

## Mentoring guidelines

### Advice for mentors and mentees



# IChemE mentoring guidance for mentors and mentees

This guide has been developed to clarify the role of a mentor and how to offer guidance to those who are planning to become a Chartered Member (MIChemE).

A mentor will need to employ a number of skills, for example: coaching, motivating and sharing knowledge and experience. Developing such mentoring skills will also be beneficial to professional development.

Candidates planning their application to Chartered membership can also use this guide to help them better understand what to expect from their mentors.

A mentee will get personal support, technical knowledge and advice from an experienced engineer who will be expected to review the candidates professional progress and development on a regular basis.

This mentoring guidance should be used in conjunction with the *Stage 3 – Professional Review guidance for applicants*. Visit **www.icheme.org/chartered** for further details.

#### Document control

Version no.	Date issued	Changes	
V3.0	January 2024	Logo changed	
V2.1	February 2023	Changed 'Professional Formation Forum' (PFF) to 'Professional Development Subcommittee' throughout. Changed 'candidate' to 'applicant' throughout.	
V2.0	May 2021	Minor updates to terminology following introduction of the new three-stage membership process	
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### Introduction: mentors

#### Why become an IChemE mentor?

As an IChemE mentor you are supporting the Initial Professional Development (IPD) of a mentee chemical engineer in accordance with good practice, particularly within your own industry sector, for the next generation of chemical engineers.

By supporting the development of IChemE members, you are not only advancing chemical, biochemical and process engineering, but this also gives you the opportunity to reflect and continue your own professional development. Mentoring is a training ground for you to become a better manager of people and develop all the skills that a good manager should have.

Mentoring will enable you to keep up to date with the requirements to achieve Chartered Chemical Engineer status, and in turn, ensure that the title maintains its relevance to you.

As a mentor you can offer an invaluable service to your fellow members, some of whom without a certain level of advice or reassurance may not feel confident in making an application to become Chartered.

Most importantly you will be able to have a huge influence on the career outlook of a young chemical engineer and this should provide you with a high level of personal satisfaction.

#### Your role as a mentor

As an experienced IChemE member you may already be mentoring, perhaps within an Accredited Company Training Scheme (ACTS) or through your regional member group.

The purpose of these guidelines is to help you support a chemical engineer through their pathway to becoming Chartered. As such we anticipate that your mentoring will focus on the areas below:

- supporting the mentee through the Individual Case Procedure (if required);
- providing support to the mentee as they plan their Initial Professional Development;
- providing advice to the mentee as they prepare their Competence and Commitment (C&C) Report;
- acting as a referee for their application for Chartered Member (MIChemE) and Chartered Engineer registration.

IChemE recommends that mentors have a maximum of two recently graduated mentees. Some mentors may also be asked to advise experienced chemical engineers with the completion of their C&C report.

#### How to register as a mentor

Mentors are usually Chartered Members or Fellows of IChemE. If you hold another registration, we might ask you to provide more details.

All new mentors are required to undertake new mentor training. Thereafter, all mentors are required to participate in refresher training once every three years to continue their roles. The training may be via one of our regular IChemE workshops or a virtual mentor training session.

All IChemE volunteers should read, understand and accept the Volunteer Code of Conduct which will be made available to you after completing the registration.

To register as an IChemE mentor, please contact membergroups@icheme.org

### Introduction: mentees

#### Why do chemical engineers need mentors?

Whether you work in a small or large organisation, you'll always find it useful to have support and guidance from a Chartered Chemical Engineer. They'll be able to help you assess and plan your career experience when planning your own application to become Chartered.

Your mentor will help you to see things in yourself and in your work experience that you might otherwise not realise. They can advise you on areas of competence that need strengthening and suggest ways to help you improve those areas. A good mentor will share their own experience to help you develop and become ready for your formal application to become Chartered.

#### The role of a mentee

As a mentee you will be required to participate proactively in the preparation of your own training programme, and to maintain accurate records of all training and work experience received. IChemE recommends that you map this experience to the sections of the Competence and Commitment (C&C) Report. It is also expected that you will discuss progress with your mentor, who will review your experience and training record and assess how you are progressing towards meeting the required standard.

#### How to find a mentor

It is probable that you can find a mentor within your own company. If your company has an IChemE Accredited Company Training Scheme (ACTS) then there will be a pool of mentors from which the ACTS Scheme Manager can assign a mentor for you.

