

## OTHER ROUTES TO IENG



### This document explains

- **How to access the Incorporated Review without a degree**
- **Academic top-ups**
- **How to get personal advice and confirmation of your progression route**
- **Application flowchart**

**Annex 1: IEng degree learning outcomes (all routes)**

**Annex 2: The further learning options**

**Annex 3: Further learning - 60 credits top up**

**Annex 4: The Technical Report**

## Other Routes to IEng

The benchmark academic entry qualification for IEng is an ordinary degree for engineers qualifying in 2001 and beyond. Older qualifications continue to be accepted. For full guidance, see **Document E1**

If you do not meet the academic entry requirements, you can access the Incorporated Professional Review by completing

- further academic learning (See the Table below)
- two further learning projects for 60 credits to top up an HND or Foundation Degree
- work based learning (WBL) drawing on several years of experience if you have an HND or a science or foundation degree (**Annex 2**)
- an employer-led accredited WBL programme ([www.jbm.org.uk](http://www.jbm.org.uk))
- Engineering Council examinations ([www.engc.org.uk/examinations](http://www.engc.org.uk/examinations))
- a technical report focused on one significant project (**Annex 4**)
- a combination of the above.

Normally, these routes ask you to demonstrate that you have achieved a breadth and depth of knowledge equivalent to degree level 'learning outcomes' in a report cross referenced to the learning outcomes and, in most cases, an interview is held to test that knowledge. Learning outcomes are explained in **Annex 1**. Once cleared, you complete a Professional Review report and interview. IHIE is happy to assess Overseas and combinations of qualifications to determine whether they are equivalent.

**Look up your qualification in this Table to see your options.**

<b>Initial Qualification</b>	<b>Possible Academic top ups</b>	<b>Other possibilities</b>
Science degree ('cognate')	Masters degree. Postgraduate Diploma. (For Transportation Masters see Napier (D/L), Leeds, Southampton, IC/UCL). NTU Professional Certificate (entry closed). Bath Highways Open Tech (HOT) Certificate.	Work-based Further Learning Technical Report

<b>Initial Qualification</b>	<b>Possible Academic top ups</b>	<b>Other possibilities</b>
HND in engineering started ≥ 1999	NTU, Masters, PGrad Diploma as above. Bath HOT and 30 'I' degree credits. Transfer to BSc. EC Examinations	Work-based Further Learning programme  60 credits of further learning  Technical Report
HNC in engineering started ≥ 1999	Gain an HND and proceed as above	Technical Report
Any honours degree (eg BA Geography)	HNC Civils and 30 'I' degree level credits <u>Technical</u> Masters degree	Technical Report
Registered EngTech with 8/10 years' experience. No engineering qualifications but with 10/15 years' experience. NVQ 3 or 4 in (eg) transportation, site management and experience.	Gain BSc in engineering	Technical Report  (NVQ contributes to proving competence)

## Possible Academic Top-ups

For a full list of available part time degree and Masters courses, email [secretary@ihie.org.uk](mailto:secretary@ihie.org.uk)

### Distance Learning

**Napier's** MSc and PostGraduate Diploma in Transportation are available by distance learning, as is a civils degree at Heriot Watt.

The **Bath Highways Open Tech** certificate tops up a cognate degree and provides 30 credits towards the 60 credits needed to top up an HND.

The **NTU** postgraduate qualification in highway and traffic engineering was available on a semi-distance learning basis via various employers and centres: [www.fact.ntu.ac.uk/students/pgcpd.asp](http://www.fact.ntu.ac.uk/students/pgcpd.asp). A full award usually provided sufficient further learning for cognate degrees and HNDs but you must always ask IHIE for formal confirmation. It does not provide sufficient top up for HNC awards, but does significantly reduce the depth of the Technical Report you would be asked to submit.

### Cognate Degrees

If you have a physical science or mathematics degree there is an engineering shortfall to be met by completing an academic course or by work-based further learning or in a technical report. Your degree will not have covered engineering analysis and design. If it is not a numerate degree, you'll also need to demonstrate achievement of numerate competency. You must provide evidence that you have engineering level knowledge, skills and understanding applied to an engineering activity i.e. design decisions have been taken and are based on sound engineering first principles.

