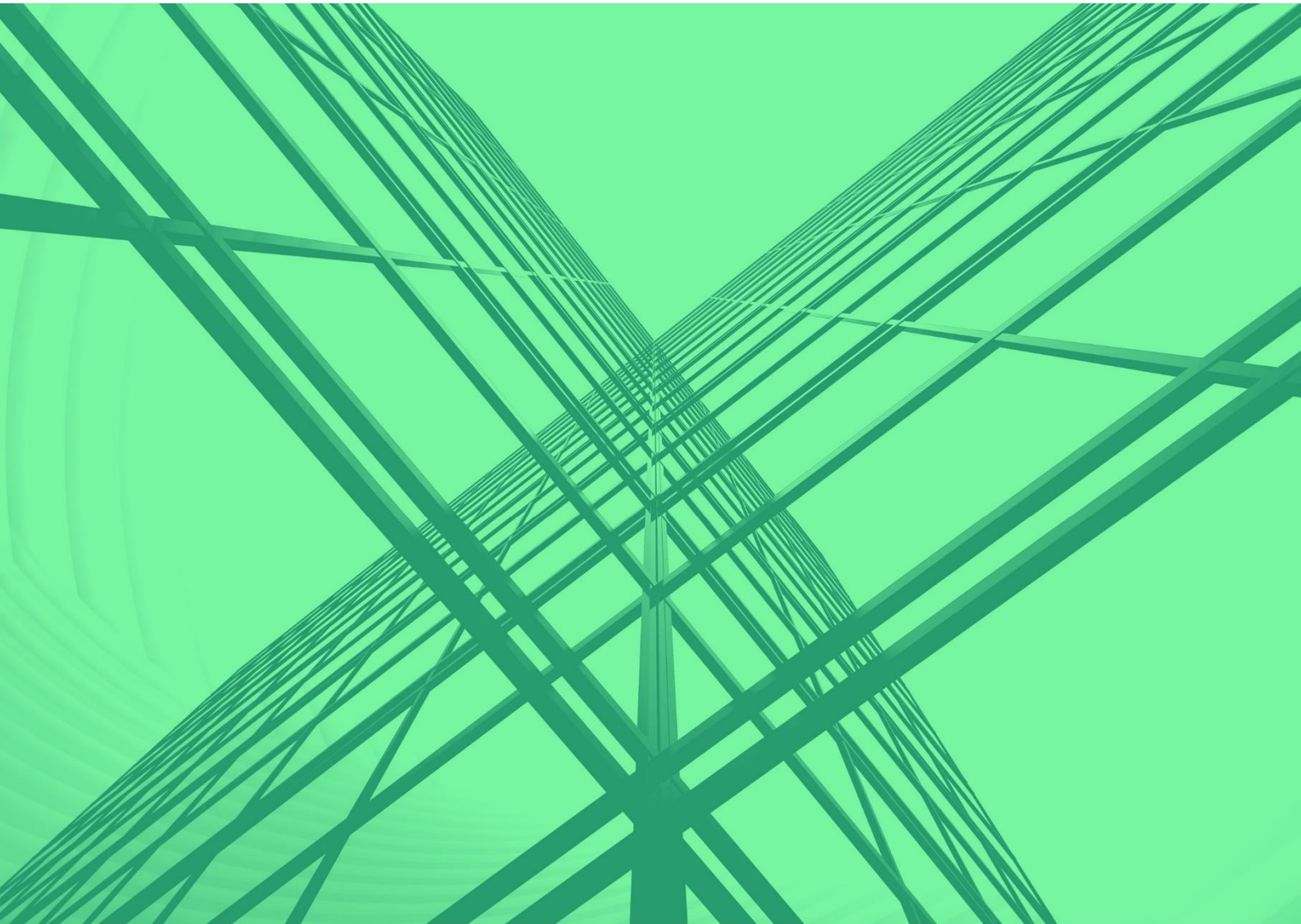


Professional Mentoring Handbook

Provide support and guidance towards Professional Membership
Version: 2024



Additional information:

This guidance should be read in conjunction with the Institution's full IPD regulations for progression to Member, Associate, Incorporated-Member and Technician-Member which may be found on the Institution's website.

Introduction

The Institution sets and maintains standards for professional structural engineers and implements these through a qualifying Professional Review (comprising of an interview and written examination).

Members of the Institution have a high degree of professional knowledge and expertise in structural engineering. They display judgement in making the best use of resources in the interests of public health and safety and in the care of the environment.

Becoming professionally qualified

Becoming professionally qualified is a great achievement and a recognition of professional experience and competence as a structural engineer. This builds on a candidate's academic qualifications and is recognised by their peers, clients and other industry professionals. Through the Institution, our professional members have access to a lifetime of professional development opportunities and an international network of professional engineers.