However, in cases where you are unable to identify a mentor, IChemE can assist. Note that the details of registered IChemE mentors are recorded in our database. Therefore, when someone requires a mentor, an appropriate person will be assigned based, if possible, on their location, expertise, current mentoring commitment and availability. The selection can be made by your regional member group mentor co-ordinator or relevant IChemE staff member.

Member groups are regional communities supporting local members. They organise events and co-ordinate local mentoring and CPD support\*. Their activity programmes offer opportunities for members to network, share ideas and promote the discipline at a regional level, and are tailored to meet local needs. IChemE members are allocated a member group based on their location. See www.icheme.org/membergroups for details.

#### Initial Professional Development (IPD)

The Engineering Council refers to IPD as the workplace development that takes place before becoming professionally registered as an Engineering Technician (EngTech), Incorporated Engineer (IEng) or Chartered Engineer (CEng).

This is the period when aspiring professionals learn to apply their knowledge and understanding, develop their skills and competence, and begin to apply professional judgement. IPD enables engineers to demonstrate the necessary competence and commitment to become registered with the Engineering Council.

Many engineers carry out their IPD through structured programmes, whereas others may choose to carry out their IPD independently. All applicants should make their employers aware that they are working towards professional registration in order to receive support and guidance.

All applicants should familiarise themselves with the requirements for Chartered membership at **www.icheme.org/chartered** and presented within UK SPEC (**www.engc.org.uk/ukspec**), and understand what type of development records to keep. (If a mentee is registered in an ACTS, then the ACTS Scheme Manager will advise).

\*activities may vary by country.

# The mentoring relationship and process

#### Making initial contact

When a member has agreed to act as a mentor for a specific trainee, the contact details will be passed onto the mentee to make the first contact via email or phone. For initial contact, ensure both parties agree to maintain confidentiality.

If the trainee has not had a mentor up to this point and believes that they are almost ready to submit their application to become Chartered, it's good practice for the mentee to send their CV for background information along with a draft of their C&C report if appropriate, to the new mentor.

#### The first meeting

Choose a location where there are no distractions (people, telephones, noise etc). This meeting will give you both a chance to get to know each other, your backgrounds and careers to date. If you work for the same company, it's also beneficial for the mentee to understand the corporate role of the mentor, in order to appreciate the respect and recognition that the mentor has within the company. If the mentee has recently joined from another company, it is useful for the mentor to understand the training, mentoring and work that the mentee accomplished there and what gaps the new company can help fill.

If the mentee is not based near the mentor geographically, and if both the mentor and the mentee are happy to do so, you may decide to conduct your communications online, by video conferencing or by phone.

The mentor should explain how training records and the mentee's progress should be recorded, and where and when the mentor and mentee should meet. Setting up a look ahead schedule for the next year is good practice, even if it needs to be changed later.

It may be useful to initially agree on how you expect the mentoring relationship to work and what you both want to get out of it. However, entering into a formal contract is not necessary.

#### Further meetings

The frequency of your meetings will depend on many factors. IChemE recommends meeting every three months. More frequent meetings are optional and may be necessary to review and discuss a particular topic eg the benefit of a change in role, an overseas opportunity, or the value of an available training course.

It's also good practice to record actions resulting from mentor/mentee meetings which should be resolved before the next session.

#### Keeping records

The mentee is required to maintain adequate records of all the training and job experience received. IChemE suggests that this record should follow the format of a Competence and Commitment (C&C) Report, which the mentor will review.

The mentee can also record their development by using IChemE's Framework for Effective Mentoring.

Making note of actions, particularly where the mentor or the mentee has agreed to do something, will provide a useful agenda for the next communication.

See Appendix A for examples of good mentoring practice.

### Chartered requirements



#### Review mentee's experience and training

Mentors will need to be aware of the depth and breadth of experience their mentee will gain (or has already gained) throughout their IPD.

At each quarterly review meeting, the mentor should review with the mentee:

- what the mentee has done in the job roles they've had and the significant assignments within those roles;
- any formal training that has been completed, ie courses or additional qualifications, and benefits gained;
- what on-the-job training, ie secondments, work shadowing etc has been completed and benefits gained.

