

THE CIBSE TRAINING & DEVELOPMENT MANUAL INFORMATION FOR TRAINEES

Leading to LCIBSE EngTech, ACIBSE IEng, MCIBSE IEng and MCIBSE CEng



SECTION 1: INTRODUCTION TO TRAINING AND DEVELOPMENT (T&D)

1.1 Why Join Your Company's T&D Scheme?

Starting the journey towards membership and registration can be a daunting task whether you are a new graduate embarking on your career or an experienced engineer wanting to take the next step in your professional development.

Joining a T&D scheme gives you the benefit of a structured support system and clear process to follow. It allows you to gather evidence throughout your career, and rather than struggling to remember projects you worked on years ago, you will have documented examples to assist you in completing your Engineering Practice Report. You will also have regular contact with a mentor who has been through the process before and should have a good understanding of the competence criteria.

Applicants who have been part of a T&D scheme usually find that they are ready to apply for membership at an earlier date, and that the process of applying is easier for them.

1.2 Why Gain Professional Registration?

Gaining professional registration with the Engineering Council and corporate membership of CIBSE has many benefits for both you and your employer. Registration sets you apart from other engineers who are not registered – you may find it easier to gain a promotion or that your pay compares favourably with non-registered peers. It allows you to prove your knowledge, understanding and competence in the Building Services Engineering industry, and demonstrate your commitment to professional standards. Your employer has the assurance of knowing that their employees have had their competence assessed, their credentials verified and their commitment to continuing professional development established.

1.3 What is Expected of You on the Scheme?

You will be expected to:

- Meet with your mentor at least once every three months
- Regularly update your Objective Achieved Reports (see page x) and bring them to each meeting
- Submit an Annual Report (see page x) to your mentor at the end of each year
- Be proactive and actively seek out opportunities to expand on your learning and gain more experience

What you get out of the scheme will depend upon what you put into it, and the most successful trainees are those who are motivated, enthusiastic and proactive in regularly meeting with their mentors and completing the documentation. You will be expected to arrange the quarterly meetings, and to have updated your documentation in time for each one. Learning to get the most from your time on the T&D scheme is vital if you want to give yourself the best chance to succeed and reach your professional goals.



1.4 Overview of the Process

JOINING THE SCHEME

Choose your target grade and find a suitable mentor

REGISTRATION

ALL TRAINEES must register on the scheme with CIBSE.

Submit T&D Plan Registration Form

Apply for CIBSE Graduate or Student membership if not already done so.

THROUGHOUT THE PROGRAMME

Objective Achieved Reports (OARs) should be regularly updated to track your progress against the relevant competences.



QUARTERLY

Meetings with the mentor should take place at least quarterly. Updated OARs should be reviewed and mentor feedback recorded.



ANNUALLY

Annual Report and summary of your progress are submitted to your mentor.



AT THE END OF THE AGREED PERIOD OF T&D

Submit a final report in the form of a draft Engineering Practice Report to CIBSE for review by the T&D Panel.



ON COMPLETION OF ALL OBJECTIVES

Submit your application for Corporate Membership (MCIBSE CEng, MCIBSE IEng, ACIBSE IEng or LCIBSE EngTech) to CIBSE.

NB: Membership Fact Sheets L20, A20, IM20 and M20 provide application guidance towards LCIBSE EngTech, ACIBSE IEng, MCIBSE IEng and MCIBSE CEng respectively.



SECTION 2: WHICH GRADE SHOULD I BE AIMING FOR?

The first step is to decide what your target grade of membership is. This will be the grade that your training will be tailored around and is based upon both your academic qualifications and your work experience.

Licentiate member of CIBSE (LCIBSE) with Engineering Technician registration (EngTech) Licentiates and Engineering Technicians apply proven techniques and procedures to the solution of practical engineering problems. You are required to apply safe systems of work. You will need to be able to provide evidence towards each of the LCIBSE EngTech competence criteria.

