



Introduction

Through the Chartered Institution of Water and Environmental Management (CIWEM) technicians working in water and environmental fields can apply for a wide variety of technical qualifications with CIWEM and associated professional bodies.

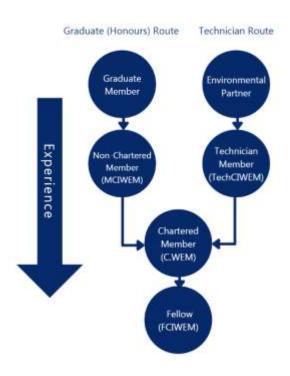
This document is designed to assist you in your application as both a Technician Member of CIWEM (TechCIWEM) and any additional registrations.

Why apply for Professional Registrations

Professional registration is a way to set the standard and demonstrate to the world your skill and professional standard in the work that you do. Technicians are vital to the water and environmental industry and at CIWEM we recognise this.

The aim is to have a technician community that can help and support each other sharing the best practices and also to act as a resource for the technicians in the field that support the water and environmental industries. This ranges from knowledge sharing between technician members to support in developing your career.

As your career develops there is a career route that can take someone who registers as technician all the way to Fellowship which is the highest level of membership that CIWEM offers.



For a TechCIWEM applicant we would normally expect at least 3-5 years of experience. For a technician to move onto Chartered Membership we would expect applicants to have at least 10 years of experience. However, this is governed by an applicant's abilities to demonstrate the mandatory competencies which will be explained later on in this document for the Technician



Level. For those applying for Chartered Membership there is guidance available through CIWEM on the experiential route.

If applicants have less than 3 years of experience, however they would like to showcase their interest in the water and environmental sector, they could apply to became Environmental Partner members.

What can I apply for?

Through CIWEM, alongside your TechCIWEM application you can also registration with the Engineering Council.

Engineering Technician (EngTech) – This is a professional registration for technicians working in engineering and is offered by CIWEM under licence from the Engineering Council. This registration is for people who are working in an engineering field, are able to operate safe systems of work and can show evidence of their contribution to either the design, development, manufacture, commissioning, decommissioning, operation or maintenance of products, equipment, processes or services. The Engineering Council have written their own guidance document for Engineering Technicians (and other registrations) which is called UKSPEC, the most current version of this can be downloaded from the Engineering Council website.

Your application

To gain their registration, individuals have been judged by their peers to demonstrate knowledge and understanding of the environment and sustainable management together with their personal commitment to maintaining the required levels of professionalism and their own competence through continued professional development.

So, what do you need to do?

Applying for professional registration is not simple and in reality, you need to want to do it before starting the journey to professional registration. There are steps that you can follow to apply for registration as a technician. The order that these steps are in are not obligatory and a checklist has been provided with these guidelines to make sure that you send in all of the paperwork that is needed.

Step 1 – Get a mentor – Mentors will help you through the process, have an open and honest discussion with what you could apply for and also help you through the application process. They will give you honest feedback. You will need two sponsors at some point in your application and normally one of your sponsors is your mentor.

Step 2 – Write a career report - This just needs to demonstrate your education qualifications (e.g. City and Guilds certificates) and give a clear record of your experience to date (1,000 word limit). This will help both you and your mentor (if you've chosen to go that route) to decide on what registrations to go for.



Step 3 – Continuing Professional Development (CPD) – This is an important part of being a professional and everyone has to do it. Typically, everyone must demonstrate what they do to develop themselves. For registration the professional organisations want to see two things:

- 1. What you have done to develop yourself professionally; and
- 2. What you plan to do in the future. This is also called a career development plan.

Later in this document we give you some examples of what this should look like. Typically, you should submit three years of CPD with an average of 30 hours per year. This sounds a lot but, as you'll find out in the CPD section of this guide, you probably do a lot as part of your day-to-day work.

Step 4 – Competency Report – This is the main document that you have to submit which has a word limit of 4,000 words and it's basically a report that demonstrates your competencies in the key areas. For each of the registrations there are some key competencies that you need to demonstrate. If you are applying for multiple registrations, you should be able to submit one good report which covers these as there will be some common key competencies across registrations.