It is recommended the mentee should update their training record and map their progress and experiences against the C&C report format.

At each stage, it should be established whether the mentee is in a position of responsibility within chemical engineering, is using chemical engineering principles routinely, and is consequently on the right track to prepare an application for Chartered Member in due course.

Examples of chemical engineering principles include but are not limited to:

- understanding of process technologies and the design of their flow schemes;
- laws of conversion;
- understanding of underlying chemistry;
- chemical thermodynamics;
- systematic approach to safety and sustainability;
- mathematical modelling e.g. process simulation;
- systematic approach to the analysis of systems;
- economic evaluation.

Chartered Chemical Engineers can be found in many fields and industry sectors. There are many opportunities to gain training and experience across a wide range of roles in industry and academia. Such areas include but, again, are not limited to:

Process plant operation	Legalisation, regulation	Computer application
Development of products, services	Project management, administration	Teaching, managing, training
Instrumentation & control	Quality & assurance	Technical/economic evaluation
Research & development	Economic accountancy, cost estimation	Technical sales, marketing, contracts
Health, safety, risk aspects	Design of process, plant & equipment	Sustainability & environmental aspects

An applicant would be expected to match their experience against four to six of the above areas in their C&C report.

### Tip: review together the mentee's experience to date against the requirements for the C&C report. Keep the criteria above in mind as a loose definition of chemical engineering to ensure that the mentee is eligible to become a Chartered Chemical Engineer.

#### Assessment of mentee experience against requirements for Chartered Member

Once the mentor is familiar with the mentee's current level of competence and has confirmed that they are working as a chemical engineer, or applying chemical engineering knowledge and principles in their work, the next stage is to assess their experience against the criteria for Chartered status.

Within the training records, ideally mapped to the C&C report sections, the mentor should review the progress in the report and provide a rating to ensure the mentee understands where he/she is against the required standard, and to enable the mentee to prioritise areas for development.

Please note that we are not asking the mentor to formally assess the mentee, but to offer their opinion and judgement as a Chartered Chemical Engineer.



Tip: assess together how well the mentee's experience covers the competencies and level of commitment required by the C&C report, ie the mentee may score low (*awareness*) in the health and safety aspects of chemical engineering due to a lack of experience. This may then become a priority area to address at the *plan* stage.

#### Plan future development

Once the assessment is completed, the mentor and mentee should then discuss those areas which may require further development.

Tip: plan together areas for future development, in priority according to the ratings of mentee's experience in the previous exercise. A priority area for development may be health and safety aspects with associated activities such as experience in conducting risk assessments, implementing improvements, communicating safety procedures etc.

#### Action: advising mentee on how to realise their plans

The final stage of the mentoring process is to discuss how the mentee can gain the training and experience they need. Things to consider:

- can the mentee ask their line manager for exposure to new areas of work?
- can the mentee request formal training from their line manager?
- how should the mentee approach their line manager?
- is the mentee ready to take on a lead role in a small project?
- can the mentee gain all the necessary skills in their current role?
- does the mentee need to change roles within their organisation or altogether?

The mentor should listen, challenge, encourage and act as a sounding board. Ensure that the mentor is supporting rather than cutting across a line manager's role.

It might be necessary for the mentor to communicate with the mentee's line manager directly in order to instigate an element of the plan.

At this stage the mentor should impress on the mentee that the ownership and responsibility for learning remains with them. The mentors should encourage the mentees to make clear short and long-term goals which help them focus on future development.

In an ongoing mentoring relationship, agreeing goals will form a good basis for future meetings and, more importantly, will help the mentee work towards achieving Chartered status.

### Tip: list together actions the mentee could take to achieve the goals set out in the development plan, ie requesting an opportunity from their line manager to shadow a risk assessment, or request relevant health and safety training.

It is important for mentors and mentees to repeat the Review/Assess/Plan/Action cycle until they agree that the mentee has adequate experience and training before submitting an application to IChemE.

#### What happens if the mentor/mentee relationship is not working?

Mentor/mentee relationships may not work out for a variety of reasons. IChemE should be notified as soon as possible to make alternative arrangements.

### Supporting the mentee as they prepare their application

#### Meeting the initial requirements

When the mentee is ready to make an application, they must normally satisfy the following requirements:

- fulfil the educational requirement (this should have been established at an early stage);
- fulfil the competencies and commitments required by Engineering Council UK;
- work, or have worked, in a responsible position in chemical engineering;
- nominate suitable referees who agree to support their application.

