

The ICE Membership – a global standard professional qualification

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Agenda

An introduction to ICE

Professional Qualifications and the benefits

Routes to membership with ICE

- IEng / CEng
- Engtech

Continuing Professional Development (CPD)

Q&A



The Institution of Civil Engineers

Who are we?



Founded 1818
Over 95,000 members
In over 150 countries

- Internationally recognised global membership organisation
- We promote civil engineering around the world
- We are a centre of Civil Engineering knowledge

- We are licensed by the UK Engineering Council to assess civil engineers for professional registration

What do we do?



Qualification



Knowledge Sharing



Professional Services



Voice of Infrastructure

A broad membership



Transport systems

– roads, railways, airports, canal.....

Public health services **consultants**

– water supplies, dams, reservoirs, pipelines.....

Structures

– bridges, buildings, viaducts, oil platforms, utility distribution grids, flood defence.....

Geotechnical projects **contractors**

Energy

- Wind farm, nuclear

...all aspects of CE field

clients

What do we offer for you

Professional qualifications



Lifelong learning



Career support



Webinars and events



Networking



Passport to a global career



Knowledge hub



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ICE Member Grades



Chartered Engineer - CEng MICE



Incorporated Engineer IEng MICE



Engineering Technician - EngTech MICE



Graduates Members GMICE



Student Members (Free)

Why do Civil Engineers join ICE

ICE Professional qualifications

Industry standard

Globally recognised

Supports career progression

Learned society

Access to world class knowledge

Networking opportunities

We inform public policy



Benefits of a Professional Qualification



**Improved
career
prospects**



**Higher
earning
potential**



**Evidence of
a
professional
attitude**



**Enhanced
status**



**International
recognition**



**Evidence of
expertise**



An introduction to ICE

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Continuing Professional Development (CPD)

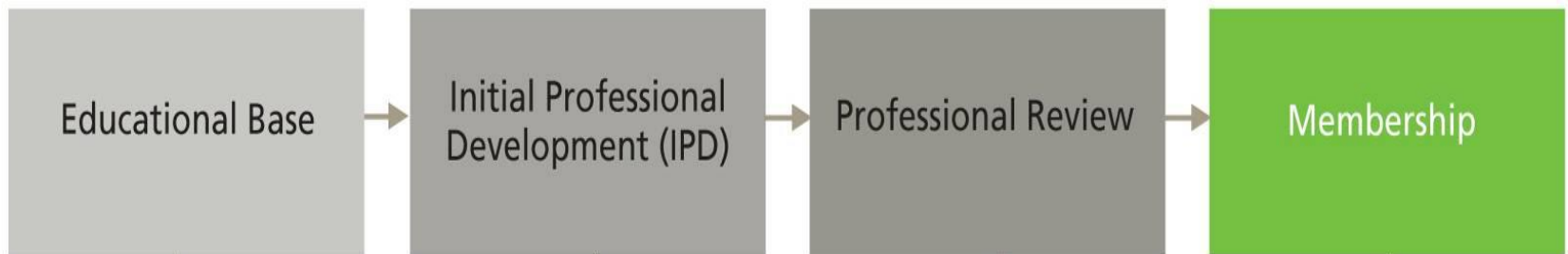
Q&A



ICE Professional Qualifications

Learning new skills in the workplace to become a professionally competent engineer

CEng / IEng / Engtech MICE



Education

Training

Review

Becoming IEng / CEng



Chartered Engineer -
CEng MICE



Incorporated Engineer
IEng MICE



Engineering Technician
- EngTech MICE

Academic Requirements

Level of Membership	Academic requirements (UK accredited qualifications)
BEng / BSc	Incorporated Engineer (IEng)
MEng	Chartered Engineer (CEng)

Those without an **accredited** undergraduate and/or postgraduate qualifications will require an