Step 5 – Application Form – This is relatively simple and is an application form. This will ask you who you are and some professional details. It will also require you to provide a number of things including:

- Your professional details.
- Copies of your certificates signed by one of your application sponsors.
- Two sponsors of your application (at least one of whom should be a member of CIWEM).
- Your CPD attainment report.
- Your career development plan.
- Your competency reports.

Career report

A career report is not a CV but is something similar, it should be a maximum of 1,000 words and should detail.

- **Education and training** What, if any, apprenticeship you have completed and what additional training you have done (e.g. City and Guilds, Health and Safety, Internal Courses). Ideally these should be backed up by a certificate or an attested training record provided by your organisation.
- **Experience** Where have you worked and what have you done as part of the jobs that you have been working in. What skills have you developed whilst performing these jobs.
- **Anything else** This is an opportunity to add to your application and can include any voluntary work that you do during your normal life. It doesn't have to be professional but all these sorts of things demonstrate who you are.



Demonstrating your competence

This is important and is the bulk of your application. Each registration has different competencies that you have to demonstrate but a lot of the competencies are common too. For example, all the different registrations require you to work safely, ethically and demonstrate a professional way of working. You must ensure you are specific in your responses for each registration for which you are applying.

Most of the different competencies are split into areas of competence (typically A-E). Table 1 gives you the categories and competencies for all of the registrations that you can get through CIWEM at a technician level.

There are further details of the Water and Environmental Technician (TechCIWEM) qualification in Appendix 1 and the most up to date information for the other registrations are available at the various organisational websites and we advise these are reviewed alongside your application.

Engineering Council – Further details are available in the most up to date version of UKSPEC. The engineering council website it available at Engineering Council (engc.org.uk))



Mandatory Competences TechCIWEM and EngTech

The table below provides detail of the TechCIWEM and EngTech Mandatory Competences. Further guidance on the TechCIWEM Mandatory Competences can be found in Appendix 2, guidance for EngTech can be found in UKSPEC, please find this online here. All candidates must provide statements against each competence for each registration that is being applied for, duplication across registrations is not recommended.

A Competencies – Sector/Industry knowledge and understanding

Category	TechCIWEM	EngTech
A	Application of knowledge and understanding in water and environmental fields	Engineering Technicians shall use engineering knowledge and understanding to apply technical and practical skills. The application shall demonstrate they:
A1	Have knowledge of your industry and how it fits into both the water and environmental industry and the wider global environment	Review and select appropriate techniques, procedures, and methods to undertake tasks
A2	Demonstrate how you apply your water and environmental knowledge in your day-to-day job	Use appropriate scientific, technical or engineering principles
A3	Demonstrate knowledge of the main issues affecting your part of the water and environment sector	-



B Competencies – Working methods

Category	TechCIWEM	EngTech	
В	How you work from a water and environmental perspective	Engineering Technicians shall contribute to the design, development, manufacture, construction, commissioning, decommissioning, operation or maintenance of products, equipment, processes, systems or services. The application shall demonstrate they:	
B1	Demonstrate how you have worked to solve a water or environmental problem within your day-to-day role	Identify problems and apply appropriate methods to identify causes and achieve satisfactory solutions	
B2	Demonstrate how you have worked both individually taking responsibility for your own work and as part of a team	Identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety, security and environmental impact	



C Competencies – Safe and Effective working practices

Category	TechCIWEM	EngTech	
С	Safe and effective working practices	Engineering Technicians shall accept and exercise personal responsibility. The applicant shall demonstrate that they:	
C1	Work safely by ensuring you work in a safe manner protecting yourself and others	Work reliably and effectively without close supervision, to the appropriate code of practice	
C2	Work sustainably by ensuring that everything you do supports good environmental practice	Accept responsibility for work of themselves or others	
С3	Ensure best practice and maintain a good standard of work	Accept, allocate and supervise technical and other tasks	



