When the IET processes your application for professional registration, it will first seek evidence, in your application, of your level of knowledge and understanding.

If you have few or no formal qualifications, it will be assumed you have developed your underpinning knowledge and understanding (UK&U) through work based learning and/or informal learning, which the IET will need to assess.

To do this effectively, the IET will consult expert assessors with:
- knowledge of the field in which you work;
- a detailed knowledge of the Engineering Council UK-SPEC and Registration Code;
- a detailed knowledge of the benchmark standard against which your application will be assessed.

The assessors will identify your opportunities to gain technical/engineering knowledge and understanding. They will then examine the written evidence that you have provided to establish how you demonstrated the exercise of that knowledge and understanding to the appropriate level for the registration category you are seeking.

For instance, a record of attendances at technical presentations or the completion of informal courses may provide evidence that you have had opportunities to learn, but they do not necessarily by themselves indicate that you have learned or applied any knowledge and understanding gained. The assessors might therefore look at your work record to see where you needed to use what you had the opportunity to learn.

If you have had the opportunity to gain appropriate knowledge and understanding, then:
• If your application shows convincingly your development of knowledge and understanding, illustrated by a succession of projects with significant technical content, the IET may only need to verify the level of your technical knowledge and understanding during the Professional Review Interview.

• If there is insufficient evidence of your technical work or a lack of clarity about your technical roles, yet there are clearly identifiable technical projects in which you have been involved, the assessment of your technical knowledge and understanding can be carried out in a separate “Technical Report interview”.

• If the IET’s assessment indicates that you have not yet had the opportunity to gain and exercise appropriate knowledge and understanding, the IET will indicate where the shortfall lies and what further technical/engineering developmental work you might consider. If appropriate, the IET will also indicate if a different registration category might be more suitable at this point in your career.

• If the IET finds there is insufficient evidence to make a judgement, the IET may contact you for further information.

What additional information might you provide?

7. The IET will advise on the specific detail, however as a guide, you may be asked to provide one or more of the following:

• An extended CV; based on employment in technical roles.
• An existing technical report written in the course of your work, based on, for example, an investigation, design study or a feasibility report, which might include individual research and study into engineering and/or technological techniques.
• A portfolio relating to one or two projects, together with a linking commentary (see guidance attached), e.g. a collection of data or records, which would need to be tied together by an aim, an outcome and a rationale.
• A copy of a technical presentation that you have given, which enables you to provide the best examples of your technical learning.

How is knowledge and understanding assessed?

8. The Engineering Council publication “The Accreditation of Higher Education Programmes” lists the Learning Outcomes attained by holders of exemplifying formal qualifications. These Learning Outcomes also provide a guide to assessing the knowledge and understanding of a registration applicant whose engineering learning has been partly or wholly gained through work based learning. Broadly the learning outcomes require a demonstration of

• A comprehensive understanding of the scientific and engineering principles of their own specialism and related disciplines;
• An awareness of developing technologies related to their own specialisation;
• A comprehensive knowledge and understanding, together with the ability to apply mathematical and computer models relevant to the engineering discipline, with an appreciation of their limitations;
The ability to identify, classify and describe the performance of systems and components through the use of analytical methods and modelling techniques.

Interpretation of the learning outcomes

9. Some detailed Learning Outcomes refer to maths and the application of quantitative methods applied in a technical/engineering context. Thus any assessment of maths and the use of quantitative methods (including the possible use of software) will be made in relation to your technical/engineering role and current engineering practice.

10. Some learning outcomes refer to the sciences used in practice by engineers or technologists; this implies you will need to illustrate the use of rigorously established forms of calculation and investigation acceptable in your field of engineering or technology.

11. Some learning outcomes mention the forefront of professional practice, however, the emphasis on the different Learning Outcomes will vary for each individual and therefore you should not necessarily be expected to be at the forefront of professional practice in all areas of your work. Because of the scale and extent of commercial or physical risks and hazards, some industries are necessarily more conservative than others. Judgement about what constitutes the forefront of professional practice must be made relative to practice in your specific industry sector and your individual role.