ACADEMIC ASSESSMENT

to ensure their qualifications are deemed equivalent to the benchmark

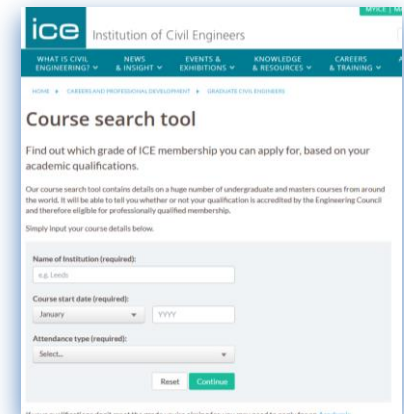
[Academic Assessment | Institution of Civil Engineers \(ICE\)](#)

For info contact aqp@ice.org.uk

- Nepal Engineering Council is not a signatory to the Washington and Sydney accords
- **Accredited courses** will be recognised by ICE

To check go to [Course Search Tool](#)

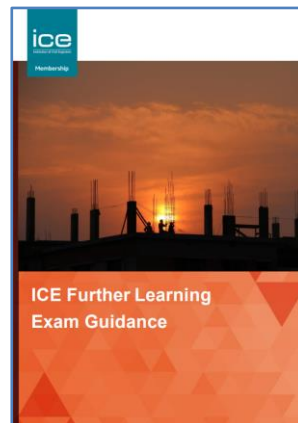
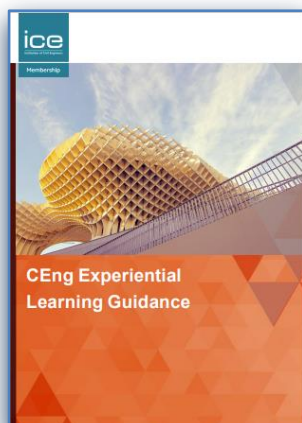
[Accredited course search | Institution of Civil Engineers \(ICE\)](#)



The screenshot shows the 'Course search tool' page on the ICE website. The page has a dark blue header with the ICE logo and navigation links: 'WHAT IS CIVIL ENGINEERING', 'NEWS & INSIGHT', 'EVENTS & EXHIBITIONS', 'KNOWLEDGE & RESOURCES', and 'CAREERS & TRAINING'. Below the header, there is a breadcrumb trail: 'HOME > CAREERS AND PROFESSIONAL DEVELOPMENT > GRADUATE CIVIL ENGINEERS'. The main heading is 'Course search tool'. The text below the heading reads: 'Find out which grade of ICE membership you can apply for, based on your academic qualifications. Our course search tool contains details on a huge number of undergraduate and masters courses from around the world. It will be able to tell you whether or not your qualification is accredited by the Engineering Council and therefore eligible for professionally qualified membership. Simply input your course details below.' The form contains three required fields: 'Name of institution (required):' with a text input field containing 'e.g. Leeds'; 'Course start date (required):' with a dropdown menu set to 'January' and a 'YYYY' input field; and 'Attendance type (required):' with a dropdown menu set to 'Select...'. At the bottom of the form are 'Reset' and 'Continue' buttons. A small note at the very bottom of the screenshot states: 'If your qualifications don't meet the requirements, please let us know and we'll be happy to help.'

Insufficient qualifications?

Aspiration	Academic background	Pathway
CEng	Assessed as CEng eligible (with further learning) or IEng eligible	Experiential learning assessment CEng or ICE Exam
IEng	IEng eligible (with further learning), Engtech eligible	Experiential Learning IEng
CEng/ IEng	No quals or only eligible for MICE, Engtech	Technical report route