D Competencies – Ability to communicate and acting professionally

Category	TechCIWEM	EngTech	
D	Communication, professionalism and ethics	Engineering Technicians shall use effective communication and interpersonal skills. The applicant shall demonstrate that they:	
D1	How you communicate	Communicate effectively with others, at all levels, in English	
D2	Work professionally, ethically and comply with the codes of conduct	Work effectively with colleagues, clients, suppliers or the public	
D£		Demonstrate personal and social skills and awareness of diversity and inclusion issues	



E Competencies – Professionalism, codes of conduct and professional development

Category	TechCIWEM	EngTech
E	Make a commitment to the Water and Environment profession	Engineering Technicians shall demonstrate commitment to an appropriate code of professional conduct, recognising obligations to society, the profession and the environment. The applicant shall demonstrate that they:
E1	Develop yourself in a structured manner	Understand and comply with relevant codes of conduct
E2	Current and/or future commitment to CIWEM	Understand the safety implications of their role and apply safe systems of work
E3	-	Understand the principles of sustainable development and apply them in their work
E4	-	Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice
E5		Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner



Continuing Professional Development (CPD) – Further Guidance

Continuing professional development (CPD) is one of the cornerstones of being professionally registered. It is part of the competency report and submitting a good CPD submission helps to prove your competency.

Once you are professionally registered you are required to do roughly 30 hours of professional development each year to ensure that you are keeping current within your industry (90 hours over a rolling 3-year period). This sounds a lot but in reality, it's probably something that you do as part of your day-to-day job. As part of your submission you are required to submit two things.

- 1. The first is what CPD you have already done in the past three years. It should come to an average of 30 hours per year (i.e., a total of 90 hours) as a minimum (it's fine to submit more) and should show:
 - What you did (e.g., confined space training refresher).
 - What it was (e.g., a course).
 - How long it was (e.g., 8 hours)
 - Why you did it (e.g., keeping up with professional practice)
 - What's next (e.g., putting the training into practice)

This is the modern method of recording CPD and is the method that you should use moving forward when, hopefully, you are a registered technician.

2. The second is a professional development plan (PDP) and is basically how you plan to develop moving forward. It is aspirational and makes you think about where you want to go. A good PDP will help you in your career and is something that you should be discussing with your line manager as part of your performance development reviews (PDRs). As an example, some PDPs concentrate on different development areas such as Technical Development and Managerial Development which could be in your plan. It helps to reflect on where your current areas of weaknesses or development needs are and present these in your career development plan alongside how these will be addressed. Include in here any training that you need to do your job as well.

This is an area that a lot of people struggle with in their professional and more guidance on both Continuing Professional Development and Professional Development Plans have been provided in Appendix 1. You can also download the CIWEM PDP Template from the CPD area of MyCIWEM.

Help and Support

We're with you every step of your application and throughout your membership, just call +44(0)207 8313110 or email membership@ciwem.org and someone will be delighted to help.



Appendix 1 – Continuing Professional Development and Career Development Plans

This appendix gives some examples of both continuing professional development submissions and career development plans.

Continuing Professional Development

There are numerous ways of recording continuing professional development but remember that it should be done in the modern format which recognises what you have done but just as importantly why you have done it and what you are going to do about it. The table below is a simple CPD submission.

Date	Time (hours)	Туре	What
January 2020	8	Course	Confined space refresher
This course was done as part of my professional role I have to enter confined spaces and issue permits to work for contractors so that they can do their jobs. So, I did this refresher course to remain up to date professionally			
March 2020	8	Course	Permitting training
As part of my day-to-day job I have to issue permits to contractors to ensure that they can do their jobs. This training taught me how to issue a permit to ensure that the contractors are operating a safe system of work			
August 2020	16	Course	First-Aid Training
Working in the wastewater industry I know that I work in potentially hazardous environments. I undertook first-aid training to ensure both my own safety at work and the safety of others. Since undertaking the training I have acted as a first-aider for my organisation			
September 2020	8	Meeting	Safety Stand down day
I attended a safety stand down day as part of my normal day-to-day job and learnt about various situations that have been experienced by others throughout this year. This enabled me to learn about current best practice with decking which is something that will help me pay more attention and highlight areas of potential risk at the works that I visit on a daily basis.			
2020	16	Personal reading	Personal reading and development
Throughout 2020 I identified areas where I wanted to develop from a technical point of view. I felt that I had a technical weakness in activated sludge plant treatment and so I worked with my area process scientist to develop my skills in this area.			
Total CPD for 2020 56 hours			



