Council Mycareerpath tool. If you use this, please export your CPD record and print it out. It can then be included in your evidence folder.

Please ensure you submit evidence of Continuing Professional Development and demonstrate how you intend to meet your obligations to CPD in the future by submitting a forward plan.

More information on CPD can be found in the members area of our website at <https://members.theihe.org/page/cpdhub> (log in required).

This should be essential reading before making your professional review submission.

13. Personal competence statements

Competence is the ability to carry out a task to the required standards. To achieve this, you will need to demonstrate that you have the level of knowledge and skills required to achieve CEng registration. Competence is developed by a combination of formal and informal learning, training and experience.

Chartered Engineers 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 techniques, marketing and construction concepts, pioneer new engineering services and management methods. Chartered Engineers are technical and commercial leaders and exercise effective interpersonal skills, through which they demonstrate a personal and professional commitment to society, to their profession, and to the environment.

Network managers, traffic engineers, transportation planners, highway designers and project managers are typical Chartered level positions. You may have broad responsibilities or may specialise in one or more aspects but the reviewers are looking for rounded awareness of the bigger picture, creative problem solving and independent thinking in all cases. Remember that, although you may lead a team, the Institute wants to know what you do, and the extent of your personal responsibility.

Chartered Engineers should be able to demonstrate the following:

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

To assess this and ensure the individual being registered is a competent engineer, the Engineering Council expect professional registrants to be competent in five broad areas:

A Knowledge and understanding.

B Design, development and solving engineering problems.

C Responsibility, management or leadership.

D Communication and interpersonal skills.

E Personal and professional commitment.

For Chartered Engineers, the Engineering Council UK-SPEC of UK Standard for Professional Engineering Competence identifies 17 competencies that fit into the skill areas outlined above. The complete document can be found on the Engineering Council website www.engc.org.uk/UKSPEC In the accompanying application form, each of the sub competencies are grouped under the overall statement heading on a separate page. You will need to make sure you address all the competencies in your answer and provide evidence to support your answers. You will be expected to have a knowledge and understanding of each specific competency (A1, A2 etc) and to be competent overall in each broad statement (A, B, C, D and E).

List on the Professional Competence section of the application form, and include in your submission,

relevant documentary evidence you have produced which illustrates achievement of each Statement. Aim to submit documents only from a few schemes overall allowing you to refer to the same ones across several statements, choosing documents to illustrate and substantiate the work described on the application form. Put yourself in the assessors' shoes and select your strongest evidence and it is sometimes useful when looking for evidence, to ask 'What can I show someone to convince them that I can do this Statement?'. Remember to seek clearance from your employer for any confidential or commercially sensitive work that you are including and warn the IHE if this is the case. All documents should be your own work, if not explain your role.

Depending on the route of application, your answers to the personal competence statements will vary. These are outlined below.

If you are a member of our Professional Affiliate partners (the Institute of Accident Traffic Investigators, ITAI, or The Association of Cost Engineers, ACostE) you should contact these Institutes directly for specific guidance to assist you with your application. Your Institute will be best placed to supply you with specific guidance in your area of engineering expertise.

RECOGNISED QUALIFICATIONS ROUTE plus INDIVIDUAL ASSESSMENT ROUTE (Further Learning and Personalised Report Option only)

Your formal educational qualifications, Further Learning Report or Personalised Report demonstrate the necessary knowledge that underpins each of the five competences. Therefore, you should aim to complete each competency area (A-E) using approximately 600 words with sufficient evidence to demonstrate achievement of the sub competency statements. The ability to analyse and summarise is part of the communication skills requirement, if we need more information, we will ask you for it. There is no problem in referring to the same scheme or experience in more than one statement, but ensure you explain which aspects are relevant in each case and don't repeat descriptions. The following pages outline what information is required and provide some IHE guidance alongside a list of typical documents you could select to illustrate your experience.

INDIVIDUAL ASSESSMENT ROUTE (Experiential Learning Option only)

Experiential Learning Option candidates should aim to complete each competency area (A-E) using approximately 250 words for the overall competency headings with sufficient evidence to demonstrate achievement of the sub competency statements. You do not need to reference or supply us with extensive supporting documentation, this will be assessed in your extended Experiential Learning interview. If we need more information, we will ask you for it.

Your written summary should provide a brief narrative to demonstrate achievement of the competency statements. The ability to analyse and summarise is part of the communication skills requirement. There is no problem in referring to the same scheme or experience in more than one statement but ensure you explain which aspects are relevant in each case and don't repeat descriptions.