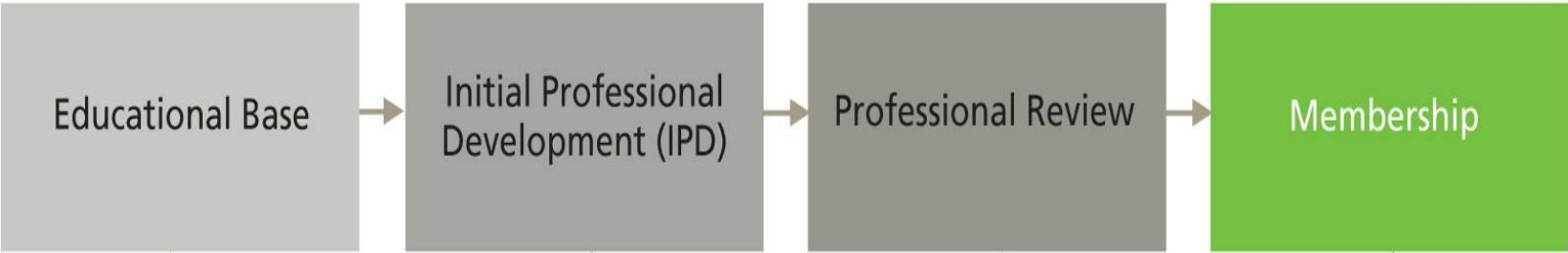


Please check your eligibility before applying by contacting experiential.learning@ice.org.uk

ICE Professional Qualifications

Learning new skills in the workplace to become a professionally competent engineer