### Engineering Council Examinations

The Engineering Council UK offers a range of examinations matched to its grades of registration. They are administered by City & Guilds and rely on self-study. Only a few colleges offer relevant courses.

To top up an engineering HND, you may complete FOUR EC (UK) papers made up of not more than TWO from the Engineering Council Certificate (in subjects not part of your HND programme) and at least TWO from the Graduate Diploma chosen from: D204 Hydraulics and Hydrology, D208 Materials, D210 Structural Analysis, D211 Structural Design, D214 Engineering Surveying, D224 Mathematics, D222 Construction Management OR D223 Management.

For full Certificate syllabus and course details go to

[www.cityandguilds.com/cps/rde/xchg/SID-B3E58835-29C77A58/cgonline/hs.xsl/1809.html](http://www.cityandguilds.com/cps/rde/xchg/SID-B3E58835-29C77A58/cgonline/hs.xsl/1809.html)

and for the Diploma: [www.cityandguilds.com/cps/rde/xchg/SID-B3E58835-29C77A58/cgonline/hs.xsl/1810.html](http://www.cityandguilds.com/cps/rde/xchg/SID-B3E58835-29C77A58/cgonline/hs.xsl/1810.html)

## How to Get Advice – your first step

**To get formal advice from IHIE on your progression options or whether your qualifications are degree equivalent:** email [secretary@ihie.org.uk](mailto:secretary@ihie.org.uk):

- Copies of your academic certificates and list of modules or units
- A brief description of any dissertation or final year project
- A career summary or CV
- A description of your current post and responsibilities.

If the information is not sufficient you may be asked for more information on the syllabus or for exam papers.

Your application will be considered by the Academic Standards Panel who may provide additional guidance. This normally takes up to eight weeks.

If you need an academic top up, once you complete the course, tell IHIE and you can then submit for the [standard Professional Review](#).

If you are advised to follow one of the Further Learning options, (see **Annexes 2 and 3**) you Report demonstrating that you meet the Learning outcomes in **Annex 1**, or the 60 credits, will be assessed by the Panel to verify achievement of the Learning Outcomes or credits. You may be asked to attend an interview to confirm your knowledge and understanding. On successful completion you will receive formal notification from IHIE that you meet the academic entry requirements for incorporated engineer. You can then submit your IEng Professional Review application under the [standard route \(Document IE2\)](#).

If you are following the Technical Report option, special rules apply – see **Annex 4** – in order for you to demonstrate the Learning Outcomes in **Annex 1**.

