

# Professional Recognition of Process Safety Engineers



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# Introduction

IChemE and Professional Recognition

Register of Professional Process Safety Engineers

Future Registration of Professional Process Safety Engineers as Chartered Engineers (CEng)



# IChemE

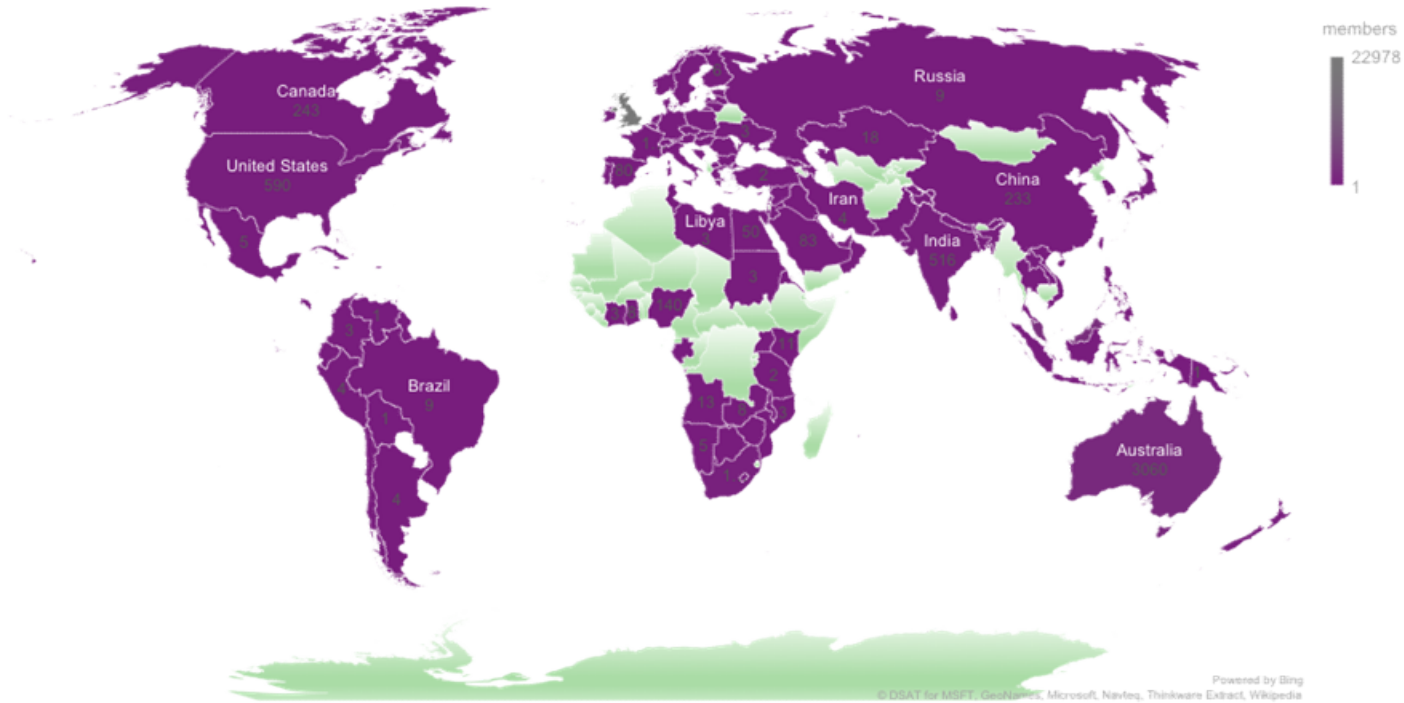
Founded in 1922, the enduring purpose of IChemE is to advance the contribution of chemical engineering worldwide for the benefit of society. IChemE is known for:

- Being a global qualifying body for chemical & process safety engineers
- Accrediting body for university courses and company training
- *The Chemical Engineer* and journals
- International events, networking and training courses
- Chartered Chemical Engineer status
- Professional Process Safety Engineer