CEng / IEng MICE

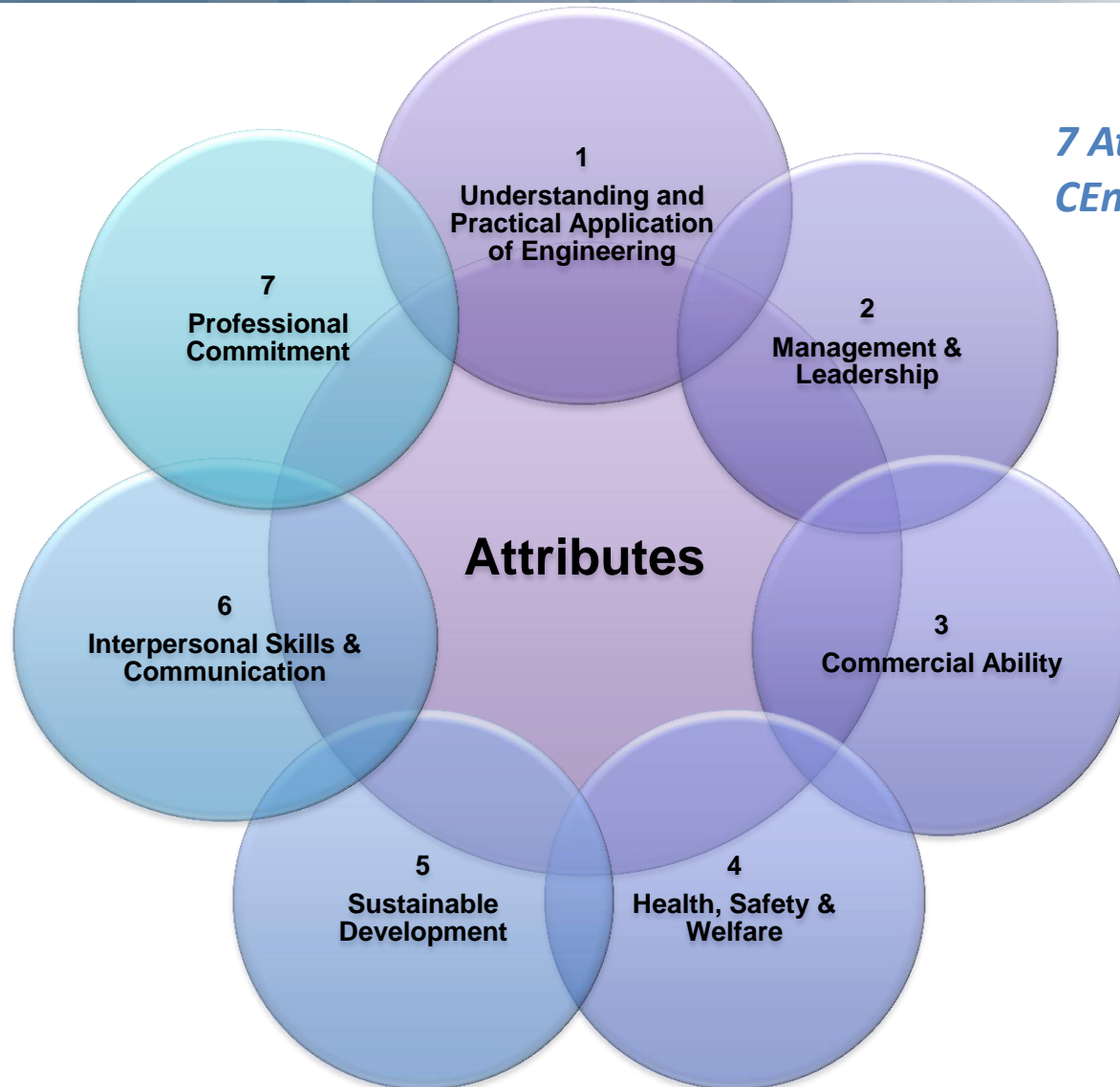


Education

Training

Review

Competences Professional Engineers



*7 Attributes used for
CEng/ IEng/ Engtech*

Attributes.....more details

Attribute group

Attributes of CEng MICE

1 Understanding and Practical Application of Engineering

- Maintain and extend knowledge of engineering theory and practice, and how technology assists its application
- Solve engineering problems using a sound theoretical approach, based on evidence, and contribute to continuous improvement
- Engage in the creation and/or introduction of new, advancing or improved techniques and technology
- Identify, review and select techniques, procedures and methods to undertake engineering tasks
- Take an active role in the identification and definition of requirements, challenges, risks, and opportunities and undertake a range of actions
- Contribute to the design and development of engineering solutions, and evaluate their effectiveness in the context of the project life cycle
- Undertake the design, development and implementation of engineering solutions and evaluate their effectiveness in the context of the whole project life cycle
- Exercise sound independent engineering judgement

2 Management and Leadership

- Plan the work and resources needed to enable effective implementation of engineering tasks and projects
- Manage the planning and organisation of tasks and resources.
- Manage (organise, direct and control) programme or schedule, tasks and

[Attributes for professionally qualified membership | Institution of Civil Engineers \(ICE\)](#)

Three options to complete IPD

Demonstration of ability level vs attributes

- **Career Appraisal:** for experienced engineers can already demonstrate the appropriate competences
- **Mentor Supported Training :** for less experienced engineers, supported by a mentor who is selected by the trainee and approved by ICE.
- **Employer supported Training Agreement :** for companies with an ICE Training Scheme

Mentor Supported Training



Development of competences measured against 7 attributes

Working with an ICE approved mentor

The mentor assesses and approves the 'trainees' competences against evidence submitted

The mentor and SCE use **online system** to approve level of competence

Once the trainee has demonstrated competence against all attributes they are ready for **Professional review**

For support in finding a mentor contact cath.mansell@ice.org.uk

[Mentor supported training guidance | Institution of Civil Engineers \(ICE\)](#)

Initial Professional Development Online

Cecilia Morrison

[View details](#)

YOUR ROLE

Trainee

CURRENTLY TRAINING FOR

IEng

You are eligible up to IEng

This is related to your education level

[About eligibility and levels](#)

ATTRIBUTE LEVELS COMPLETED

6/27

YOUR SUPERVISING CIVIL ENGINEER

Ed Wright

- [Summary](#)
- [Attributes](#)
- [Document library](#)
- [Help centre](#)
- [Your details](#)

[? Step-by-step guide](#)

Your progress

7

Pieces of evidence submitted this year

1

Attribute completed to IEng level!

6/27

Attribute achievement levels completed

21 to go!