## FURTHER INFORMATION

***Document E1 lists all the IHIE documents and Forms you will need***

**INSTITUTE OF HIGHWAY INCORPORATED ENGINEERS**

**De Morgan House,  
58 Russell Square,  
London  
WC1B 4HS**

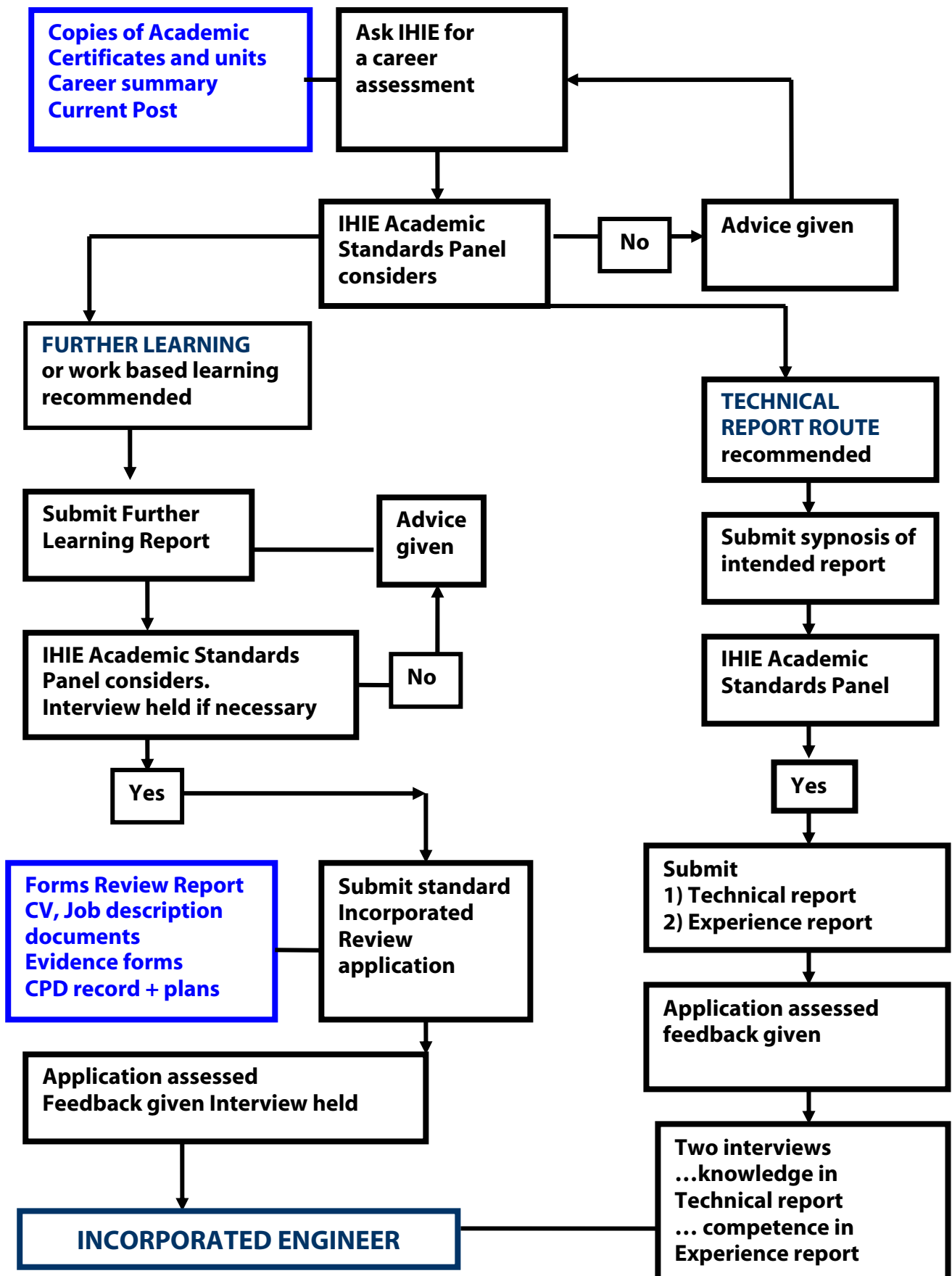
**T: 020 7 436 7487**

**F: 020 7 436 7488**

**E: [secretary@ihie.org.uk](mailto:secretary@ihie.org.uk)**

**W: [www.ihie.org.uk](http://www.ihie.org.uk)**

# APPLICATION PROCESS



## OTHER ROUTES TO IENG

### ANNEX 1: Learning Outcomes

#### What is “Incorporated Degree level”?

All current UK qualifications are defined by “Learning Outcomes”. The Engineering Council publishes the Learning Outcomes it expects of degrees at the different levels in UK SPEC:

[www.engc.org.uk/documents/EC0005\\_AHEPBrochure\\_MR.pdf](http://www.engc.org.uk/documents/EC0005_AHEPBrochure_MR.pdf)

They are based on the QAA standards (see below) which you must use.

In general, incorporated degrees go beyond knowledge and understanding to require ability and application. Bachelor level learning is also about support know-how when applying technology to future engineering problems and processes. The Qualification Assurance Agency (QAA) defines this Intermediate level of its Framework as follows:

*“Holders of qualifications at this level will have developed a sound understanding of the principles in their field of study, and will have learned to apply these principles more widely. Through this, they will have learned to evaluate the appropriateness of different approaches to solving problems. Their studies may well have had a vocational orientation, enabling them to perform effectively in their chosen field. They will have the qualities necessary for employment in situations requiring the exercise of personal responsibility and decision making.”*

**The Learning Outcomes you are seeking to achieve are listed on the “Specific Learning Outcomes’ on pages 13-14 of the Engineering PDF:**

[www.qaa.ac.uk/academicinfrastructure/benchmark/masters/default.asp](http://www.qaa.ac.uk/academicinfrastructure/benchmark/masters/default.asp)

Your report must highlight your individual contribution and demonstrate

Science and mathematics

Design

Engineering practice

## OTHER ROUTES TO IENG

### ANNEX 2: Further Learning Option (1)

**If you have an HND or Foundation Degree in Engineering or a cognate degree, you can either (1) compile a report drawing on your work experience and any courses attended and matched to the Learning Outcomes – see below - OR (2) submit two projects at degree level in order to show that you to meet the requirements for the academic base – see Annex 3.**

#### REPORT STRUCTURE (FL Option 1)

The following advice on content and structure is intended to help; it is not mandatory.