Visit www.icheme.org/chartered for a full explanation of the requirements the applicant must meet before making an application.

#### Chartered application and report guidance

Mentors and mentees should always refer to the *Stage 3 - Professional Review guidance for applicants* which contains information on Stage 3 of the application process for Chartered membership, with emphasis on how to complete and submit the C&C report. See www.icheme.org/chartered-guidance

#### Application and assessment process

All applications are peer-reviewed. Our volunteer professional reviewers are Chartered Members and Fellows of IChemE and receive training to ensure consistency and to maintain standards.

Our election panel, the Registration Subcommittee, are made up of IChemE Fellows who are invited to sit on the panel and make the final decision on whether applicants are elected to Chartered Member (MIChemE).

## Acting as a referee for an application

We encourage mentees to ask their mentors and line manager to act as referees.

In other cases, some chemical engineers preparing their application for Chartered status will be working as consultants or in companies where there are no other Chartered Chemical Engineers. To make an application, an applicant must have two Chartered Member or Fellow referees to support their application.

In this situation, mentors may be contacted in their capacity as a Chartered Chemical Engineer by IChemE or their regional member group to act as a referee.

#### Once the mentor has agreed to act as referee

This is of course dependent on the mentor's assessment of the applicant and whether the mentor subsequently agrees to support their application.

As a referee, the mentor will need to be satisfied (and eventually testify) that the applicant:

- is working in a position of responsibility;
- has the relevant competence and commitment in the field of chemical engineering to uphold the standing and reputation of IChemE.

#### The mentor's decision to act as referee

Although it is very common for the mentor to act as a referee, that is not always the case, and the mentor might decide not to accept this role.

Occasionally an IChemE mentor will be approached by either the regional member groups' mentor co-ordinator or the local IChemE office and be asked to act as a referee for an applicant applying for Chartered status. If the applicant clearly meets the requirements for Chartered status, a conversation over the phone following a review of the draft C&C report, might be enough to convince the mentor that they are able to act as a referee.

The mentor may want to arrange a face-to-face meeting if more information about the applicant is required before they support the applicant's application.

If the mentor feels the applicant needs further development for them to act as their referee, their role may then evolve into mentoring in the fullest sense where it is necessary to review their experience, assess where development is needed and then plan future Continuing Professional Development (CPD). An applicant may also need some support in preparing their final application to become a Chartered Chemical Engineer.

In this instance, both parties should refer to the rest of this guide and use the **Framework for Effective Mentoring** to assist the mentoring process.

If the mentor is not able to continue mentoring the applicant for any reason, then within an ACTS the Scheme Manager will identify another mentor. If this is not possible for the applicant, then they should contact the regional member group's mentor co-ordinator or the local IChemE office so another mentor for the applicant can be identified.

### Accredited Company Training Scheme (ACTS) mentors

This section applies only to IChemE ACTS mentors and mentees. For more information regarding ACTS please visit www.icheme.org/acts

Each mentee must be assigned a mentor for the duration of their training. The role of the mentor is to counsel the mentee on technical, professional and personal matters relating to the acquisition of sufficient training and experience (Initial Professional Development) to become a Chartered Member of IChemE. They will also monitor the graduate's progress.

#### Mentor requirements

The ACTS Scheme Manager must ensure that mentors understand their responsibilities when taking on this role and are prepared to commit adequate time to their mentee(s) over the period they are on the scheme.

Since there is a need for the mentor to form an effective relationship with the mentee, it is recommended that a mentor should not have the responsibility for more than two mentees at any one time, although it is recognised that this may not always be possible. The mentor should also not be the line manager of the mentee.

The mentor will ideally be an experienced Chartered Chemical Engineer (a Chartered Member or Fellow of IChemE). If this is not possible an experienced chemical engineer can be used, but that person should have a full understanding of the IChemE membership application process. The IChemE ACTS Administrator should also be informed in such circumstances.

All new mentors must be registered with IChemE by the ACTS Scheme Manager who should complete and submit a mentor registration form to the IChemE ACTS Administrator. It is advised for mentors to log in to 'MyIChemE' to ensure their contact details are kept up to date.