Your attributes

<p>1. Knowledge and understanding of engineering</p>	<p>New Comment</p>	CEng only	Ac
		2/3	IEng levels complete
<p>2. Technical and practical application of engineering</p>	<p>New Comment</p>	CEng only	Ac
		3/3	IEng levels complete
<p>3. Management and leadership</p>		CEng only	Ac
		0/3	IEng levels

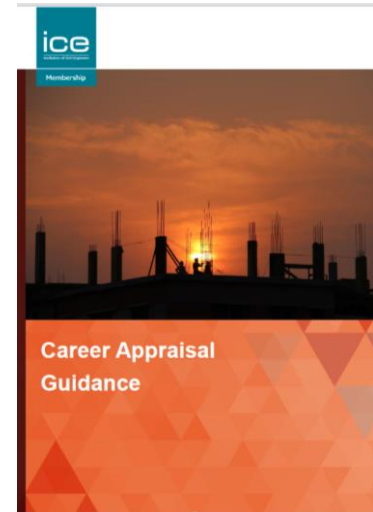
[Download a report](#)

Career Appraisal Assessment

A process by which the applicant is demonstrating that they can already demonstrate evidence of their competences against the attributes

Demonstration of competences via a 5000 word report

You are advised to use a mentor
(not approved by ICE)



[Career Appraisal | Institution of Civil Engineers \(ICE\)](#)

What do I have to produce?

A CA application form

Certified copy of your academic qualifications *(if not already assessed by the ICE)*

Continuing Professional Development (CPD) records

A 2 page CV

A report to demonstrate your experience and achievement of the attributes

Relevant evidence to demonstrate achievement of the Attributes

The fee

The Report – as described in the guidance

Up to 5000 words)



A means to demonstrate the attributes

A professional layout with tables of content etc

One or two “projects” in which you have played a major part




Describe your role in development and management of the projects

Use appendices for evidence

 Member support (IEng & CEng) Online

Career Appraisal Fast Track Workshop, South Asia

This is a fast-track programme to get you preparing your Career Appraisal application in time for your preferred Review date. There is a high demand for the workshops and limited places – do not register unless you are committed to attending all workshops and to working hard in-between sessions.

 Online
 05 September - 09 November 2022
 13:30 - 14:00 BST (GMT+1)

Free

[Member support \(IEng, CEng\) | Institution of Civil Engineers \(ICE\)](#)

3 part workshop – booking is essential

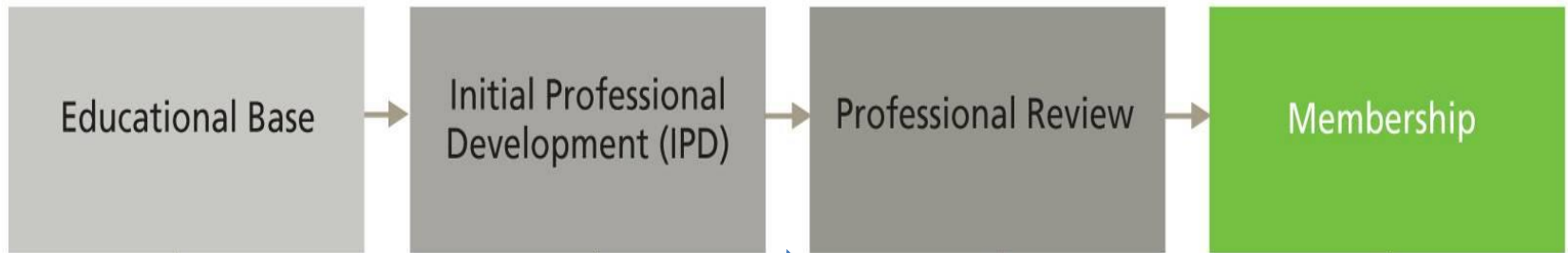
Next one will start in February

Application Dates

Assessment closing date	Results issued no later than
04 January 2023	17 February 2023
01 February 2023	10 March 2023
01 March 2023	21 April 2023
29 March 2023	19 May 2023
26 April 2023	16 June 2023
31 May 2023	14 July 2023
28 June 2023	11 August 2023
26 July 2023	15 September 2023
30 August 2023	13 October 2023
28 September 2023	10 November 2023
25 October 2023	15 December 2023
29 November 2023	12 January 2024

Learning new skills in the workplace to become a professionally competent engineer

CEng / IEng MICE



Approx 5-7 years to CEng
Approx 3-5 years of IEng

...but this will depend on the experience you are getting



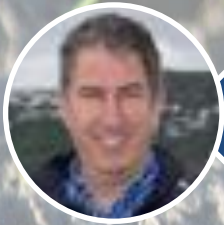
Demonstration of the skills, knowledge and experience needed to become a professionally qualified member.

