

Applying for Chartered Engineer

INSTITUTE OF HIGHWAY ENGINEERS

De Morgan House

58 Russell Square

London

WC1B 4HS

t: 020 7436 7487

f: 020 7436 7488

secretary@ihie.org.uk

www.ihie.org.uk

This document explains

- How to apply for CEng
- The academic entry standards
- The purpose and scope of a Professional Review
- The submission you will prepare for a standard Review
- How to apply for the Review
- What happens on the day
- How to combine the Review with IHE's Professional Certificates

Why aim for CEng with IHE

Becoming a Chartered Engineer demonstrates a commitment to professional standards, setting you ahead of unregistered engineers, and puts the seal on your achievements. Chartered Engineers use new or existing technologies to solve engineering problems through innovation, creativity and change. Typically, through technical and commercial leadership they develop and apply new technologies, introduce new concepts and pioneer new engineering services and management methods.

IHE has a proven track record of support for practical engineers and understands specialist disciplines.

How you do it

By a combination of knowledge and understanding exemplified by an academic qualification (see below) and proven application of that knowledge on highways and transport projects.

To become a Chartered Engineer you must have your competence to perform professional work to high standards and your professional commitment assessed through a Professional Review. The standard Review essentially comprises a report of your experience and documents presented at an interview with Chartered colleagues.

You will need a mentor to assist you. Normally they will be a Chartered Engineer in your company. IHE can supply back-up support and mentor training. See [Document C](#) for more on the mentor role.

Come along to one of IHE's courses, "[Preparing for your Review](#)" and your mentor can attend without charge.

Academic Entry Standards

1. These qualifications meet the **benchmark** entry requirements:

- BEng (Hons) plus a Masters degree
- MEng
- BEng (Hons) and BSc (Hons) in engineering normally started before 1999

2. If you have any of the following, you will need **to top up** with an MSc or other Further Learning at college and/or on the job to follow the standard route:

- BSc (Hons) or BEng (Hons) in engineering started in or after 1999
 - BSc (Hons) in a cognate (science) subject
 - Registered IEng with seniority
- } MSc must be technical

Other qualifications may be deemed to be equivalent. A NARIC Certificate is helpful for overseas qualifications: www.naric.org.uk

The **Further Learning** option allows you to compile a report for IHE to assess which demonstrates how you have developed a breadth and depth of knowledge equivalent to Masters level through the work you have done and/or through academic study. Once assessed, you may submit for your Professional Review.

Check out **Document CE4** for more details.

Your first step is to ask IHE where you stand. For a **career assessment**, email a CV explaining your current responsibilities and copies of your qualifications, the units you studied and brief details of any final year project or dissertation. Straightforward requests will be dealt with within three days. Others will be forwarded to the Institute's Academic Standards Panel for decision within 4/6 weeks.

3. If you do not have sufficient engineering qualifications or you do not want to follow the further learning route, you may still access CEng using the **Technical Report Option** (See **Document CE4** which replaces this Document). Your first step is to ask for a **career assessment** as described above.

Once accepted, you need to prepare a Technical Report which shows you have Masters level knowledge and present it at an interview.

The purpose of your Technical Report is to show that you have acquired sufficient engineering knowledge since completing your initial qualification to allow you to apply your technical skills at Chartered level.

Your Technical Report, and interview, will focus on establishing your knowledge of engineering principles. It will be followed on the same day by a professional review for which you will have prepared the usual submission.

What is a Chartered Professional Review?

When you are ready and satisfy both the education and experience requirements (by whatever route), send IHE your review submission showing how you meet the Engineering Council (UK) Statements of Competence and Commitment in **Document CE3**.

You must also have ten "CPD Days" off the job education and training in the two years before submitting and a professional development plan showing five days a year of structured development.

Two IHE Chartered Reviewers will assess your submission in order to decide whether to call you for interview. You receive a copy of their assessments.

Next, you present one or two of recent projects at an interview with these two Reviewers and an observer from the Engineering Council.

Documentation

Document E1 lists all the documents and forms you will need.

Make **four** copies of your submission and a CD and keep the original for yourself.

Consult **Document A** for advice on the presentation and layout of your reports, on choosing documents and on the interview.



Your Review Submission looks like this

- **An IHE Application or Transfer form**
- **A payment form and your cheque or credit card**
- **Academic Certificates authenticated as true copies**
- **Your Job description**
- **An organisation chart with your position highlighted**
- **A professional development record with 10 “CPD Days”**

Plus

1. Your CV summarising your employment history: date, employer, job and responsibilities.

Describe clearly the work undertaken and your personal responsibilities. It can be helpful to start each section “I was responsible for”

Mention the size and complexity of schemes for which you were directly responsible.

Keep it short: aim for one page for each five years of employment.

2. Professional Development Forms

Give a succinct description, drawn from your more recent experience, of how you meet each of the 16 Competence and Commitment Statements listed in **Document CE3**.

