



THE PWI

# PROFESSIONAL REGISTRATION with the PWI

NR Track Maintenance Engineering Conference  
22 May 2025

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**THE PWI**  
EMPOWERING RAILWAY ENGINEERING

# A little bit about me.....



**MEng**  
**Mechanical Engineering**



**10 Years**  
**Graduate Scheme**  
**Junior - Senior Engineer**  
**Construction Manager**



**10 Years**  
**Head of Strategy**  
**Value Management Business**  
**Partner**  
**Senior Project Manager**



**Head of Innovation**  
**Feb 2025**

**WES Trustee**  
**IMechE**  
**Council**  
**Member**



**Chartered Engineer**  
**& Fellow**

**Institution of**  
**MECHANICAL**  
**ENGINEERS**

**Chartership Assessor**



**Permanent Way**  
**Institution**  
The Institution for Rail  
Infrastructure Engineers

**Deputy President 24/25**  
**Incoming President 25/26**



**How many people do you think have been professionally registered since May 2024?**

- 26
- 38
- 54
- 111

**What % of people who gained professional registration are female?**

- 3%
- 5%
- 8%
- 11%

**What % of people who gained professional registration are from a maintenance team?**

- 10%
- 16%
- 23%
- 33%

**N.B. All questions relate to Network Rail staff who are members of the PWI**

# Innovation, Change and the future generation

TfL and NR infrastructure old

HS1 relatively new infrastructure

Challenges we face: Ageing infrastructure under mounting pressure of less cash, less people, less resource, workforce shortages

These railway issues require a change, Innovation

Innovation, technology, process, people, culture

Skills gap, future generation and promising career in rail

# Professional Registration

Professional registration had been on my objectives since 2004

Work weekends and nights

Finally became Chartered in 2020



**THE PWI**  
EMPOWERING RAILWAY ENGINEERING

The PWI was founded in **1884** as a learned society with a number of objectives:

- To promote the advancement of technical training
- To acquire and share scientific knowledge
- To adopt a standard competency
- To provide a certificate or diploma of competence to any person who meets the requirements

In recent years, the focus has widened to encompass Railway Engineering.

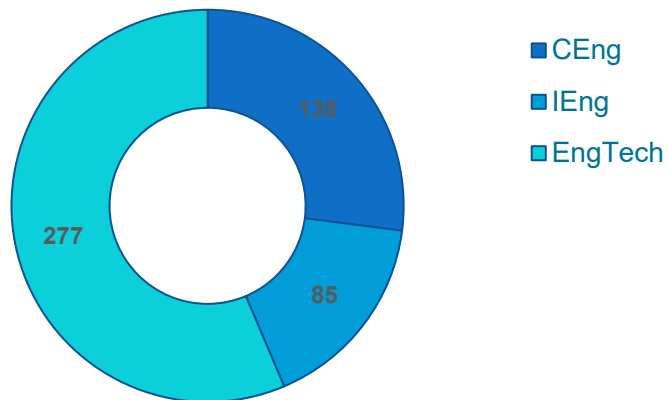


**In 2019 we became a Professional Engineering Institution (PEI)**



1

## Total Registrations - 500



2

## Additional Membership

- 48 additional titles
- Holding the same title with more than one Institution
- Could transfer registration
- Be recognised as a competent railway engineer professional

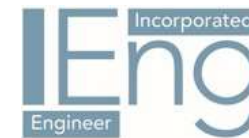
# What is professional registration?

Recognition that an individual's **competence and commitment** has been assessed, and that they have attained the standard required for admission to the UK **Engineering Council** Register at the appropriate level.



# The Titles

- Engineering Technicians (EngTech) apply **proven techniques and procedures** to the solution of practical engineering problems.
- Incorporated Engineers (IEng) maintain and manage applications of **current and developing technology**, and may undertake engineering design, development, manufacture, construction and operation.
- Chartered Engineers (CEng) develop solutions to **complex** engineering problems using new or existing technologies, and through **innovation, creativity and technical analysis**.



## Academic Competence

- EngTech – typically BTEC Level 3 learning
- IEng – typically Bachelor Level 6 learning
- CEng – typically Masters Level 7 learning

## Professional Competence and Commitment

- A - Knowledge and understanding
- B - Design, development and solving engineering problems
- C - Responsibility, management and leadership
- D - Communication and interpersonal skills
- E - Personal and professional commitment

# Which route will you take?

| ROUTES TO REGISTRATION   |            |                                                 |                                                                           |
|--------------------------|------------|-------------------------------------------------|---------------------------------------------------------------------------|
|                          | TITLE      |                                                 |                                                                           |
| QUALIFICATIONS           | EngTech    | IEng                                            | CEng                                                                      |
| NO FORMAL QUALIFICATIONS | ✓ + 3-5yrs | ✓ via Technical Report + 5-10yrs                | ✓ via Technical Report + 10-15yrs                                         |
| LEVEL 3                  | ✓ + 2-3yrs |                                                 |                                                                           |
| HNC LEVEL 4              |            | ✓ via Experiential Learning + 5yrs              |                                                                           |
| HND / FDENG LEVEL 5      |            | ✓ via PWI Diploma & Supplementary Report + 5yrs |                                                                           |
| BACHELOR DEGREE LEVEL 6  |            | ✓ Recognised                                    | ✓ via Experiential Learning + 5yrs<br>✓ via MSc + 3-6yrs                  |
| MASTERS DEGREE LEVEL 7   |            |                                                 | ✓ Recognised Qualification + 3-6yrs<br>✓ Academic Panel Approval + 3-6yrs |

