

# ACTS

---

## Notes for scheme managers

*These notes are intended to provide you, as manager of a company training programme, with the information you need to apply for IChemE accreditation of your ACT scheme and then to ensure it runs smoothly. The accreditation process provides the company with a unique opportunity to benchmark its graduate training for chemical engineers against world class standards and to demonstrate this achievement to the outside world, e.g. potential recruits and key customers.*

With awareness being raised in schools and universities of the need for an individual to take ownership of his or her own career, graduates are actively seeking employment in companies which can provide the kind of high quality training and experience associated with IChemE approval.

### The purpose of the scheme

Achieving Chartered status is the professional qualification for chemical engineers in the UK and increasingly around the world. By gaining accredited status for your training programme you can ensure that your graduates reach this key point in their professional development as effectively and quickly as possible, thus realising their potential and maximising their value to the company.

The requirements for Chartered Membership of IChemE, which entitles the individual to call themselves a Chartered Chemical Engineer, have been developed to ensure that the person achieving this status has the knowledge, understanding and experience expected from a professional working in this field. As chemical engineering changes so does this expectation. IChemE monitors this continually and will from time to time alter its requirements accordingly. If there are any changes, IChemE will provide information and guidance to the scheme managers. The current requirements are set out in IChemE's [Chartered Member guidance](#).

### Gaining accreditation

In order to accredit your training scheme, IChemE needs to ensure that it meets certain standards and provides the range of opportunities that a new graduate will need to fulfil the requirements to become a Chartered Chemical Engineer. For further guidance, contact IChemE who will arrange for a visit from a Regional Support Executive to talk through the process and provide support whilst developing the scheme: [acts@icheme.org](mailto:acts@icheme.org).

You will need to complete an ACTS Application and self-assessment form, to give some background details about the company and provide information on your current or proposed training scheme. If you feel you need help in adapting or developing your scheme to meet IChemE requirements, contact the ACTS administrator.

Your application will be initially reviewed by one of our experienced ACTS assessors. If found to be satisfactory, arrangements will be made for an accreditation visit.

If, from reading your application, the assessor feels that the training scheme does not incorporate some of the expected features, you will be contacted with feedback on how it might be modified to

meet IChemE requirements. When changes have been made you can resubmit relevant documents with the alterations highlighted, for review and approval prior to proceeding to the accreditation visit.

The assessment visit will be carried out by two experienced Chartered Chemical Engineers. Care is taken to select assessors who will be acceptable to the company, so for example, previous employees and in some cases members from rival companies, are avoided. Please inform the ACTS administrator if your organisation has any special sensitivities in this area.

The visit usually lasts about three quarters of a day. The assessors will need to meet with the individual responsible for the co-ordination of the scheme as well as a selection of graduate trainees and mentors.

Following the visit a detailed confidential report is prepared, reviewing and analysing the information gained and making a recommendation of approval (or otherwise) of the training programme. A copy of this report, without the recommendations, will be sent to you as soon as it has been agreed by the assessors.

You have the opportunity to comment on the report and your response, along with the report, will be presented to IChemE's Professional Formation Forum at its next monthly meeting. Following the meeting you will be notified of their decision. Initial full accreditation is normally for two years, although it can be for a shorter period. Other options are provisional accreditation (requiring a further visit at a specified time), or occasionally, a conditional recommendation that requires further changes be made before accreditation is granted.

## Fee

IChemE endeavours to maintain costs associated with ACTS at a minimum. This is helped by the support of companies which permit assessors time off for accreditation visits. However, there are still costs to be met and so it is necessary to charge a fee for each application for accreditation/re-accreditation. Please contact IChemE for current pricing information.

## Operating the scheme

As scheme manager you are normally the first point of contact between the company and IChemE. You should be conversant with our guidelines and your company practice. For successful operation of the scheme you are required to:

- amend and review the scheme to ensure it is up to date with current IChemE requirements
- inform IChemE of any changes that may impact on the scheme
- register graduate trainees
- appoint mentors and register them with IChemE
- submit an ACTS Annual report at the end of each calendar year, listing contacts and scheme progression (please add a reminder to your diary)
- administer and forward communications to participating individuals
- arrange visit meetings with IChemE for the purpose of scheme re-accreditation.

## Trainees

All trainees are required to be in membership of IChemE as an Affiliate or Associate member. If graduates are Student/Affiliate members of IChemE and eligible to upgrade their membership, they should go online and apply to upgrade their membership to Associate Member.