2.1 Exemplifying Qualifications for EngTech Registration

- An approved level 3 NVQ or SVQ in an engineering discipline.
- An approved qualification at level 6 in the Scottish Qualifications and Credit Framework.
- The City & Guilds Higher Professional Diploma in engineering.
- An Advanced/Modern Apprenticeship or other work based learning programme approved by a licensed professional engineering institution.
- International qualification recognised by the Dublin Accord

If you do not hold the correct qualifications, you can still apply for LCIBSE EngTech and will need to attend an interview.

For more information please see www.cibse.org/licentiate

Associate of CIBSE (ACIBSE) with Incorporated Engineer registration (IEng) Eligibility for ACIBSE requires you to be engaged in technical and commercial leadership and possess effective interpersonal skills. You will exhibit a personal and professional commitment to society, to your profession, and to the environment. You will need to be able to provide evidence towards each of the ACIBSE IEng competence criteria.

Exemplifying qualifications for IEng Registration

- An accredited BSc, BSc (Hons), BEng or BEng (Hons)
- An accredited HNC (8 level H units) or HND (for programmes started before Sept 1999)
- An HNC (8 level H units) or HND started after 1999 (but before Sept 2010 for an HNC)
- An NVQ4 or SVQ4 plus appropriate further learning to degree level.
- International qualifications recognised under the Sydney Accord or FEANI Index.
- Individually assessed qualifications in similar areas.

For more information, please see www.cibse.org/associate

2.2 Member of CIBSE with Incorporated Engineer registration (MCIBSE IEng) or Chartered Engineer registration (MCIBSE CEng)

Members of CIBSE develop solutions to engineering problems using new or existing technologies, through innovation, creativity and change and/or may have technical accountability for complex systems with significant levels of risk. You will need to be able to provide evidence towards each of the MCIBSE IEng competence criteria or MCIBSE CEng competence criteria. The MCIBSE IEng route was established for those that are working at the level of MCIBSE but only hold qualifications accredited for IEng.



Exemplifying qualifications for CEng Registration:

- An accredited integrated MEng degree.
- An accredited BEng (Hons), plus either an accredited MSc or Engineering Doctorate (EngD)
- An accredited BEng (Hons) started prior to Sept 1999.
- International qualifications recognised under the Washington Accord or FEANI Index
- Individually assessed qualifications in similar areas.

For more information, please see www.cibse.org/member

To confirm if your qualifications are accredited, please contact membership@cibse.org

2.3 Trainees without Accredited Qualifications

If you don't hold exemplifying qualifications for the grade of membership and registration you would like to apply for, don't panic! There is always a route to membership for you, and you still have several options:

Qualification Assessment

If you do hold higher education qualifications but they are not accredited, you will need to submit your qualifications for assessment by our Individual Case Procedure (ICP) Panel.

Assessment for IEng

If you hold an un-accredited Bachelor's degree in an Engineering discipline, it can be assessed for IEng registration. If successfully assessed at this level, you would be eligible to apply for ACIBSE IEng or MCIBSE IEng.

Assessment for CEng

If you have any of the following, your qualifications can be assessed for CEng registration:

- Unaccredited BEng (Hons) + unaccredited MSc or EngD
- Unaccredited integrated MEng
- Unaccredited BEng (Hons) + accredited MSc or EngD
- Accredited BEng (Hons) + un-accredited MSc or EngD

If successfully assessed at this level, you would be eligible to apply for MCIBSE CEng. Details of this process can be found at www.cibse.org/qa

2.4 The Technical Report Route

If you do not have any relevant qualifications, or your qualifications do not meet the requirements for your desired level of registration, you can still apply for registration by following our Technical Report Route.

The Technical Report Route requires you to first obtain your desired grade of CIBSE membership (ACIBSE or MCIBSE). You would then write a Technical Report to demonstrate that you have the same level of technical understanding as someone educated to Bachelor's level (for IEng) or Master's level (for CEng).

See www.cibse.org/trr for further information

2.5 Help for Applicants

If you're still not sure which grade is best for you, you may benefit from attending one of our webinars or membership briefings. These cover areas such as qualification requirements, the application process and how to start your engineering practice report.