# First Steps to Registration

- Must be a **member** of PWI
- Obtain a **Supporter** (someone in work who knows you well) and a **Sponsor** (EngC registered member) and obtain signatures
- Ensure **CPD** records are up to date and that you have a current Personal Development Plan
- For IEng and CEng: check your route to registration. Is there an **academic gap** to fill before you can progress to professional review?
- Find the **certificates** and transcripts from your formal studies – eg BTEC, HNC, BEng



# Sponsor

1

## Why?

- Preserving the future of the railway by supporting the next generation of engineers
- Ensuring your employer's work force is professionally recognised
- You've been there, seen it, done it!
- Pride at helping another

2

## Who?

- Active registrant with UK Engineering Council
- Know the technical discipline
- Independent
- Does not need to be PWI Member
- Does not need to know the candidate well

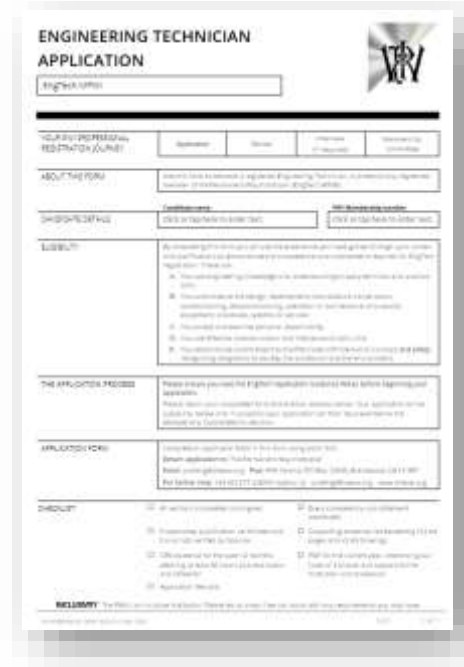
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## What?

- Statement of support against A-E
- Recommend the candidate as suitable for election
- Verify academic certificates
- Declaration in professional review report (IEng / CEng only)
- Advise and guide candidate on sufficiency of answers

# Professional Registration – Eng Tech

- Engage with your **Sponsor**
- Complete the **application form** and fill in the boxes with statements about how you demonstrate the A-E EngC UK competences
- Provide supporting evidence as necessary (not more than x12 A4 and x3 A3 pages)
- Provide current **Personal Development Plan** and one years' **CPD** records
- Submit by email to PWI and within **six weeks** you will get a response with possible outcomes of:
  - Pass and you will be registered with Engineering Council
  - Resubmit with requests for further explanation or evidence
  - Be asked to attend Professional Review Interview



The screenshot shows the 'ENGINEERING TECHNICIAN APPLICATION' form. It includes sections for 'ABOUT THE FORM', 'SUPPORTING EVIDENCE', 'EVIDENCE', 'THE APPLICATION PROCESS', 'APPLICATION FEE', and 'CHECKLIST'. The form is designed to collect personal details, a statement of intent, and evidence of competence and CPD. A checklist at the bottom provides a summary of the required documents and steps for submission.

# Professional Registration – IEng / CEng

- Engage with your **Sponsor**
- Apply for an **academic assessment** and our Academic Panel will advise on how any gap can be filled
- Produce and submit a **5,000-word Professional Review Report** to demonstrate the A-E EngC UK competences
- Provide supporting evidence as necessary (not more than x12 A4 and x3 A3 pages)
- Provide current **Personal Development Plan** and three years' **CPD** records
- **Scrutineers** confirm sufficient evidence to progress to interview
- Attend Professional Review **Interview**

# The benefits to industry & society

- Society can have **confidence and trust** in the engineering profession
- Professional registration underpins the systems and processes that ensure the current and future **safeguarding** of society
- Government and wider society (both in the UK and overseas) can have confidence that registrants meet the **engineering and technological needs** of today - whilst also catering for the needs of future generations



# The benefits to employers

- Build and maintain **trust** in your organisation with a professional work force
- Mitigate potential liability with proof of **experienced and qualified staff**. Insurance rates could be reduced
- Demonstrate employees have suitable and necessary **competence** for ISO 9001 requirements
- **Recruit and retain** the very best technically skilled and experienced staff
- Employees keep their skills **up to date and relevant** through membership with a PEI



# The benefits to you

- Demonstrates a **professional attitude** and commitment to engineering and safety; valued by employers and clients
- Benefit from **international recognition** of competence and commitment and demonstrate evidence of your expertise and work ethic
- Have **letters after your name** EngTech, IEng, CEng MPWI
- Enjoy **higher earning potential** and **career progression**
- Access a framework to support your **future career development** with support from PWI rail infrastructure engineers



# #thepwi

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