A. Knowledge and understanding. Chartered Engineers shall use a combination of general and specialist engineering knowledge to optimise the application of advanced and complex systems.

| Engineering Council Statement of Competence | IHE Guidance | Examples of evidence |
|---|---|---|
| <p>A1. Have maintained and extended a sound theoretical approach to enable them to develop their particular role.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Engage in formal training related to your role. • Learn and develop new engineering knowledge in a different industry or role. • Broaden your knowledge of engineering codes, standards and specifications by studying and reading widely. • Have an understanding of current and emerging technology and technical best practice in your area of expertise standards/methods and can extend these methods to new situations. • Are aware of evolving policy and practice for design, construction and maintenance of transport projects. • Have a comprehensive knowledge of relevant data collection methodologies, design techniques, audit processes and contract documents in your field. • Use and evaluate innovative solutions/techniques in your projects. • Identify new areas for development and research. • Evaluate the need for policy changes. • Evaluate options and recommend solutions based on evidence. • Develop a broader and deeper knowledge base through research and experimentation. • Learn and develop new engineering theories and techniques in the workplace. | <ul style="list-style-type: none"> • Client briefs • Research reports • Reports on new engineering theories and techniques carried out and initiated. • Inspection reports • Feasibility reports • Commissioning reports • Design option appraisals with costings. • Interpretation and analysis and application of survey results or other data in reaching a design solution. • Transport policies, strategies and plans, (LTPS, Local frameworks) which you wrote. • Transport assessments, Travel plans Safety audits or exception reports. • Materials investigation reports • Failure investigations. • Appeal Statements. • Cost benefit analyses. • Value engineering exercises. • Correspondence demonstrating engineering knowledge. • Research commissions. • Environmental assessments. |
| <p>A2. Are developing technological solutions to unusual or challenging problems, using their knowledge and understanding and/or dealing with complex technical issues or situations with significant levels of risk.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Carry out technical research and development. • Develop new designs, processes or systems based on new or evolving technology. • Carry out complex and/or non-standard technical analyses. • Develop solutions involving complex or multidisciplinary technology. • Develop and evaluate continuous improvement systems. • Develop solutions in safety-critical industries or applications. | <ul style="list-style-type: none"> • Test reports of the suitability of strategy options. • Conduct statistically sound appraisal of data. • Use evidence from best practice to improve effectiveness. • Take part in early client contacts eg. presentations, analyses. • Investigate, identify and agree client, user and community requirements. • Identify and implement innovative schemes. • Supervise and present project proposals. • Assess and recommend strategy options. |

B. Design, development and solving engineering problems. Chartered Engineers shall apply appropriate theoretical and practical methods to the analysis and solution of engineering problems.

| Engineering Council Statement of Competence | IHE Guidance | Examples of evidence |
|---|--|---|
| <p>B1. Take an active role in the identification and definition of project requirements, problems and opportunities.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Identify projects or technical improvements to products, processes or systems. • Prepare specifications, taking account of functional and other requirements. • Establish user requirements. • Review specifications and tenders to identify technical issues and potential improvements. • Carry out technical risk analysis and identify mitigation measures. • Consider and implement new and emerging technologies. | <ul style="list-style-type: none"> • Documents indicating your responsibilities. • Site investigation and condition reports. • Traffic survey and data reports. • Accident data and analysis reports. • Road user or safety audits. • Specifications/Tender documents you drew up. • Preliminary designs and drawings. • Detailed design drawings you prepared or initiated. |
| <p>B2. Can identify the appropriate investigations and research needed to undertake the design, development and analysis required to complete an engineering task and conduct these activities effectively.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Identify and agreeing appropriate research methodologies. • Investigate a technical issue, identify potential solutions and determine the factors needed to compare them. • Identify and carry out physical tests or trials and analyse and evaluate the results. • Carry out technical simulations or analysis. • Prepare, present and agree design recommendations, with appropriate analysis of risk, and take account of cost, quality, safety, reliability, accessibility, appearance, fitness for purpose, security (including cyber security), intellectual property constraints and opportunities, and environmental impact. | <ul style="list-style-type: none"> • Calculations. • Alternative costings. • Test reports. • Design mixes. • As built drawings. • Site type approvals and acceptance tests. • Writing of, or interpretation of, design guides, safety statements. • Technical advice statements or reports. • Health and Safety plans/ files. • Instructions on monitoring performance. • Maintenance manuals and maintenance schedules. |
| <p>B3. Can implement engineering tasks and evaluate the effectiveness of engineering solutions.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Ensure that the application of the design results in the appropriate practical outcome. • Implement design solutions, taking account of critical constraints, including due concern for safety, sustainability and disposal or decommissioning. • Identify and implement lessons learned. • Evaluate existing designs or processes and identify faults or potential improvements including risk, safety and life cycle considerations. • Actively learn from feedback on results to improve future design solutions and build best practice. | |