Aim for no more than 250 words per statement explaining what you have done. The ability to analyse and summarise is part of the communication skills requirement. If we need more information, we will ask you for it.

Describe at least two schemes or projects per statement. This gives your Reviewers more confidence in your abilities.

Do not cite training courses as examples. Courses provide you with knowledge – the Review asks you to demonstrate how you have used that knowledge.

Your Mentor should sign off each statement.

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.

3. Supporting Evidence

List on the Professional Development Forms, 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.

Choose documents to illustrate and substantiate the work described on the Forms.

When looking for evidence, ask 'What can I show someone to convince them that I can do this Statement?'

Put yourself in the assessors' shoes and obviously select your strongest evidence.

Examples of documents and of a cross referencing schedule or matrix you can use to quickly summarise how your chosen documents relate to the 16 EC Standards are included in [Document CE3](#).

4. Review Presentation

On one or two sides of A4, briefly describe one or two projects you will discuss at the Review to demonstrate you meet the five broad CEng requirements (Statement headings A, B, C, D and E).

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 people
- Are committed to the profession's code and rules of conduct
- Are committed to your personal and professional development

The schemes may be among those described on you forms.

5. Continuing Professional Development (CPD)

To satisfy Statement E.4 you need to include a CPD record and plan.

Your CPD record should show five days a year of structured development (which may include internet research and reading). Use IHE form BO4 or your employer's record.

The plan could be your recent appraisal forms or use IHE forms BO2 and BO3.

Please attach a list of seven "CPD Days", formal off the job education and training taken in the two years before you submit. Identify two on health and safety and one on sustainable issues. Do not bother with attendance certificates, a list is sufficient.

6. Corroboration from your Employer Proposer

You should ask a line manager to endorse and authenticate your full completed application. He or she should be a Chartered Engineer familiar with your work and with the Chartered Review who is able to sign off your submission in terms of Engineering Council standards. Your mentor can act as your Proposer but remember that an independent Proposer brings another viewpoint

He or she should offer constructive criticism and final advice and either your mentor or proposer should offer a mock interview.

Your proposer should complete a confidential report (**Form 301**) to be sent direct to IHE or enclosed with your submission in a sealed envelope.

Applying for Review

Send IHE one copy of your Review submission.

We will confirm your eligibility and give you details of two IHE Reviewers and the Engineering Council representative. You then send them a copy of your full submission direct by post.

The Reviewers complete an Initial Assessment of your submission against each of the 16 EC Standards over about 8 weeks. You will receive copies of their assessments from IHE. They may ask you to bring additional evidence to the interview.

Any identified weaknesses should be addressed in your interview presentation.

If the Reviewers are not convinced that you have broadly achieved the Standards, you will be asked to provide additional information.

Once they are satisfied, you will be told the date and place of your Review.

If you have any disability, special access requirements or medical problems which might affect your performance, tell the IHE Membership Manager in advance and we will do our best to accommodate you. Advice is available for dyslexic applicants.

The Review Interview

The review is very much your show. The Reviewers will ask you to present the scheme(s) outlined in your summary using relevant documents to explain your decisions and your role.

Expect 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 Role E.

Your Reviewers will normally be IHE Chartered Fellows familiar with, or practitioners in, your discipline. In addition a Engineering Council representative will be present to advise the Reviewers and he may participate in the discussion and assessment.

After the review

After your review, the Reviewers prepare a holistic assessment of your competence and commitment and a recommendation for the next Institute Membership Committee. If you are successful, you will receive a letter within three weeks of the Committee meeting notifying you of your election as a Fellow. IHE will register you with the Engineering Council.

If you do not succeed you will be given detailed reasons and advice in a letter which you should discuss with your employer. IHE can provide further help and a Mentor will be offered.

If you wish to appeal, ask the IHE Membership Manager about the procedures and reply within six weeks after receipt of your notification. Advice is NOT available during an appeal. You can appeal if you are dissatisfied with the way the Review was conducted. – i.e. if the format, procedure or structure of the Review significantly compromised your ability to convince the Reviewers that you meet the Institute's published standards. It is unlikely that appeals based around the Reviewers' assessment of engineering competence will be pursued.



Exemptions

1. Holders of a full NVQ/SVQ Level 4/5 in transportation, project or site management are still required to have an approved academic qualification to be eligible for the standard Review.

The Institute is a partner in various awarding bodies and if you want further advice, ring IHE

If your NVQ covers all or part of the EC Statements, it is suggested that you briefly describe on the relevant Professional Development Forms how the work submitted for your NVQ units meets each Statement and cross referencing the documentary evidence in your NVQ portfolio. (See **Document IE3** for an example). We do not need to see this evidence.

There may also be sufficient evidence in your NVQ units about managing others (Statement C) and developing yourself (Statement E4 on CPD). Just explain how.

Bring your NVQ portfolio to the Review interview but do not submit it in advance.