If no suitable mentor can be identified within the company, a Chartered Chemical Engineer from another organisation may be used. If help is required to identify such a person, the ACTS Scheme Manager can contact the IChemE Member Group team for support. The disadvantage here is that both parties may be unfamiliar with each other's work, and the mentor will be able to offer less company support to the mentee. In addition, there may be conflict of interest and confidentiality issues arising, whereby the mentee will not be able to be as open in their relationship with their mentor.

Usually, the mentee will retain the same mentor throughout the programme, however sometimes the relationship does not work. After consultation with both parties, the ACTS Scheme Manager should identify a new mentor. If for any reason a change has to be made, such as a change of role or mismatched pairing, the Scheme Manager should notify the IChemE ACTS Administrator as soon as possible.

When a trainee has completed an ACTS they need to obtain the 'ACTS completion form' which is required for Stage 2 of the IChemE application process. The form needs to be signed by the trainee's mentor and ACTS Scheme Manager to confirm that the trainee has successfully completed the scheme.

#### Annual Update

At the end of each year, the ACTS Scheme Manager should update IChemE with registered mentees and their assigned mentors, by submitting an Annual Report. This ensures that IChemE records are up to date and that the scheme is being appropriately managed according to ACTS accreditation guidance. It will also show the status of each of the mentees and their readiness for Chartered Member application, plus details of those who have entered and left the scheme.

### Available support

- visit www.icheme.org/mentoring for further details about mentoring, including the latest version of this guidance document and the Framework for Effective Mentoring;
- to register as a mentor, or to find a mentor in your area, contact membergroups@icheme.org;
- guidance documentation for all three stages of the Chartered Member application process, including the C&C report template, can be found at www.icheme.org/chartered-guidance;
- for more information about Accredited Company Training Schemes visit www.icheme.org/acts or contact acts@icheme.org;
- IChemE has a range of courses for those looking for more experience in specific areas. Visit www.icheme.org/training for more details.

### Appendix A: Mentoring good practice

- entering mentoring relationships is voluntary;
- either party may withdraw from a mentoring partnership if, after genuinely trying, the relationship is not satisfactory;
- while often the mentor will have more experience of life or an aspect of work, the relationship is one of partners who jointly make decisions;
- meetings should be held in a quiet environment where both parties feel they can speak freely without being overheard;
- information shared in mentoring meetings is subject to standard rules of professional confidence, any notes made in meetings should be kept confidential;
- commitments made should be honoured. If meetings are cancelled or delayed adequate warning should be given and a new date re-booked;
- if either party feels unclear about the current status of the mentoring, that party should seek to clarify the views and wishes of the other party;
- mentees should not expect mentors to deal with long standing issues or major emotional events that are more properly the province of professional counsellors and psychotherapists;
- mentors should recognise their limitations and avoid working with the applicant in ways that exceed those limitations;
- if a mentor senses there is a conflict of interest between the mentoring and any other role, the mentor should make this conflict known to the mentee as soon as possible;
- mentors must not exploit applicants in any way financial, sexual or otherwise;
- notice to end the mentoring should allow for at least one meeting where a final review can take place;
- both parties accept that mentoring is for a limited period. It is entirely optional as to whether any relationship takes place after the mentoring.

# Appendix B: Ten tips for a better C&C report

- 1. Assign training and experience to correct sections of the C&C report.
- 2. Write clearly, in singular first person, using clear and correct English.
- 3. Provide one main in-depth example per sub-section and supplement with one or two brief examples to demonstrate breadth of experience.
- 4. Explain what chemical engineering principles you used in the examples and how you applied them.
- 5. Keep within the word limit.
- 6. Explain what you did and why you needed to do it (provide Context, Action and Result with the emphasis on Action). Another approach is the STAR (Situation, Target, Action, Result).
- 7. Prepare a CV specifically to support your Chartered application. Use this CV to help clarify project details and context etc as this will save word count in the C&C report.
- 8. Maintain records of your CPD activities (focus on the learning outcomes and not just the attendance of the training course).
- 9. Submit your C&C report only when you feel you are 100% ready.
- 10. Make sure that your ACTS mentor/Scheme Manager has scrutinised your final C&C report before you submit it. But always bear in mind that...

...ultimately, the responsibility for managing initial professional development rests with the applicant.

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