- Review submission
- Online review (interview)
- Review day - assessment by two experienced civil engineers
- Communication Task

Becoming an Engtech Member



Chartered Engineer -
CEng MICE



Incorporated Engineer
IEng MICE



Engineering Technician
- EngTech MICE

What is an Engineering Technician?

Technicians carry out tasks which underpin the work of engineers

Technicians will have a practical understanding and knowledge of **general fundamental engineering concepts**. Engineering technicians often assist in projects

Who is an Engineering Technician?

- CAD technician, engineer or manager
- BIM technician or manager
- Civils technician
- 3d RC Modeller
- Technical Designer
- Supervisor
- Construction manager
- Setting-out engineer
- Inspector
- Site engineer



..... Or you may be a graduate Civil Engineer using this as a stepping-stone to IEng or CEng

Requirements for eligibility

Experience



Academic
Qualification

Competence in line with
the 7 attributes at
Engtech level

- Level 3 (UK qualifications) = Nepal's Diploma?
- Non UK qualifications - apply for **academic assessment**
- No qualifications? You can still apply via **Technical Report Route**
- Same application but provide additional detail to demonstrate technical competences

Application stage

- Application form to demonstrate the attributes
- Examples of your work (appendices)
- Training records (CPD)
- 2 sponsors
- Fee

Friendly Interview

- 45 mins
- 5 Minute presentation (optional)
- Opportunity to talk further about your work
- Friendly discussion

Approx 6 weeks



3. Demonstration of the Attributes

In the following pages write about examples from your professional experience which allow you to demonstrate how you meet each attribute. The overall word count in this section of the application form should not exceed 3000 and this can be spread across all the attributes examples. Further details on the attributes can be found in the [Technician Professional Review guidance document appendix A](#).

Understanding and Practical Application of Engineering

Use appropriate scientific, technical, or engineering principles.

Review and select appropriate techniques, procedures, and methods to undertake tasks.

Identify problems and apply appropriate methods to identify causes and achieve satisfactory solutions.



Review Dates 2023 (CEng/ IEng/ Engtech)

Sponsors closing date	Application closing date	UK online Review dates	In person date/location	International online Review dates
29 July 2022	05 August 2022			06 - 07 October - Auckland #
29 July 2022	05 August 2022			09 - 13 October - UAE #
29 July 2022	05 August 2022			10 - 11 October - Sydney #
29 July 2022	05 August 2022			13 - 14 October - Singapore #
29 July 2022	05 August 2022			21 October - Malaysia #
29 July 2022	05 August 2022			23 - 24 October - Qatar #
19 August 2022	26 August 2022	01 - 30 November 2022	15 November 2022 - Cardiff	

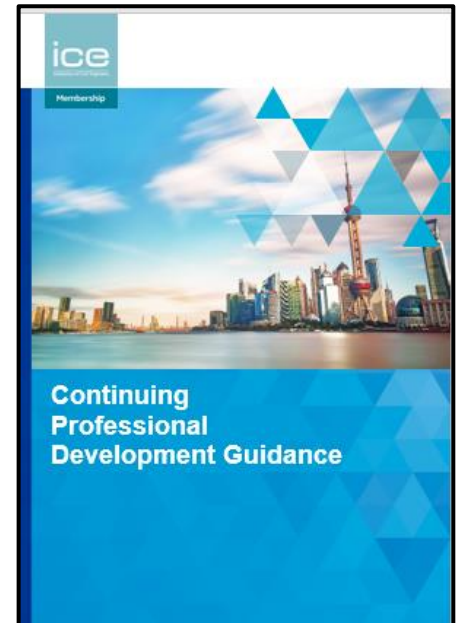
Continuing Professional Development

The maintenance, improvement and broadening of knowledge and skills

CPD records must be submitted for all routes to membership

Typically minimum of 30 hours per year

[Continuing Professional Development \(CPD\) guidance | Institution of Civil Engineers \(ICE\)](#)