Your report can draw on formal academic learning, short courses, work-based learning or all three, depending on your initial academic qualifications and hence the 'gap' you are seeking to fill.

Once IHIE confirms that you meet the benchmark academic level for IEng, you take the standard Professional Review.

#### 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 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 or syllabuses for all formal qualifications and substantial short courses explaining how they contribute to meeting the outcomes.
- If you are using work-based experience, explain your post-qualification work experience demonstrating how the Learning Outcomes have been achieved. Summarise the technical nature of the work or learning, the technical objective of the scheme and support your explanation of your key project with relevant calculations, results, conclusions, recommendations.

Include, as Appendices, copies of drawings or reports or witness testimonials if necessary.

Aim for 3,000 – 5,000 words: let quality not quantity be your guide.

You can submit a report you authored with a covering explanation with cross-referencing to the learning outcomes.

If your documents were joint with others, explain clearly which parts are yours.

Focus on demonstrating your academic knowledge and understanding of the principles that underpin your work.

Include key calculations, engineering drawings and diagrams as Appendices and include appropriate references.

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

## SUPPORT AND AUTHENTICATION

You will find it helpful to engage a mentor, a more senior colleague, who can give a second opinion and general advice. IHIE Academic Standards Panel members may be able to give them additional back up support.

Your report should be authenticated by a senior EC registered Engineer, usually your line manager.

He or she is also asked to satisfy themselves, to the best of their ability, that your report demonstrates achievement of the Learning Outcomes.

## IMPORTANT ADVICE (FL Options 1 and 2)

- Ensure your Report:
  - captures your involvement on a significant engineering project or scheme
  - explains, not describes
  - provides analysis, not discussion
  - provides evaluation, not opinion
  - explicitly refers to engineering knowledge not in your initial qualification.
  
- Ensure your Report is **not**:
  - a review of your experience or employment responsibilities
  - concerned with your managerial or organisational competency or experience
  - like a professional review report.

If your work is confidential, please get clearance from your company and warn us. IHIE will make every effort to maintain confidentiality.

## SUBMITTING YOUR REPORT (FL Options 1 and 2)

Your Further Learning Report will be assessed by IHIE's Academic Standards Panel to verify achievement of the Learning Outcomes or the 60 credit criteria.

You may be asked to attend an interview to confirm your knowledge and understanding.

On successful completion you will receive formal notification from IHIE that you meet the academic entry requirements for incorporated engineer. You can then submit your IEng Professional Review application under the **standard route** (**Document IE2**).

## OTHER ROUTES TO IENG

### ANNEX 3: Further Learning Option (2) - 60 credits Top-up

**If you have an HND or Foundation Degree in Engineering or a cognate degree you can submit two engineering projects at degree level to show you meet the requirements for the academic base.**

#### PURPOSE of the SUBMISSION

- To demonstrate use of higher subject knowledge in solving technical problems associated with your employment.
- To produce a complete solution to a technical problem, or problems, which you have undertaken.
- To demonstrate your ability to translate a client' ideas into effect.

#### YOUR SUBMISSION

Send IHIE a CV, 1000 words on the development aspect of the study\* and a report of up to 2000 words with supporting drawings etc and references for each project.

#### MINIMUM PASS STANDARD

- Two academic areas have been developed beyond the HND/FD.
- A viable complete solution to a problem, together with any ancillary surveys, drawings, calculations etc, has been made.
- Conclusions are supported by evidence and references
- Clear evidence of not less than **120 hours of study** in not less than two subject areas is shown.
- The complete solution has few errors.
- Awareness of sustainability Issues is demonstrated.