# Global Professional Body

IChemE members worldwide - 1 August 2019



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# Professional Recognition

Professional recognition achieved by peer-reviewed demonstration of Competence and Commitment developed through a combination of:

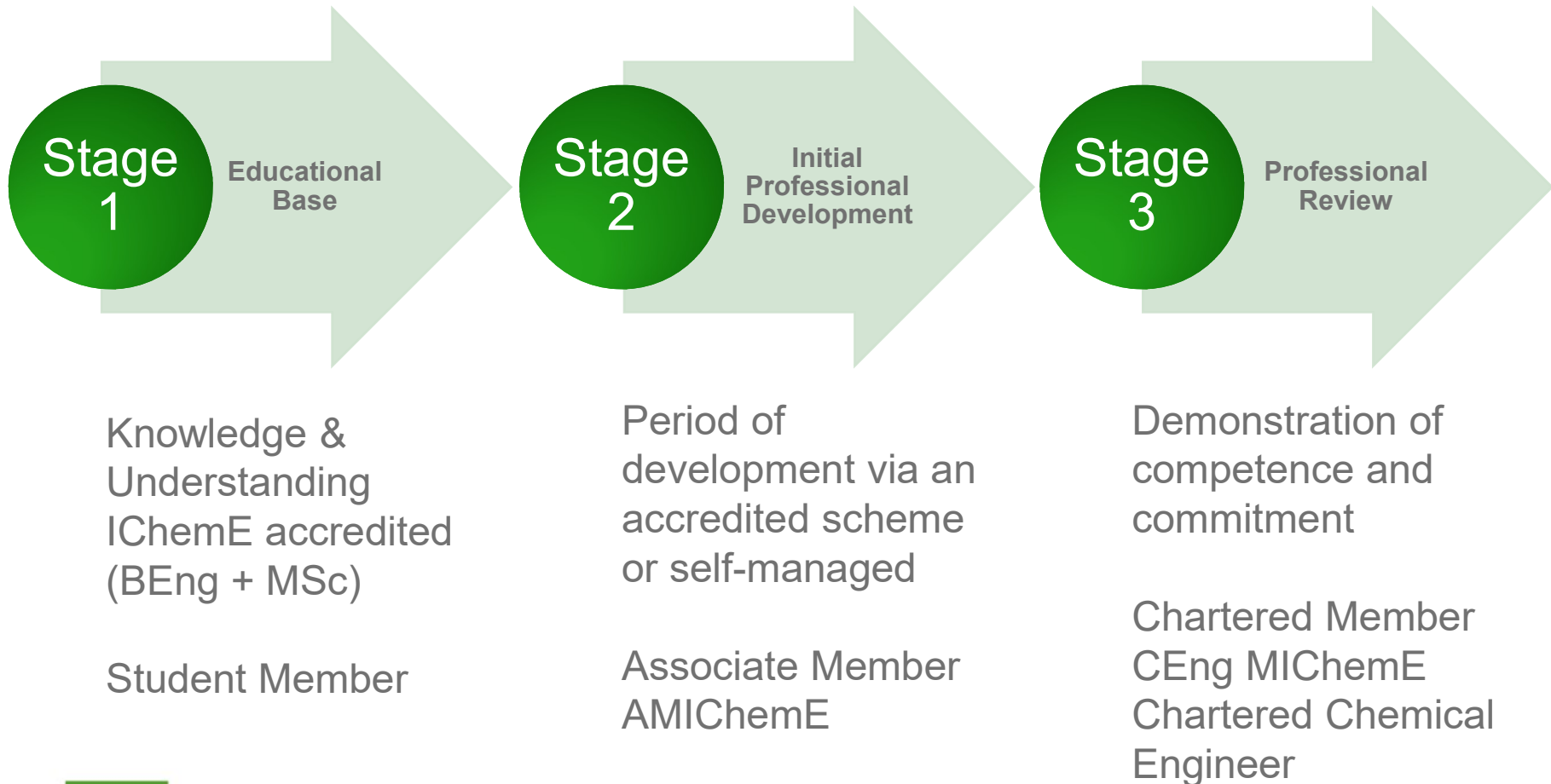
- underpinning knowledge and understanding, generally acquired through educational programmes;
- professional development and experience.