CPD Development Action Plan

Highlight formal
Health & Safety
training

Name: Jenny Bloggs							
Job role, responsibilities, and engineering sector: Graduate Engineer – Bridges Section							
Review of learning needs				Development plan			
Date	Ref	In what area do I need to improve my performance? *	What do I need to learn in order to achieve this?	What will I do to achieve this?	What are the likely resources and support that I will need?	How will I evaluate a successful outcome?	What are my deadlines for meeting this target?
06/01/2021	A1	Knowledge of health and safety legislation	Latest H&S legislation	Apply to for permission to attend a training course	Course fees	I should have ability to engage effectively with company H&S practices/requirements	31/06/2021
06/01/2021	A2	Ability to assess steel corrosion and specify appropriate repair and protection techniques	Details about corrosion and repair and protection techniques	Peer discussion and self-development through project work. Consultation with colleagues and background of appropriate standards and guidance notes.	Mainly personal time to read with input from colleagues.	Able to apply techniques to an inspection project	31/06/2021
06/01/2021	A3	Ability to design concrete steel structures to Eurocodes	Develop knowledge of Eurocodes for concrete and steel structures	Attend courses about Eurocodes	Budget and time to attend course	Ability to design concrete and steel to Eurocodes	31/06/2021

*Please consider and include any appropriate ICE CPD Framework topics and highlight them within your plan.

CPD Personal Development Record

Name: Jenny Bloggs					
Job role, responsibilities, and engineering sector: Graduate Engineer – Bridges Section					
Development activity				Evaluation	
Details of CPD activity	Dates	Effective learning time	Dev. Plan ref.	Key Learning Points	Key Benefits/Value added
<i>If applicable, please include what ICE CPD Framework topic this aligns to</i>					<i>How has this learning activity helped you? How will the learning be used in the future? How will this influence my DAP next year?</i>
Thomas Telford course on CDM Regulations 2015 Health, Safety & Welfare	15/06/2021	6 hours	A1	Gave an overview of the regulations	Improved knowledge and understanding of the roles and responsibility of all parties in a construction project. To be applied in future projects
Corrosion Protection: self-development through project work and peer discussion	15/09/2021	3 hours	A2	Examples of different type of surface preparation and protection systems	To improved understanding of paint specification methodology and have an information source to reference to. To apply in future projects
Concrete Centre Course on Eurocode 2	25/11/2021	12 hours	A3	A good base knowledge to enable me to design basic structures to Eurocode 2.	An excellent course. Need to follow up with practical implementation.

Thomas Telford course on CDM Regulations 2015
Health, Safety & Welfare

Highlight formal Health & Safety training

21 hours

< 30 hours per activity

Useful to add an annual summary in hours
{Note: 1 day = 6 hours learning time}

CPD documentation for Career Appraisal / Engtech application

You must submit:

- Current Development Action Plan (DAP)
- 3 previous years Personal Development Record (PDR) *

The assessors are looking for;

- Minimum 30 hours per year
- Broad subject base; technical and non technical
- Formal H&S training annually

*for Engtech this can be reduced for someone at the beginning of their career

Sponsors – for Professional Review

You will need 2 sponsors

- ❑ Lead sponsor
 - must be ICE member at or above the grade to which you are applying
 - will have to state that they have scrutinised your submission

- ❑ 2nd sponsor
 - must be ICE or EC registered at or above the grade for which you are applying or qualified members of other overseas institutions (see eligible institutions within Professional Review Sponsor questionnaire)

Includes; Institution of Engineers India

[Sponsor's statement of support | Institution of Civil Engineers \(ICE\)](#)

Thank you for listening

Questions

cath.mansell@ice.org.uk

cbshrestha1961@gmail.com