Register all your trainees with IChemE by completing the Company trainee registration form or Annual report form and sending it to the ACTS administrator whenever a new graduate starts. IChemE will then:

- officially register the trainee on your company's ACT scheme
- assess each individual's academic qualifications for Chartered Chemical Engineer and advise on the most appropriate route to Chartered membership
- send a confirmation email to the trainee and forward a copy to you

If you are applying for accreditation for the first time, you can register graduate trainees who have joined the company within the previous four years.

We recommend keeping this information on a computer spreadsheet which can be amended as trainees join or complete the scheme. You can then use this as part of your annual IChemE report, submit it to IChemE when registering new trainees or to change IChemE records as necessary. Please check with your Data Registrar or IT department that the collection, storage and passing on of this information to IChemE is carried out in accordance with any relevant company rules, data protection or other legislation.

## Mentors

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

As scheme manager you must ensure that mentors understand their responsibilities when taking on this role and are prepared to commit adequate time to their graduate trainee(s) over the period they are on the scheme.

Since there is a need for the mentor to form a close personal relationship with the trainee, it is recommended that a mentor should not have the responsibility for more than three trainees at any one time. The mentor should not be the line manager of the graduate trainee.

The mentor will ideally be an experienced Chartered Chemical Engineer (a Member or Fellow of IChemE). If this is not possible an experienced chemical engineer can be used, but IChemE should be informed.

All new mentors must either complete a mentor registration form for submission to IChemE, or, if their membership number is included in the ACTS Company Trainee registration form, this can be used to register them as a mentor on your scheme. If this is the case, it is recommended that the mentor is advised to login to 'MyIChemE' to ensure their contact details are up to date.

For those not Chartered with IChemE additional information will be required such as details of relevant training and experience, qualifications and professional body membership.

If no suitable mentor can be identified within the company, a Chartered Chemical Engineer from another organisation may be used. If you require help in identifying such a person, please contact the ACTS administrator.

However carefully you match trainee to mentor, sometimes the relationship does not work. Be alert for this and if necessary, after consultation with both parties, identify a new mentor. Usually the trainee will retain the same mentor throughout the programme. If for any reason a change has to be made, such as a change of role or mismatched pairing, please notify IChemE as soon as possible.

It is essential that mentors are trained for their role within the operation of the ACTS and scheme managers should ensure this is provided. IChemE offer free introductory mentoring sessions for ACTS companies; contact the ACTS Administrator for more information. IChemE also run the following courses: “Mentoring for Chemical Engineers” and “Mentoring for Chemical Engineers Online Training Series”. Please see the link to [Courses](#) for further details and the current cost.

## Monitoring development

Trainees and mentors are strongly encouraged to use available toolkits to capture evidence of training and experience as they progress through ACTS. Various systems and tools are available such as IChemE’s Get Chartered web pages and online CPD tool (mycareerpath). The mentor and trainee should detect skills gaps and identify plans to acquire desired training and practise. A great way to track progress is for the trainee to submit an annual report to their mentor.

Trainees should use the scheme to ensure that they build a strong portfolio of initial training and experience, in a number of chemical engineering functional areas, to allow proper integration and demonstration as a competent, rounded practising chemical engineer.

They should look to include the following:

Evidence that they have the ability to provide chemical and general engineering knowledge to practical situations:

- Identifying or defining problem, opportunity or project
- Combining ideas and contributions from different people and disciplines
- Creativity and innovation (developing your own ideas to produce new solutions, new designs and technological approaches)
- Scientific or technical evaluation and optimisation (of product, process, equipment, method, project against the requirements you identified or the brief given)
- Planning and execution of projects (organising or performing technical work to implement or validate solutions, designs etc.)

Evidence that they are able to handle the wider implications of their work as a chemical engineer:

- Ability to handle health, hazard and safety aspects: to apply appropriate principles, good practice, meet legislative requirements etc.
- Ability to handle sustainability aspects: these could include environmental, public concern and other societal issues, recognition of risks etc.
- Ability to handle commercial and economic aspects.

Evidence of their interpersonal, leadership and communication skills in relation to:

- Managing interpersonal relationships
- Demonstrating leadership in a professional role
- Communicating ideas and plans by report writing and oral presentation

Evidence to show that they are committed to high standards of professional and ethical practice.

Evidence of their commitment to continuing professional development (CPD), including the methods and tools used to record their CPD activities.