For more information including dates, locations and how to book, visit www.cibse.org/briefings



SECTION 3: JOINING THE SCHEME

3.1 Find a Mentor

When you join your company's T&D scheme, the first step will be for a mentor to be assigned to you. Your mentor must be registered at the level you wish to apply for or higher. For example: your mentor must be an MCIBSE or Chartered Engineer if you are progressing towards CEng registration, or an ACIBSE or Incorporated Engineer or higher level if you are progressing towards IEng registration. Your mentor may hold Engineering Council registration through a different institution, as long as it is at the right level.

Your mentor is there to support you through your time on the scheme, and act as a sounding board for any concerns you may have. You should be meeting with them formally every three months to review your progress and receive feedback on your documentation. However, if you need to discuss something with your mentor outside of these quarterly meetings don't be afraid to get in touch with them – they are there to help you.

3.2 CIBSE Membership

You must already hold CIBSE membership at student, graduate or affiliate grade, and if not, an application for membership must be submitted along with your T&D registration form. The company you work for must have a scheme that has already been approved or is seeking approval.

3.3 T&D Registration

You should submit a <u>T&D Registration form</u> to CIBSE ideally **within three months of starting** a programme, as it registers you as a T&D trainee with CIBSE.



SECTION 4: Building up your T&D Portfolio

Your T&D Portfolio will contain the following:

- Objective Achieved Reports
- Annual Reports
- Written mentor feedback



Sample forms for your T&D portfolio are provided at www.cibse.org/t-d

In order to complete the documentation necessary to build your T&D portfolio, you will need to become familiar with the competence criteria for your desired grade. Take some time to read through the competence criteria, and for each one considers what kind of work might contribute to the necessary experience.

4.1 How to Complete the Objective Achieved Reports (OARs)

You should complete one OAR for each competence criteria you are required to meet. Identify the competence at the top of the form, and then fill in the following sections:

Practical Experience

Practical experience is likely to be the lengthiest section. Your entries here will record the various activities such as tasks, projects, meetings, etc., in which you have acquired the knowledge, experience or ability the competence specifies.

Record data about:

- the event (date, place, purpose, people involved) and your role in it
- Your analysis of how, and what, you learned. Do not be afraid to include negative experiences, such
 as a client meeting involving an argument, which enabled you to learn from your own mistakes or
 mistakes made by others

Where possible, use key words which refer back to the range statement or the competence itself. When reporting on the Interpersonal Skills competences (Section D), some examples from outside work may be appropriate.



Remember, it is not sufficient to record **what** you did – in each case, you must say **what you learned** and **how it links to the Competence Objective**.

Structured Learning

The structured learning section should record any courses, conferences, seminars or similar, giving the dates and locations, as well as the title and summary of content. (Course materials provided and your post-course evaluation will help you to focus on how well the course achieved its learning aims in your case).

Private Study

Under private study, note your reading from books, journals or elsewhere, relevant to the competence. You should also include any relevant research you have done. Again you should include an evaluation of the usefulness to you of what you have read.

Observations

The observations section asks you as trainee to take stock of your progress: it is recommended that you make an entry here annually.



The OAR forms have been designed to ensure that your activities are not only recorded but are reflected upon so that the process by which new skills and knowledge are acquired becomes a conscious one. In this way, aspiring building services engineers become reflective professionals, laying the foundations for future learning.

OARs should be considered live documents, to which further information can be added right up to the point of your membership application. Remember not to only use examples from your favourite projects – you may have gained valuable experience elsewhere.

Your OARs should be reviewed by your mentor at the quarterly meetings. Your mentor should provide written feedback which should be stored either in hard copy or electronically.

4.2 How to Complete Annual Reports

At the end of each year of T&D, an Annual Report must be submitted to your mentor to enable them to monitor your progress. Combine the best examples from your OARs so far and include:

- activities since submitting your T&D registration or the last annual report: nature of employment, work undertaken, training events, visits, study, reading, Competence Objectives addressed;
- your own evaluation of these activities, for example, strengths and weaknesses identified;
- activities envisaged for the coming year, for example, work in prospect, training/ visits/research planned, Competence Objectives to be tackled;
- your own observations on progress, mentioning opportunities and difficulties you foresee;
- general comments from your mentor on 'work in progress', reporting any particular difficulties
 encountered and/or indicating the future direction the two of you are planning towards completion of
 the Objectives.
 - The more effort you put into your OARs and annual reports, the easier you will find writing your Engineering Practice Report

It will help if you:

- become familiar with the Competence Objectives you are working towards;
- keep your own notes, e.g. a daily or weekly record of what you did at work, noting when links
 occur to you between your activity and one or more of the Objectives. This record is not to be
 submitted, but to be used as a reminder when you are completing your OARs;
- update your OAR forms at least once a month;
- schedule regular meetings with your mentor specifically to discuss your T&D activities;
- take the documents to every appraisal, progress or career development meeting with your employer.