C. Responsibility, management and leadership. Chartered Engineers shall demonstrate technical and commercial leadership.

| Engineering Council Statement of Competence | IHE Guidance | Examples of evidence |
|---|--|---|
| <p>C1. Plan the work and resources needed to enable effective implementation of a significant engineering task or project.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Prepare budgets and associated work programmes for projects or tasks. • Systematically review the factors affecting the project implementation including safety, sustainability and disposal or decommissioning considerations. • Carry out a task or project risk assessment and identify mitigation measures. • Lead on preparing and agreeing implementation plans and method statements. • Negotiate and agree arrangements with customers, colleagues, contractors and other stakeholders, including regulatory bodies. • Ensuring that information flow is appropriate and effective. <p>Also:</p> <ul style="list-style-type: none"> • Lead/manage project planning activities. • Produce and implement procurement plans. • Carry out project risk assessments. • Collaborate with key stakeholders, and negotiate agreement to plans. • Plan programmes and delivery of tasks. • Identify resources and costs. • Negotiate and agree contract/work orders. • Have played a key role in a major project involving other professionals and disciplines. • Manage the design development process. • Agree legal investigation requirements. • Obtain statutory consent. • Manage projects. • Negotiate and finalise agreed non-standard contracts. • Monitor and control. • Manage evaluations. | <ul style="list-style-type: none"> • Work instructions. • Non standard tenders, manuals and guides written by you. • Progress meetings and action plans managed by you. • Work programmes. • Exchange of letters. • Scheme briefs and monitoring reports. • Minutes of meetings you led. • Budget control cash flow analyses. • Schedule of tasks with the delivery monitored. • Audit reports. • Preparation or evaluation of estimates, bids and tenders. • Contract variations you negotiated. • Monitoring reports. • Estimates. • Planning gain arrangements. • Partnering arrangements showing your role – collaboration. • Monitoring reports. • Quality system reviews. • Materials laboratory report. |
| <p>C2. Manage (organise, direct and control), programme or schedule, budget and resource elements of a significant engineering task or project.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Operate or define appropriate management systems including risk registers and contingency systems. • Manage the balance between quality, cost and time. • Monitor progress and associated costs and cost forecasts, taking appropriate actions when required. • Establish and maintain appropriate quality standards within legal and statutory requirements. | |

| | | |
|---|--|--|
| | <ul style="list-style-type: none"> • Interface effectively with customers, contractors and other stakeholders • Take responsibility for and control project operations. • Manage the balance between quality, cost and time. • Manage risk register and contingency systems. • Manage project funding, payment and recovery. • Satisfy legal and statutory obligations. • Lead/manage tasks within identified financial, commercial and regulatory constraints. <p>Note:</p> <ul style="list-style-type: none"> • “Costs” can be broadly interpreted to cover procuring and allocating money, resources and people. • “Operations” are whatever you are responsible for – a design, materials research, a feasibility study, a construction site, a highway maintenance programme. | |
| <p>C3. Lead teams or technical specialisms and assist others to meet changing technical and managerial needs.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Agree objectives and work plans with teams and individuals. • Reinforce team commitment to professional standards. • Lead and support team and individual development. • Assess team and individual performance and providing feedback. • Seek input from other teams or specialists where needed and managing the relationship. • Provide specialist knowledge, guidance and input in your specialism to engineering teams, engineers, customers, management and relevant stakeholders. • Develop and deliver a teaching module at Masters level, or leading a University research programme. | |
| <p>C4. Bring about continuous quality improvement and promote best practice.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Promote quality throughout the organisation as well as its customer and supplier networks. • Develop and maintain operations to meet quality standards eg ISO 9000, EQFM. • Support or direct project evaluation and propose recommendations for improvement. • Implement and share the results of lessons learned. | |

D. Communication and interpersonal skills. Chartered Engineers shall demonstrate effective communication and interpersonal skills.