This is a simple, made-up version of a continuing professional development submission however there are numerous examples of CPD that could be used including things that have been learnt at team meetings, toolbox talks or talking to suppliers to learn the most up to date techniques that are being used.

A random audit of CPD is taken each year and so you might need to submit your CPD at some point. This is normal part of being a professional. When an auditor is looking at a applicant's CPD (either as part of a registration application or as part of an audit) it has to satisfy certain question. Example of these questions are:

- 1. A registrant must maintain a continuous, up-to-date and accurate record of their CPD activities,
- 2. A registrant must demonstrate that their CPD activities are a mixture of learning activities relevant to their current or future practice,
- 3. A registrant must seek to ensure that their CPD has benefitted the quality of their practice,
- 4. A registrant must seek to ensure that their CPD has benefited the users of their work (employee, customer, student, etc.).

If you can answer these questions in your CPD submission, then your CPD is going to be up to specification.

Professional Development Plan

I can improve my handling of these situations

PDP is about what you have done where a career development plan is what you are planning to do. It is normally done on a year-to-year basis but can be on a much larger timescale. For your submission you don't have to put a timescale on it but its sensible to do it for the next year or two. It also sensible to split it up into categories such as technical development, health and safety.

Complete by	Development Category	Development Activity
Within the next year	Technical	Knowledge of Sustainable operation
I've recognised, through my CPD, that my knowledge of sustainable systems needs to be developed further. I've identified a course in sustainable operation that I plan to undertake within the next year. I hope this will improve the quality of my practice		
Within the next year	Technical	Keeping up to date with my professional qualifications
Within the next year my qualifications for both first-aid and confined space are running out. These will need to be renewed within the next year		
Within the next six months	Management	How to manage conflict
I've had several occasions in the past six months where I have been in conflict for one reason or another. I have felt uncomfortable in these situations and realised it's an area of weakness. I plan to undertake a course to see if		



This is an example of a career development plan and reflection of your PDP should identify areas which can feed into your career development plan and vice versa. The CPD/PDP relationship is an example of a continuous improvement system which has you at its centre.

You can also find the CIWEM PDP Template in the CPD area of MyCIWEM.



Appendix 2 – TechCIWEM Competency Guidelines

Mandatory competencies provide the opportunity to show the formal and informal skills and qualities that you have developed throughout your career. They demonstrate your ability to work independently and as part of a team, to take initiative and work effectively and apply yourself to a variety of situations

Please provide a response to each of the Technician Mandatory Competencies in the relevant section of your online application. The maximum number of words for the CIWEM report is 4000 words. The distribution between individual competencies is at your discretion to best demonstrate your experience. However, please give due consideration to all competencies in your submission, no competence can be left incomplete.

Also, please note that appendices, references and footnotes will not be accepted.

You need to use examples from your practical experience to demonstrate the appropriate level of achievement for each competence. Images and diagrams can be included to support responses in the 'CV and other supporting documentation' section of the online application.

Your responses need to be written in the **first person** and identify *your* role and responsibilities, what *you* have done and what *you* have learned. If you were part of a team you need to identify what you personally did, describing your contribution to the overall aim of the specific project or piece of work.

You normally need to provide two examples that demonstrate the appropriate level of attainment for each mandatory competence. The competence report is your opportunity to demonstrate that you are working at a level appropriate to the registration/s for which you are applying.

Guidance on completing each individual TechCIWEM competence is given below.

Please note that you do not have to address all of the questions under each competence, they are there to help you think about your responses to the Mandatory Competence.