These elements, or parts of them, may be integrated or undertaken simultaneously.



# Professionally Qualified Membership

Eg, for Chartered Chemical Engineer



# Process Safety

*“IChemE is taking a firm, leadership position in regard to the competence of process safety professionals. For too long there has been a stark absence of professional recognition for those who competently apply process safety principles professionally”*

Dame Judith Hackitt, former Chair of the Health and Safety Executive and IChemE Past President



# Process Safety

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# Profession

Liberal professions: those practiced on the basis of **relevant professional qualifications** in a **personal, responsible and professionally independent capacity** by those providing **intellectual and conceptual** services in the **interest of the client and the public**

DIRECTIVE 2005/36/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 7 September 2005 on the recognition of professional qualifications



# Process Safety

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# Competence vs knowledge

Competence is the ability to carry out a task to an effective standard.

To achieve competence requires the right level of knowledge, understanding and skill, and a professional attitude



# What is Professional Process Safety Engineer Registration?

- competence based assessment
- rigorous peer review
- aligned to UK Engineering Council standards
- awarded exclusively by IChemE
- aimed at senior process safety professionals
- demand from the industry



The only globally recognised process safety qualification



# Demand for the Register

Survey undertaken by IChemE's Safety Centre in 2018.

378 individuals responding (>86% were not PPSE)  
c70% saw value in PPSE Registration and  
c70% would like to see CEng awarded with it.



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# Awarding CEng

The survey shows a clear demand for CEng recognition for those who would otherwise not obtain this via Chartered Chemical Engineer.

IChemE is revising its By-laws to facilitate the award of CEng for those non-chemical engineers who satisfy the requirements for admission to the Register.



# Professionally Qualified Membership

## Professional Process Safety Engineer



Knowledge & Understanding.  
Accredited Engineering BEng + IChemE accredited MSc Process Safety

Student Member



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Period of development via accredited scheme or self-managed

Associate Member  
AMIChemE

Demonstration of competence and commitment

Chartered Member:  
CEng MIChemE  
Professional Process Safety Engineer

IChemE ADVANCING CHEMICAL ENGINEERING WORLDWIDE

# Professional Process Safety Engineer

## Leadership Competences in:

- Hazard Identification
- Assessment of Consequences
- Control of Hazards
- Risk Assessment
  
- Understanding and Application of Relevant Regulations
- Protection of the Public
- Incident Investigation
- Emergency Planning
  
- Process Safety Management
- Influencing Process Safety Culture

## Commitment to:

- High Standards of Professional Conduct
- Effective Continuing Professional Development

## Professional Process Safety Engineer Standard

The IChemE competence and commitment standard for Professional Process Safety Engineers.

Standard	Guidance
Professional Process Safety Engineer registrants in design, operations or other relevant fields, must be competent throughout their working life, by virtue of their education, training and experience, to:	Examples of activities which could demonstrate that you have achieved the Professional Process Safety Engineer criteria
Section A: Evidence of abilities to apply knowledge and understanding of technical process safety to practical engineering situations <b>and</b> of your ability to apply appropriate theoretical and practical methods to the analysis and solution of process safety problems	
<b>A1. Hazard identification</b> Able to identify hazards using recognised hazard identification techniques	Evidence could be drawn from personal experience of relevant techniques which, non-exhaustively, could include HAZID, FMEA, and HAZOP...
<b>A2. Assessment of consequences</b> Able to assess hazard consequences using recognised consequence modelling techniques.	Evidence could be drawn from personal experience of relevant techniques which, non-exhaustively, could include fire and explosion consequence analysis; flare calculation; occupied building analysis; escape and evacuation...







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