| Engineering Council Statement of Competence | IHE Guidance | Examples of Evidence |
|---|---|---|
| D1. Communicate effectively with others, at all levels, in English. | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Prepare reports, drawings, specifications and other documentation on complex matters. • Lead, chair, contribute to and record meetings and discussions. • Exchange information and provide advice to technical and non-technical colleagues. • Engage or interact with professional networks. | <ul style="list-style-type: none"> • Committee or cabinet reports. • Correspondence conducted by you. • Internal documents or briefing materials. • Minutes which show your participation. • Advice and recommendations you have made. • Interpretative reports. • Public consultations you conducted. • Public exhibitions you prepared or participated in. |
| D2. Clearly present and discuss proposals, justifications and conclusions. | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Contribute to scientific papers or articles as an author. • Prepare and deliver presentations on strategic matters. • Prepare bids, proposals or studies. • Identify, agree and lead work towards collective goals. | <ul style="list-style-type: none"> • Public inquiry evidence you prepared. • Public exhibitions you prepared or participated in. • Public inquiry evidence you prepared. • Appropriate presentation of data. • Impact and environmental assessments. <p>Note:</p> <ul style="list-style-type: none"> • “All levels” means colleagues, subordinates, line managers, clients, consultants, utilities, developers, contractors, elected members, interest groups, the public, local press – as applies to your job. • “Teams” may be your staff or all those concerned with delivering your project, including the public, clients, consultants and contractors. |
| D3. Demonstrate personal and social skills and awareness of diversity and inclusion issues. | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Know and manage own emotions, strengths and weaknesses. • Be confident and flexible in dealing with new and changing interpersonal situations. • Identify, agree and lead towards collective goals. • Create, maintain and enhance productive working relationships, and resolving conflicts. • Be supportive of the needs and concerns of others, especially where this relates to diversity and inclusion. <p>Note:</p> <ul style="list-style-type: none"> • Include an example where ethical behaviour has been an issue at work or how a conflict of interest was resolved, or the procedures for doing so. | <p>The documents can be those already used in the A. B. C. Statement of Competence lists of examples of evidence.</p> <p>Appropriate voluntary activities may provide evidence for D1, D2 and D3</p> |

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

| Engineering Council Statement of Competence | IHE Guidance | Examples of Evidence |
|---|--|--|
| <p>E1. Understand and comply with relevant codes of conduct.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Demonstrate compliance with the IHE's Code of Professional Conduct. • Identify aspects of the Code which are particularly relevant to your role. • Be aware of the legislative and regulatory frameworks relevant to your role and how they conform to them. • Lead work within relevant legislation and regulatory frameworks, including social and employment legislation. <p>Note:</p> <ul style="list-style-type: none"> • Refer to your company's standing orders, equal opportunities and conduct statements in your submission but do not include them. | <ul style="list-style-type: none"> • Risk Assessments • Application of CDM regulations, Chapter 8 etc. • COSHH assessments and method statements. • Environmental or social impact assessments. • Reports recommending improvements in safety or the environment. • Safety audits. • Pre-tender health and safety plans. • Reports of consultations with conservation and local groups. • Environmental assessments. • Waste disposal/ recycling in your projects • LTPs, travel plans or green transport initiatives you wrote or to which you made a significant, identifiable contribution. • A structured Professional Development Plan. • Copies of recent annual appraisals. • A structured professional appraisal of ethical matters. |
| <p>E2. Understand the safety implications of their role and manage, apply and improve safe systems of work.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • Identify and take responsibility for your own obligations and ensure that others assume similar responsibility 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 and culture. • Manage, evaluate and improve these systems • Apply a sound knowledge of health and safety legislation, for example: HASAW 1974, CDM regulations, ISO 45001 and company safety policies. <p>Note:</p> <ul style="list-style-type: none"> • Include in your submission, evidence of CPD days on health and safety along with (any training within your discipline) during the last two years that show you are aware of latest requirements. | <ul style="list-style-type: none"> • A structured Professional Development Plan. • Copies of recent annual appraisals. • A structured professional appraisal of ethical matters. |
| <p>E3. Understand the principles of sustainable development and apply them in their work.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> • 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. | |

| | | |
|---|--|--|
| | <ul style="list-style-type: none"> Recognise how sustainability principles, as described in the Engineering Council's Guidance on Sustainability, can be applied in your day-to-day work. See note below for website. Understand and secure stakeholder involvement in sustainable development. Use resources efficiently and effectively in all activities. Take action to minimise environmental impact in your area of responsibility. <p>Note:</p> <ul style="list-style-type: none"> Include in your submission, evidence of appropriate CPD on Sustainability issues in the last two years indicating that you are aware of latest rules, regulations and requirements. Guidance on Sustainability is published by the Engineering Council. | |
| <p>E4. Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> Undertake reviews of your own development needs. Plan how to meet personal and organisational objectives. Carry out planned and unplanned CPD activities. Maintain evidence of competence development. Evaluate CPD outcomes against any plans made. Assist others with their own CPD. <p>Note:</p> <ul style="list-style-type: none"> Include in your submission a record, over the last two years, showing evidence of structured development (which can include reading and research) showing that you are aware of up to date and latest knowledge. A list of 'CPD days' is required, or off the job education and training in the last two years showing that you are aware of up to date and latest knowledge. At your interview, expect to discuss your learning experiences to date. | |
| <p>E5. Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner.</p> | <p>In your submission, show you:</p> <ul style="list-style-type: none"> Understand the ethical issues that you may encounter in your role. Give an example of where you have applied ethical principles as described in the Engineering Council's ethic guidance and IHE Ethics Policy. See note below. Give an example of where you have applied or upheld ethical principles as defined by your organisation or company | |