Given the diversity of chemical engineering roles today a wide range of work areas can and will provide the necessary experience. This includes, but is most definitely not limited to:

- |  |                                   |
|--|-----------------------------------|
| ▪ Health, safety, risk aspects           | ▪ Plant & process design          |
| ▪ Plant operation                        | ▪ Teaching, managing, training    |
| ▪ R&D                                    | ▪ Project and contract management |
| ▪ Instrumentation & control              | ▪ Product & process development   |
| ▪ Technical evaluation                   | ▪ Simulations                     |
| ▪ Materials                              | ▪ Quality & assurance             |
| ▪ Sustainability & environmental aspects | ▪ Economic evaluation             |
| ▪ Legislation, regulation                |                                   |

Typically, ACT schemes cover four years of supported development. Trainees would not normally be expected to remain on the scheme beyond six years.

## Annual Update

At the end of each year, update IChemE with current scheme management contacts, registered trainees and their assigned mentors, by submitting an Annual Report to the ACTS administrator. This ensures that IChemE records are up to date and that your scheme is being appropriately managed according to accreditation guidance.

## Re-accreditation

All companies are accredited for a set period of time (normally two to four years); after this the company will apply for re-accreditation. Updated application and documentation will be required for this assessment. This takes the same format as the initial assessment but assessors will take into account your experience of running an accredited scheme.

During re-accreditation the assessors will verify whether a review of the scheme has taken place and what resulting changes, if any, have been made. They will check whether recommendations from previous IChemE visits have been implemented and speak to trainees and mentors to assess company and individual progression.

If your graduate training scheme is expected to change significantly during your accreditation period, you must notify IChemE as soon as possible. Changes may be due to alteration of scheme content or organisation, or even structural changes within the company. Once details are received and checked, you will be notified whether the changes affect your accredited status.

If for any reason you are unable to proceed with re-accreditation by the accreditation due date, you should inform the ACTS Administrator of the situation at the earliest opportunity.

## Support

If you experience any problems in operating your scheme or with the feedback given by assessors, please notify the ACTS administrator as soon as possible.

In the unlikely circumstance that you are not satisfied with the response, please put your concerns, in writing, to the Director (Qualifications) at IChemE. If your concern relates to an assessment decision this should be sent within 60 days of its receipt.

## Scheme manager check list

What do I do to get the scheme accredited?

For accreditation/re-accreditation send electronic copies of the following documents to IChemE's ACTS administrator:

ACTS Application and self-assessment form	
Your company's training manual/training documentation	
Clear mapping of the training and experience that the scheme provides in relation to IChemE's competence and commitment requirements	
Your company's corporate brochure/material (weblink)	
Selection of interim trainee reports (two to five examples of draft C&C reports and/or competency mapping logs)	
List of trainees currently on the scheme	
List of mentors currently supporting the scheme	
Location map of your site/offices	
Trainee registration form for all NEW trainees on the scheme	
Mentor registration forms for all NEW mentors supporting the scheme	
Accreditation fee - check the current fees with IChemE's ACTS administrator	

Once your scheme has received accreditation you will be responsible for ensuring the scheme runs smoothly and maintaining contact with IChemE.

As scheme administrator we suggest you review the following on a continuous basis:

<b>Annually:</b>	<b>Last reviewed date</b>
Review training manual/documentation annually ensuring any changes do not impact on accreditation status	
Ensure information in relation to the scheme is up to date on the <a href="#">ACTS companies page</a> of the IChemE website	
Submit annual review form at year end to IChemE (add reminder to diary)	
Arrange Get Chartered/mentoring sessions – contact your Regional Support Executive to arrange a date	

<b>Regularly:</b>	
Register NEW chemical engineering trainees by completing the Company registration form or annual report form and sending it to IChemE's ACTS administrator	
Register NEW mentors by completing the Company registration form or annual report form (including mentor's membership number) and sending it to IChemE's ACTS administrator	
Track submission of internal trainee reports to mentors	
Maintain records of trainees and mentors on the scheme and their progress	
Receive communications from IChemE and circulate to all concerned parties	
Remain updated with IChemE guidelines and requirements	

### Contacts

ACTS administrator: [acts@icheme.org](mailto:acts@icheme.org)  
 Courses: [courses@icheme.org](mailto:courses@icheme.org)

Membership: [members@icheme.org](mailto:members@icheme.org)