You will be judged against the brief you specify.

Failure to comply with health, safety and welfare regulations will result in the rejection of the whole submission.

#### INDICATIVE CONTENT FOR ASSESSMENT

Where practicable the nature and scope of the submission should be agreed with a senior manager or supervising engineer. The further study should be evidenced by listing attendance at courses/ Institution meetings, the reading of texts/ journals. The short development statement\* (1000 words) should set out how the study has benefited, or will benefit, you in your career development.

The project or projects should not be repetitive but be of sufficient scope to allow you to demonstrate knowledge and ability in your chosen field of civil engineering beyond the HND/FD level.

Projects should be real schemes in the workplace.

The projects may need to be extended by the supervisor to include any elements that should be tested but are missing from your initial contribution to the scheme.

The scope and content of the project should be as defined as a client brief.

#### THE PROJECT

***Ask IHIE to agree the subject material of the project before you start.***

It is expected that the report will include plans, drawings, calculations, research, design synthesis and evaluation, planning and some economic and environment assessment where possible. You are encouraged to seek out help from external sources (through work or local firms) but to give credit in the submission to this assistance.

You should identify a project scheme which requires you to carry out a holistic appraisal of the project, exploring the complex inter-relationships related to the client, the site, planning design, construction processes, post construction processes, health and safety, community, environment, financial and legal issues. Typical projects may require you to demonstrate knowledge and skill in structural design, transportation studies, hydraulics and drainage or construction/project management.

Prepare a brief that includes an agreed timescale for the staged development of the overall plan of work within defined constraints, working towards an acceptable and viable solution to the brief.

## EXAMPLES

### 1. A project brief for a simple structure

- Produce two options for a footbridge to cross a one metre deep river with a span of 6 metres.
- The underside of the bridge deck should be no lower than one metre above the river water level.
- There are to be no supports in the river.
- The ground is poor so the foundations will need to be piled to rock that is 5 metres below the river bed level.
- Choose one option, giving reasons for the option, and produce preliminary design calculations, a general arrangement drawing and a detail drawing(s).
- Produce a cost estimate, based on a simple bill of quantities, for the construction to an accuracy of +/- 15%.

*To be able to complete this project candidates would need to research the following:* Simple bridge types such as concrete slab and beam; steel truss with concrete deck; timber beam and deck, simple piling in steel or concrete. footbridge loadings, bills of quantities and typical unit rates for the materials used.

### 2. A highways brief

- Produce two schemes for highway works. These could be either new road projects or alterations to existing highways.
- Show how ground conditions, accident statistics, or other elements relate to the proposal.
- Indicate how the proposals relate to environmental and sustainable issues along with the promotion of other modes of transport other than the car.
- Provide an assessment of road safety implications.
- Choosing one option, give reasons for your choice and provide preliminary design criteria or calculations with appropriate drawings.
- Provide cost estimates based on simple bill of quantities.
- Provide a risk assessment or safety review

*To be able to complete this project you would need to research the following:* - Design and layout of highways, capacity of highway, accident data, drainage requirements, bills of quantities and typical unit rates for materials used.

### 3. Anglia Ruskin Individual Project Examples taken from the degree course

Structures: SCI Bridge Competition or the Concrete Centre Competition

Highways: Assess or improve the A12 entry from Witham southbound or Design an alternate link route from M25 to Chelmsford (West).

Transportation: Bicycle route from station to Rivermead or Park and Ride schemes for Ipswich, Bury or Colchester

Hydraulics: Impounding the River Blackwater for leisure use or a Flood Protection Scheme for a site of your choice.

## OTHER ROUTES TO IENG

### ANNEX 4: The Technical Report Route

**You submit a Technical Report and an Experience Report and your presentations and separate interviews will be conducted around these two reports on the same day. You will also need a continuing professional development plan and seven 'CPD' days.**

Your Technical Report, and the first interview, will focus on establishing your knowledge of engineering principles. The second interview is based on an Experience Report and is like the standard Professional Review. It will cover your management and communications skills and confirm your level of responsibility and professional commitment. You may opt to submit your Technical Report and be interviewed on it separately first and then, once you have achieved the Knowledge requirement, submit your Experience Report at a later date for the second interview.

Your report must be technical; a management based report is not acceptable.