- Give an example of where you have applied ethical principles as described in EC Ethical Principles.

Note:

- At your interview, expect to discuss the profession's values, your aspirations and practical ethical issues arising from work and requirements. Guidance on Sustainability is published by the Engineering Council.

14. Document matrix

Please map how your evidence documents meet the Competency Standards in a document matrix. An example of this would be:

| Doc No. | Doc Name | A1 | A2 | B1 | B2 | B3 |
|---------|----------------------------------|----|----|----|----|----|
| 1 | Drawing of a roundabout design | ✓ | | | ✓ | |
| 2 | CAD drawing of approach junction | | ✓ | | | ✓ |

Experiential Learning candidates do not need to complete this section.

15. Presentation synopsis

Use this page to provide a synopsis, (briefly) describing one or two projects you will discuss at your review interview to demonstrate you meet the five broad CEng requirements (Statement headings A, B, C, D and E) of UK-SPEC.

You should show that you:

- Enable the introduction and exploitation of new and evolving technologies.
- Are able to engage in innovative development.
- Can design and develop engineering solutions based on sound principles.
- Evaluate the effectiveness of schemes.
- Plan, direct and control tasks, people and resources.
- Lead teams and develop staff.
- Lead and carry through continuous improvement.
- Exercise holistic independent judgment.
- Can communicate new concepts and ideas to technical and non-technical audiences.
- Are committed to the profession's code of conduct.
- Are committed to your personal and professional development.

16. Statement by applicant

You must sign and date the declaration in section 16. *We will not accept any application without this declaration signed.*

17. Completing your submission

Please follow the guidance in the application form regarding our required format for CEng submissions.

All submissions must be presented in a single ring binder or lever arch folder. Any other style of folder or binding, or without the coversheet affixed will be returned to you.

Please send your complete submission and this form to:

Membership, Institute of Highway Engineers, Floor 4, Euston House, 24 Eversholt Street, London NW1 1DB

Please note: We reserve the right to reject and return any submission that does not include all of the documents and attachments marked on the checklist at the back of this form, or with sections of this application form incomplete or left blank unless not required.

Important: ITAI and ACostE members should send your application as described above, to the following address.

ACostE members should send your application directly to The Association of Cost Engineers: ACostE Administration Office, Lea House, 5 Middlewich Road, Sandbach, Cheshire, CW11 1XL

ITAI members should send your application directly to the Institute of Accident Traffic Investigators at: ITAI, PO Box 16057, Solihull, West Midlands, B93 3GL.

18. Electronic copy of your submission

Please follow the guidance in the application form and supply us with a digital copy of your CEng folder and any documents you have submitted on a writeable CD or USB memory stick.

19. Employer proposal statement

Section 19 details the employer proposal statement we require from you. We cannot pass your submission to a reviewer without an employer proposal statement.

20. Proposer and seconder

Please ask your proposer and seconder to complete all fields in this section. Self employed applicants should ask a recent Client to complete this section.

21. Payment form

The fee required as part of paying for your CEng application comprises of (2021 rates):

1. IHE CEng professional review fee: £250.00 (Recognised Qualifications Route) or £295.00 (Individual Assessment Route)
2. Engineering Council CEng registration entry fee (collected on their behalf by the IHE) £53.20

Please check our website for up-to-date fee information.

An additional upgrade to your membership fee might also be required. If you are currently a Member you will be required to pay the difference between your current annual membership fee and the annual fee for IHE Fellow grade of £167.00.

If you are a member of the Institute of Traffic Accident Investigators or The Association of Cost Engineers, an additional £65.00 administration fee is required to process your application.

Please note: ACostE and ITAI applicants should contact the appropriate Institute directly to arrange payment of your application fee. The IHE will receive your payment directly from ACostE or ITAI.

22. Checklist

This section provides you with an opportunity to ensure you have included all the applicable documents and paperwork we have asked for. It also helps us to ensure we have received all of your submission when we process your application.