2. If you have successfully completed an ICE Career appraisal or an approved Training programme you can dispense with the Professional Development Forms. Instead submit proof of your success and a copy of your training record or the career appraisal. There will not be a formal initial assessment; provided the Reviewers are content, you will be called for Review. Check with IHE before you embark on this route. A more comprehensive CV maybe required.

IHE Professional Certificates

IHE Professional Certificates certify achievement of specialist expertise. They are available in Traffic Sign Design and Traffic Signal Control at Practitioner and Expert Practitioner level. Certificates in Designing for the Public Realm and Development Control are at Foundation level only.

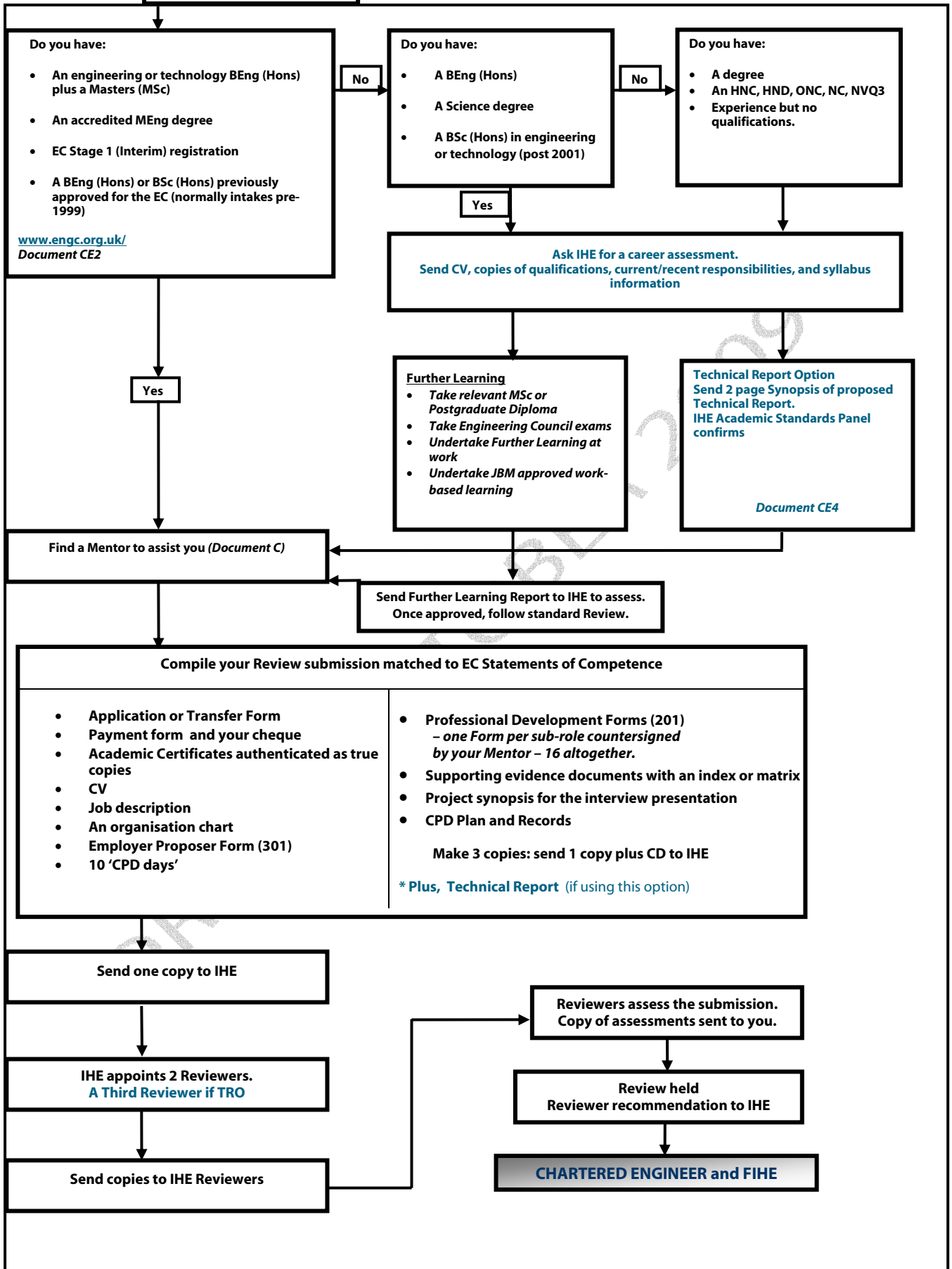
You can simultaneously submit for a Review and Certificate at Practitioner or Expert level. Describe your experience on the 16 Professional Development forms and cross reference these descriptions to the relevant standards in the Certificate. Produce a second grid (or matrix) referencing your evidence to the Certificate Standards. If, necessary, provide additional information to show you meet the Certificate Statements.

The process is fully explained in **Document TSC 4 and TSD4**.

If you decide to follow this route, please apply to IHE for clearance in the first instance.

How to apply for CEng

**START HERE
YOU MUST JOIN IHE**



DRAFT OCTOBER 2009