There are three stages to becoming professionally qualified with the Institution:

- ▶ Achievement of the required academic base
- ▶ A period of responsible work experience initially under guidance and supervision, known as Initial Professional Development (IPD)
- ▶ Success in the Institution's Professional Review (Interview and Examination*)
 - ▶ As of September 2023, academically eligible members can be elected to Associate AIStructE CEng after passing the interview

*The interview and examination can be taken in any order or concurrently depending on the preference of the candidate.

Mentoring

Mentoring is a process that occurs when two individuals enter into an agreement to spend time sharing questions, insights, knowledge, ideas and experiences, for the development of the mentee (and in many instances, also the mentor). Mentors will normally be an experienced engineer in a position to provide guidance, advice and training to candidates in the workplace.

Mentors should preferably be a Chartered Structural Engineer (Fellow or Member of the Institution of Structural Engineers) or a suitably experienced Associate or Incorporated-Member, or a person of equivalent standing.

Mentors have a very important and crucial job to perform to ensure that candidates are genuinely in a position to pass the Professional Review Interview (PRI) when they apply. Mentors should assist and guide candidates in satisfying the IPD requirements in preparation for the PRI.

Benefits of mentoring in the workplace

To graduates:

- ▶ a chance to test ideas and strategies
- ▶ **insight into the organisation's goals, structure and values**
- ▶ **assistance in defining personal career and other developmental objectives**
- ▶ someone to talk to outside of the day-to-day work environment
- ▶ transfer of knowledge, skills and/or expertise
- ▶ personal growth and reflection
- ▶ guidance and assistance through the application for professional membership

To mentors:

- ▶ enhanced communication and coaching skills
- ▶ **professional development opportunity (CPD)**
- ▶ **contribution to ongoing development of less experienced employees**

To the Institution:

- ▶ focussing candidates to work towards the Professional Review
- ▶ **increased awareness of the Institution within the workplace**
- ▶ **helps provide a more enhanced support system outside HQ**

Initial Professional Development (IPD)

IPD is simply the period of time between satisfying the academic requirements of the Institution and being in a position to demonstrate compliance with the Institution's training requirements.

IPD comprises the acquisition and development of the specialist knowledge and skills, and their practical application that are needed to practice as a structural engineer.

There are three IPD routes that can be followed through the IPD regulations:

Individually Managed

Managing training with the assistance of a personal mentor.

Accredited Training Scheme

Following a recognised accredited training agreement e.g. ICE or HKIE

Retrospectively Collated

Self-managing training without the assistance of a personal mentor

As a mentor you will only be required to be involved in assisting progression through the Individually Managed IPD route; however, you may choose to act as a mentor regardless of the route that is being followed.

Individually Managed IPD route and the mentor's roles and responsibilities

The Individually Managed IPD route enables candidates to take responsibility for their own professional development with the assistance of a mentor or mentors who will provide support and guidance through the Institution's Core Objectives. Candidates may have a number of mentors if they wish – some mentors may have relevant experience in analysis and design, whilst another mentor may have detailed knowledge of law or health and safety.

A key element of a managed training programme is the production of regular reports which, by recording the activities undertaken and the lessons learned in relation to the Core Objectives, not only act as a first source for future reference but also demonstrates progression towards and achievement of the Core Objectives.

Mentors should meet with the candidate on a regular basis (at least every three months) and complete the IPD quarterly report form and progress summary record.

IPD Quarterly Report Forms

The IPD quarterly report form is designed to simply list very brief details of the activities undertaken. If candidates wish to add further information, they may use additional sheets, providing each sheet is signed by both the candidate and the mentor. Alternatively, the candidate may prefer to write a report expanding on each of the bullet points and this report may be attached to the IPD quarterly report form. Although the Institution does not wish candidates to write lengthy reports, it is advisable for the candidate to keep detailed records of their training and experience. These detailed records will act as an aide memoire to help candidates complete the IPD final report forms and compile the portfolio of work, perhaps three or four years later.

The IPD quarterly report form is split into five sections. The first three sections cover the three groups of Core Objectives:

- ▶ Personal – Core Objectives 1-2
- ▶ Engineering – Core Objectives 3-7
- ▶ Management and Commercial – Core Objectives 8-10

In each of these three sections, candidates are required to list training or experience they have received in the preceding two or three months which contribute to specific Core Objectives.

The fourth section of the form is the candidate's development action plan where they should list activities they plan to undertake in the next two/three month period to satisfy other objectives.

The mentor should complete the fifth section of the form, and both the candidate and the mentor should sign the form and each additional page.