The Technical Report is not just what you did but explains why and what engineering principles you considered and applied and it should show what you have learned since completing your academic qualifications, if any. Contact IHIE for Exemplar synopses and Reports.

**YOUR NEXT STEP AFTER A CAREER ASSESSMENT IS TO ASK IHIE TO AGREE YOUR REPORT SYNOPSIS.**

#### 1. YOUR NEXT STEP: GETTING APPROVAL FOR YOUR SYNOPSIS

Before submitting the full report, you must submit a **synopsis** to IHIE for approval. In it you set out clearly how you intend to demonstrate your technical knowledge and understanding,

In the synopsis set out clearly how you intend to demonstrate your technical knowledge. Identify 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.**

You may put forward more than one topic (each must be 2 pages) and ask for advice. If you want any other guidance ask at this stage. IHIE will help wherever possible.

IHIE's Academic Standards Panel will consider your application within about 8 weeks.

**DO NOT WRITE THE PAPER UNTIL YOU HAVE CLEARANCE.**

**YOU CAN SUBMIT YOUR SYNOPSIS AND YOUR REPORT AT ANYTIME: the normal deadlines do not apply.**

## MENTOR SUPPORT

You will need to work with a Mentor in planning and preparing your Synopsis, Technical Report and your Experience Report. IHIE cannot always supply an Institute Mentor but will assign an experienced Reviewer able to give back up advice.

Your Mentor could be a colleague at work, a teacher or trainer who is a knowledgeable and experienced engineer. Most importantly, it should be someone whom you know well and trust, and who is prepared to spend some time with you to

- Understand how your project satisfies the learning outcomes
- Learn about the requirements for EC(UK) Registration
- Support you as you work on it
- Read and comment on you work
- Endorse your synopsis and your Report.

You might wish to attend an IHIE course together .and we can provide back up advice from experienced reviewers.

## 2. YOUR TECHNICAL REPORT REVIEW SUBMISSION

<ul style="list-style-type: none"><li>• <b>Transfer Form for Fellow</b></li><li>• <b>List of Contents</b></li><li>• <b>CV, Job description</b></li><li>• <b>Organisation Chart</b></li><li>• <b>CPD Plan and record of 7 'CPD Days'</b></li><li>• <b>Employer/Proposer Statement (301)</b></li></ul>	<p><b><u>Technical Report</u> and supporting documents</b></p> <p><b><u>Experience Report</u> and supporting documents</b></p> <p><b>Evidence Summary Forms – one for each EC role (16 in total)</b></p>
--	--

**Make four copies and a CD** keeping the originals for yourself.

### **Cross Referencing**

Cross refer **your Technical Report** in the right hand margin to the learning outcomes in **Annex 1**.

Some of the outcomes, for example those on team roles or management, may be better referenced in the Experience Report. This is acceptable provided all the outcomes are covered in either report.

It is also helpful to cross reference your **supporting documentary evidence** to the learning outcomes in a matrix or grid.

**Your Experience Report**, which is the basis of the second interview, should be cross referenced to the EC statements of Competence and Commitment A.1 to E.4 set out in **Document IE3**.

### **Compiling your submission step by step**

Collect: CV, job description, organisation chart, certified copies of certificates, recent appraisals, training records.

Put them into a ring binder with dividers and a preliminary list of contents.

Identify a Mentor. Timetable meetings.

**For the Technical Report:** Re-read the Learning Outcomes and write the report as explained below

**For the Experience Report:** Read the EC Statements of competence and commitment (**Document IE3**). Make notes alongside listing recent projects and documents you have produced. Expand your CV into a chronological experience report with more about recent work and responsibilities. Meet your Mentor.

Collect relevant documents. Take site photos. Meet your Mentor.

Ask colleagues to read drafts for English and technical detail.

Identify and number the key documents which best illustrate your knowledge and competence. List them in your reports.

Compile a matrix cross referencing the documents to the learning outcomes or EC statements. Meet your Mentor.

Bring your CPD record and plans up to date.

If there are gaps in your experience or documentation, fill them.

Write your 16 Evidence Summary Forms. Meet your Mentor.

Review the Submission file to maximise ease of handling. Add tables, dividers etc.