A Competences – existing and emerging factors influencing environmental and water issues

A1. Have knowledge of your industry and how it fits into both the water and environmental industries and the wider global environment

The water and environmental industry is one part of the wider environment and in this competence you should demonstrate what your knowledge is of the wider global environment and how your industry fits in.

- What are the major environmental issues that affect your industry?
- How are these issues being managed and what is your contribution?
- What would you do about them if you had the option

A2. Demonstrate how you apply your water and environmental knowledge in your day-to-day job

On a day-to-day basis you deal with water and environmental issues. This competence is all about how you use your knowledge to anticipate problems and deal with them before they happen or manage them so their impact is minimised in a sustainable fashion. For instance

- how you are aware of the challenges in wastewater treatment plant operation, current weaknesses in the treatment caused by external factors and how you manage these factors.
- how you are aware of the importance of waste management and how you manage waste management procedures.
- What knowledge do you require to do your day-to-day job?
- When you need help with these issues how do you get it?
- How do you influence situations in your industry to get the best environmental result?
- How have you adopted an innovation or technology to help you in your day-to-day job?
- Awareness of environmental risk and how you reduce this in your work, how you respond to environmental incidents?

A3. Demonstrate knowledge of the main issues affecting your part of the water and environment sector

What are the issues that affect the water and environmental industries? How do these issues affect the industry and what is being done about it? In this competence you have to demonstrate that you are aware of the major issues that affect the water and environmental industries and how they are affected and how they affect the wider global environment.

- What are the main issues that are affecting your industry?
- How are these managed? How is your industry regulated?
- How do you use your knowledge to affect the major issues affecting your role in the water industry?



B Competencies – Working methods

B1. Demonstrate how you have worked to solve a water or environmental problem within your day-to-day role

In this competence you have to give an example of a water or environmental problem within your day-to-day role that you have addressed.

- Explain what the problem was and why it was a problem
- Explain what you did about it and where the method of what you did came from or was based on?
- What other solutions did you think of and how did you come to a decision on the best way to manage the solution?
- Did this solution lead to a change in the way things were done in the business?

B2. Demonstrate how you have worked both individually taking responsibility for your own work and as part of a team

In this competence you have a chance to demonstrate how you take responsibility for your own work and how you work as part of (a) your wider team and (b) the wider business. In this competence you need to demonstrate:

- How you take responsibility for your own work?
- How you take responsibility for the work of others?
- How you have used the support of your own team or business to resolve a problem?
- How you have contributed to the operation of your business to solve a water or environmental problem?
- How have you contributed to the project delivery that addresses a water or environmental issue?
- How you have contributed to the solution?
- What mitigating actions did you put in place to minimise risk?
- Have you carried out an audit or post project appraisal?
- Did the solution achieve what was expected of it?
- If the solution did not achieve what was expected of it what corrective action did you take?

C Competencies – Safe and Effective Working Practices

C1. Work safely by ensuring you work in a safe manner protecting yourself and others

In this competence you are expected to demonstrate your knowledge of health, safety and welfare and safe systems of work and demonstrate how you work safely and ensure that others do too. You should be able to demonstrate:

- Your knowledge of health and safety legislation
- How you ensure that all of the work that you do is done safely



- How you ensure that the work of others is safe
- How you have challenged unsafe working practices
- How you have ensured that issues that present potential risk are addressed and resolved
- How you apply a safe system of work

C2. Work sustainably by ensuring that everything you do supports good environmental practice

In this competence you have to demonstrate your knowledge of sustainability and how it affects your day-to-day job and how you have influenced operation in a sustainable way.

- What impact does your work have on the environment?
- What measures have you taken to minimise negative impacts?
- What environmental improvements have you identified and delivered?
- How do you define sustainability?
- How do you encourage others to adopt a sustainable approach?
- How do you implement sustainability principles in your personal life?
- What examples of sustainability have you incorporated into a project?
- What actions do you take to minimise impact on the environment?
- How do you balance economic, environmental and societal factors?
- How do the outputs of your work contribute to sustainability?
- How do you promote sustainable solutions?