The Institution recommends the use of a personal development diary which should be updated on a weekly basis to aid completion of the IPD quarterly report forms and progress summary records. This diary should be used to record all IPD related activity to make it easier to complete the quarterly reports. It is important that regular meetings are scheduled to review progress against the Core Objectives and agree an action plan.

Progress Summary Record

The progress summary record shows logical progression through the Core Objectives. At a glance it shows where works needs to be done, and at the PRI, the reviewers can see how the candidate has progressed through each Core Objective.

Candidates should simply note the date of the meetings with their mentor and the level of attainment reached at that date.

Core Objective Standards

There are four different standards that apply to the Core Objectives:

- A*** A general **appreciation** of the subject, as well as an understanding of how the subject may affect, or integrate with the other subjects.
- K** A **knowledge** and understanding of the subject and its application.
- E** Sufficient **experience** to enable the subject to be performed independently or under supervision.
- B** An **ability** to perform the subject without supervision and be competent to advise others.

*Appreciation is a standard that is only applicable to the IPD for **Incorporated-Member** and **Technician-Member**.

Candidates are not required to be experts in all of the objectives; they are simply required to satisfy the minimum standard as specified in the objective. As far as attainment levels are concerned, the guidance notes under each Core Objective highlight what a candidate must demonstrate. Examples of evidence to demonstrate the required level are also included.

It should be noted that if candidates have not undertaken a number of activities specified in the guidance, they may find it difficult to demonstrate that they have met the minimum requirement of the objective.

Candidates who have satisfied all the Core Objectives

Once the candidate, and more importantly the mentor, is satisfied that all the Core Objectives have been completed, consideration should be given to applying for the PRI.

Before applying for the interview, the candidate should complete the IPD Final Report Forms for each of the Core Objectives. Additional sheets may be used provided they are signed by the mentor. The expectation is that each Core Objective should have no more than two sheets.

IPD Final Report Forms

The IPD Final Report Forms are the candidate's statement summarising how all of their experience and training has enabled them to satisfy the requirements of the objective.

Candidates are strongly advised to read the objective and include appropriate and relevant statements. The reviewers want to know how the candidate has gained and met the appropriate standard required through their experience.

Experiences of engineers can differ significantly across the world and the IPD Final Report Forms/portfolio of work should reflect the individual experiences of these candidates, and we do not wish to prescribe a particular way of completing them as 'correct'.

The general advice that we would give to candidates is:

1. **Personal:** The reviewers are not interested in what the candidate's company does, they are only interested in what the candidate has done. Therefore, ensure that they state what they have personally undertaken and try to avoid generic statements about how their company operates.
2. **Positive:** Candidates must focus on their strengths and not highlight weaknesses – if there are limitations these will be picked up by the reviewers during the interview; there is no need to state them on the IPD Final Report Forms. Try to avoid statements such as 'I have limited/some experience' – the candidate either has experience or not. Also try and ensure that the correct words are applied to the relevant objectives e.g. if it's an 'ability' objective, do not use 'experience' or 'knowledge'. Using the correct words can remove some possible concerns the reviewers may have.
3. **Practical:** Ensure the candidate states how they have achieved the Core Objective standards – all too often candidates fall into the trap of simply describing the objective or stating why it is important. This is not what the reviewers will want to know. There is no benefit in describing the properties of various materials (for Core Objective 5) as the reviewers will already know this; what they need to know is how the candidate has developed their understanding of materials and what practical experience they have. So be sure they detail how they have gained the appropriate standard for each Core Objective, and in what ways they have utilised the aforementioned in their professional career.

Mentors are required to write their comments on each of the IPD Final Report Forms, supporting the statements made by the candidate and confirming that they have satisfied the minimum requirements of the objective. Comments should be specific to the candidate/projects and be positive. As a reminder, a mentor only needs to comment on and sign IPD forms for those applying through the Individually Managed route.

The Professional Review Interview (PRI)

The PRI is designed to test the candidate's ability and ensure that they have satisfied all the Core Objectives. The interview will normally be approximately 60 to 90 minutes, but this may vary according to the length of time it takes for the reviewers to determine whether the candidate has reached the required standard in each Core Objective. It will include an informal presentation of their career in structural engineering which should last approximately 10 minutes. They will be permitted to include no more than 10 slides when making the presentation, and it is expected that they will refer to the content in their portfolio and IPD Final Report Forms.

Whilst the reviewers will try to help the candidate by putting them at ease and asking questions about their work and experience, it is important that candidates realise that the onus is on them to demonstrate that they have achieved the stated attainment levels for all the Core Objectives.

Failures

Candidates who fail up to three of the Core Objectives will only be required to be re-assessed on the failed objectives. Candidates who fail four or more Core Objectives will be assessed on all Core Objectives. Candidates will be required to reapply with an updated and improved submission.