Ask colleagues to comment on the submission.

Mentor signs Evidence Summary Forms.

Practice your presentation of the Experience Report. Identify key documents to use at the interview.

Arrange a mock interview on your Technical Report and a mock Review based on a presentation of your Experience Report.

Employer Proposer reviews final draft. Comments. Completes Employer Proposer form and authenticates the Technical Report

Make three photocopies from your final original and a CD.

Send to IHIE

Send to Reviewers.

Receive initial assessment from IHIE.

Revise presentation and documentation. Resubmit, if necessary.

Make travel arrangements.

Attend Review.

Receive results, **Celebrate.**

## What the Technical Report contains

**Your paper is not a general report of your work experience or your professional or managerial ability. You are seeking to demonstrate your knowledge of underpinning engineering principles developed since gaining your academic qualifications and how you apply them.**

You should explain clearly in the report the activities you did or were responsible for.

Write about one or two significant projects 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; explain the problems encountered or the development aims 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. Provide references or evidence to back up your analyses or assertions. You should include calculations and refer extensively to engineering principles. Most applicants submit a project or design study in which they have played a significant role at the relevant level. 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 formation and highlighting how you applied engineering principles to solving problems.

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 the Technical Report**

Title Page

List of contents

Summary of main conclusions or findings and achievements

Introduction; what the paper is about (one page) indicating main topics and points to be covered

Background

Aim of the project/study

Main body of the report

Explain the whole project; use engineering principles to interpret and evaluate data; explain your contribution

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.

Conclude with a critical evaluation of your work; identify any lessons learned, and recommendations for further work

References

Bibliography

Glossary

**Appendices** of essential supporting evidence: research data, calculations, diagrams/drawings/documents

Your **Technical Report** should include sufficient documents to set the scene for the Reviewers, to make the project description self-explanatory and to show your level of knowledge. Other documents may be brought to the interview to allow you to demonstrate your abilities and depth of experience when presenting your report but must be described fully in

the written submission. Choose key documents to show your engineering knowledge and understanding. Remember: Quality not Quantity – your presentation needs to be persuasive and focused.

***Cross reference your report to the learning outcomes in Annex 1.***

## 2.2 YOUR EXPERIENCE REPORT

After you have presented and discussed your Technical Report at the interview, you will be asked to talk about your career and current responsibilities. You will need to demonstrate Incorporated Engineer abilities using this Report as a jumping off point. Make sure it shows developing technical skills and knowledge and that you exercise project control. The report should demonstrate your competence as a potential Fellow of IHIE and show you exercise independent technical judgement.

Your Experience Report should be around 2000 words and describe your experience chronologically

Outline your initial professional development – your training and experience to date - with more about recent schemes where you exercised incorporated level responsibility and took the lead. Describe the tasks you undertook. Indicate the size and value of works. Make your contribution absolutely clear and mention any special problems or valuable lessons. Explain your involvement, your options, why the preferred solution was recommended, subsequent monitoring and evaluation. Don't be afraid to include work which went wrong – say how you responded, what you would like to do another time.

The focus will be mainly on your abilities in Engineering Council Statements C, D and E as Statements A and B will be central to your Technical Report, however you should cross-reference your Experience Report to all the Engineering Council's 16 *Statements of Competence and Commitment* in the right-hand margin, as you will be assessed against them both before and at the Review interview.

Complete Evidence Summary Forms cross referencing your Experience Report and Documents to the EC Statements.

## 2.3 THE EVIDENCE SUMMARY FORMS 201

Use the Forms to explain **why** the work you have described in your **Experience Report** shows you perform each Statement of Competence.

Avoid repeating descriptions of projects which are in the Reports: use the Forms to argue and substantiate your case.

Explain how your experience demonstrates your competence. Cross reference this explanation to the relevant scheme descriptions in the Reports (quote the paragraph number) and to the supporting documents (quote their title and number).

Complete separate Forms for each sub-role A.1 to E.4.

The Forms help the Reviewers. Once they have read through your submission, they will start from the 201 Forms to find their way around the Experience Report. They will look at your experience to test whether it meets the Statement descriptor and will complete an Assessment Form (212) covering each role. You will receive a copy of their assessment to allow you to address any weaknesses before or after the Review.