SECTION 5: Applying for Corporate Membership

5.1 Final Report and Application for Membership

At the conclusion of your T&D period, you will need to consider, and discuss with your mentor, when you might be ready to apply for membership and registration. If you and your mentor both feel that you are ready to progress, at this stage you should then write your final report.

Please note that your final report will form the basis of an Engineering Practice Report (or Work Experience Report for LCIBSE EngTech applicants), which is a significant part of the application. Experience has shown that a T&D trainee does not have to carry out a major re-write of their final report to form their Engineering Practice Report. The intention is for you to record the most appropriate examples of your career episodes. This will allow you to consider all aspects of your careers/experience and not just the projects you have been involved in.

The final report can be submitted to CIBSE and will be reviewed by the T&D panel, giving you a valuable opportunity to get feedback from people who work with the institution and understand what we are looking for. The T&D panel will identify areas that are strong, and any where you may need further work before submitting your application for corporate membership and registration.

For ACIBSE IEng, MCIBSE IEng and MCIBSE CEng applicants based in the UK, there are two closing dates a year: 1st February and 1st August. Overseas applicants, or those applying for LCIBSE EngTech, may apply at any time.

CIBSE are here to help and support you on your journey, so if you do have any questions don't hesitate to get in touch with us at membership@cibse.org or on **02087723650**.



SECTION 6: APPENDICES

Appendix 1: Useful Links

CIBSE T&D page

CIBSE Member Grade

CIBSE Associate Grade

CIBSE Licentiate Grade

CIBSE Accredited Courses

CIBSE Closing Date for Applications

CIBSE CPD



Appendix 2: Glossary of Terms

ACIBSE	Associate of the Chartered Institution of Building Services Engineers
Annual Report	Annual Interim Overview summarising progress. To be submitted with OARs to
	the Mentor
approved programme / scheme	A company-based T&D programme that CIBSE approves for groups of trainees
CEng	Chartered Engineer, one of the three Engineering Council UK Registration grades
CIBSE	Chartered Institution of Building Services Engineers
CPD	Continuing Professional Development
EngC	Engineering Council
Engineering Council	the overarching organisation which links the specialist engineering institutions
EngTech	Engineering Technician, one of the three Engineering Council Registration grades
Engineering Practice Report (EPR)	Engineering Practice Report to be submitted with MCIBSE or ACIBSE application and Development Action Plan
experience	in the context of the CIBSE T&D objectives, having been involved in a particular
further learning	activity, and having knowledge of it supplementary study which builds on a lower qualification for the purpose of reaching the level specified by EngC for registration as CEng, IEng or
IEng	Incorporated Engineer, one of the three Engineering Council UK Registration grades
LCIBSE	Licentiate of the Chartered Institution of Building Services Engineers
Mentor	The mentor should be a senior engineer not working directly with the trainee on
MCIBSE	a day to day basis Member of the Chartered Institution of Building Services Engineers
OAR	Objective Achieved Report
PEI	Professional Engineering Institution. An institution licenced by the Engineering Council in the UK.
PRI	Professional Review Interview, the final stage leading to Registration as a professional engineer
Register	the list kept by the Engineering Council UK, of Chartered and Incorporated Engineers, and Engineering Technicians
T&D Registration Form	Submitted at the commencement of a T&D programme by trainees following an
UK-SPEC	approved scheme The Engineering Council's UK Standard for Professional Engineering Competence 3 rd edition, last updated in 2014.
Work Experience Report (WER)	Work Experience Report to be submitted with LCIBSE application.