C3. Ensure best practice and maintain a good standard of work

In this competence you have to demonstrate how you maintain the quality of your work and the work of others and demonstrate how you follow best practice.

- What is your awareness of quality management systems and continuous improvement?
- How have you contributed to the continuous improvement in your organisation?
- How have you ensured that your organisation is following best practices
- How you have worked with quality management systems and systems of work
- How you have challenged these systems to ensure that best practice is followed
- How you have ensured that there is sufficient time to do any job effectively and in a timely fashion.
- How have you ensured that things are operating correctly?

D Competencies – communication and professional ethics

D1. How you communicate

You will need to demonstrate that you can communicate effectively with a wide range of different stakeholders in different ways. For example, how, if you are in a customer-facing role, you speak to them to convey the key messages or how you communicate with your peers to ensure that the job gets done. Examples of effective communication could include:

- Give an example of how you communicate with different stakeholders at different levels including your peers, your wider team, the wider business and/or the public or customer
- Have you ever presented at either an internal and/or external meeting or event?
- How do you communicate the results of your work? How do you get the message across?



D2. Work professionally, ethically and comply with relevant codes of conduct

You will need to demonstrate that you understand CIWEM's, your organisation's and other relevant Codes of Conduct and ensure that you are complying with the required standards and promoting professionalism. You will need to demonstrate how you adhere to all relevant legislation and regulatory frameworks (e.g. employment legislation....). You will need to demonstrate that you think and act professionally and impartially. You will be aware of the limits of your own knowledge, expertise and competence and when to seek advice / guidance. You will be aware of the CIWEM Code of Ethics and strive to deliver the most appropriate solutions for all stakeholders.

- What codes apply to you how do you comply?
- How do you deal with stakeholders?
- Have you ever needed to give an unpopular message?
- How do you take into account stakeholder requirements?
- When have you needed to supplement your knowledge seeking expert advice?
- Do you know the limits of your delegated responsibilities?

E Competencies – professional development

E1. Develop yourself in a structured manner

In this competence you will need to demonstrate that you are taking a structured approach to both your own continuing professional development and career development.

- Do you have a career development plan?
- How do undertake your continuing professional development?
- Have you coached or trained others within your organisation or indeed externally?

E2. Your current or future commitment to CIWEM

You will need to identify your commitment to CIWEM, identifying your reasons for joining the Institution, how you have, will continue to or will in future contribute to developing the Institution

- Why did you choose CIWEM?
- What have or will you contribute to CIWEM?
- How do you promote the benefits of CIWEM with your colleagues and other potential members?



Hints on how to structure your examples to demonstrate attainment of the mandatory competencies (MCs)

When providing examples to demonstrate your attainment of the MCs you may find it helpful to structure your response on the lines of the **CAR** model:

- **Context:** What was the problem/situation/brief? What did you need to achieve/what were the goals? What was your role?
- **Action:** What did you do to complete the task? How did you structure your plans? What challenges did you overcome?
- **Results:** What was the outcome of your actions? What did you achieve through your actions and did you meet your objectives? Did you deliver your responsibility?



Appendix 3 – TechCIWEM and additional registrations

It can be difficult to understand what registrations apply to who so some guidance is provided in this appendix.

TechCIWEM applies to everyone working in the Water and Environment fields. To list a few this could be:

EngTech

(Engineering Council)

Maintenance Technicians (Electrical or Mechanical)

ICA Technicians

Asset Technicians

Surveying Technicians

The additional registrations are available to all to consider, and it will depend upon what you do as to what additional registrations, if any, are suitable for you. Do bear in mind that you don't have to apply for anything else and if your career changes or you develop professionally in an area you can always apply later.

This is not an all-inclusive list, and some people will fit into several categories and there is no reason why you can't apply for more than one additional registration.



Appendix 4 – Checklist

The checklist has been provided to allow you to ensure that you have included all of the documents need for your application

Have you completed and included your application form and included two sponsors?
Have you completed and included your career report?
Have you completed and included your competency report?
Have you included three years of continuing professional development activities?
Have you included your professional development plan?