## 2.4 CONTINUING PROFESSIONAL DEVELOPMENT

The Institute's CPD requirements are fully explained in ***Moving Ahead: Document B.***

To satisfy Statement E.4 you will need a continuing professional development plan which may be your recent appraisal or personal development plan or IHIE forms B02 and B03.

You also need a record of your CPD. Again either use IHIE form B04 or your company's forms. Aim to show five days a year of structured development which can include structured reading or research.

In the two years before your review you will need **seven 'CPD Days'** of off-the-job education and training. These should cover technical and managerial topics and can include institution Branch events and in-house courses. You will need to devote two days to health and safety and one to environmental issues. Do not bother with attendance certificates: a countersigned list is sufficient.

## 2.5 CORROBORATION BY AN EMPLOYER PROPOSER

You should ask a line manager to endorse and authenticate your full completed application. He or she should be a registered engineer familiar with your work and with the IEng review who is able to sign off your submission to say it meets the learning outcomes and Engineering Council standards.

He/she should be prepared to offer constructive criticism and final advice. Either your proposer or your Mentor should offer to facilitate two mock interviews to test your knowledge and competence.

Your Proposer will complete a confidential report (**Form 301**) to be sent direct to IHIE or enclosed with your submission in a sealed envelope.

## 3. SUBMITTING YOUR REVIEW APPLICATION

Send one copy of your submission and the CD to IHIE who will appoint two Reviewers and a **Third Reviewer** who is responsible for ensuring IHIE is following its procedures and maintaining consistent standards.

At least one Reviewer will be experienced in the same field(s) as you.

Send your submission to the three Reviewers by registered post. They have 8/10 weeks to confirm that the Technical Report merits calling you for review and to assess your Experience Report against the EC standards and.

You will receive a copy of their assessments and you may be asked to provide additional material or to respond to any comments on both Reports either before or at the interview.

**The interview will be arranged once you have passed this preliminary assessment and the Technical Report is judged sufficient to justify an interview.**

If you have any disability, special access needs or medical problems which might affect your performance, tell IHIE's Membership Manager in advance and we will do our best to assist. Advice is available for dyslexic applicants.

## 4. THE INTERVIEWS

Your Reports have been read by the Reviewers who will expect you to answer questions on the specialist and general engineering principles underpinning your work.

### Before you get there:

- Time yourself - allow yourself an hour and a half to two hours to discuss your Technical Report including questions and answers.
- Arrange a mock review to see how you respond to technical knowledge questions and prepare yourself for the probing which may cover basic as well as advanced engineering relevant to your specialism.

- Practice a fifteen minute presentation of your Experience Report focusing on current responsibilities, particularly in relation to Statements C and D. Keep it short, like a quick description at a job interview of why you meet the specification.

## What happens on the day?

**In the first interview** the focus is on testing the academic relevance of your knowledge and understanding through the medium of your **Technical Report**. Although you should start by presenting your Report, expect this interview to be more led by the reviewers. The **Third Reviewer** will participate in questioning.

**The second interview** looks at your professional competence through the experience outlined in your **Experience Report**. You will be expected to lead this with a presentation of your general work experience and current responsibilities. The Reviewers will arrive at a rounded evaluation of your competence and commitment using the broad UK SPEC statements and will explore the professional commitment and conduct aspects of Statement E.

Reviewers have their own interview styles and the balance of discussion will reflect your individual experience and background in relation to the Engineering Council's expectation.

*There will be a short break between the two interviews. If you have not satisfied the reviewers that you meet the learning outcomes, they will explain and may not hold the second interview.*

## 5. AFTER THE REVIEW

After your review, the Reviewers prepare two recommendations for the next Institute Membership Committee:

- (1) an assessment of your engineering knowledge , and
- (2) a general assessment of your competence and commitment.

If you are successful, you will receive a letter within three weeks of the Committee meeting notifying you of your election as a Fellow. IHIE will register you with the Engineering Council (UK).

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

If you wish to appeal, ask the IHIE Membership Manager about the procedures and reply within six weeks after receiving your notification. Advice is NOT available during an appeal. You can appeal if you are dissatisfied with the way the Review was conducted, for instance, 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 knowledge or competence will be pursued.