

# Individual Case Procedure Reviewer (Chartered and Incorporated Chemical Engineer)

## Volunteer Role Descriptor

### 1. Reference

MQ/ICPR/2.0

### 2. Background

Following consultation and pilot work, the Education Subcommittee (EdSub) is reintroducing Individual Case Procedure (ICP) to assess potential Chartered and Incorporated Chemical Engineer applicants' academic knowledge and understanding (educational base). The ICP will replace the current Chartered Membership and Incorporated Engineer Technical Report Route. The possible ways of satisfying the educational base requirements are shown at Annex 1.

The new ICP process will ensure that we provide a flexible, accessible pathway to all those who do not hold an accredited degree that meets in full the requirements of Engineering Council and IChemE at M-standard. The new process also covers those candidates for Incorporated Engineer without IChemE accredited chemical engineering degrees at B-Standard. Candidates without accredited qualifications will need to submit a Technical Biography which will then allow a more focussed assessment of the candidates' background knowledge and permit a more tailored request for information against the requirements.

IChemE has set up a new process for ICP applications, details of which are given in Annex 2. ICP reviewers are involved in the process to assess the initial Technical Biography submitted by the candidate and later, to assess any Technical Report Questionnaire (TRQ) and to interview the candidate on its contents.



Figure 1: The ICP process overview

### 3. Main duties and responsibilities

IChemE ICP reviewers are academics or industrialists who give their time voluntarily to represent IChemE. ICP reviewers will be a Chartered Chemical Engineer with IChemE at Member or Fellow grade.

ICP assessors are required to work in small teams with other ICP assessors:

- assess candidates against defined criteria. Discussions and decisions must be objective and comply with IChemE standards and requirements; they must not be based on personal views or prejudice
- assess candidates' Technical Biography and documentation and reach a mutual decision whether the candidate meets the education base requirements against IChemE requirements on Learning Outcomes at Levels B and F to become a Chartered Chemical Engineer or at Level B to become an Incorporated Engineer
- where a Technical Report Questionnaire (TRQ) is required, assess and conduct a TRQ Interview (TRQI) to confirm evidence
- if a candidate's submission does not meet the requirements, agree with the co-Reviewers and provide feedback, based on the possible outcomes, on what the candidate needs to do to fulfil the requirements,

- comply with ICP procedures and schedules to ensure all applications are dealt with in a timely manner.
- communicate with co-reviewer and IChemE administrators
- undertake induction and refresher training as and when required
- have access to teleconference facilities (e.g. Microsoft Teams) to conduct discussion and interview with co-Reviewer and candidate.

#### 4. Appointment method

Applications to be an ICP reviewer are made to the relevant IChemE staff. Recommendations are then considered by the ICP panel. Following approval by the panel, nominated ICP assessors will be asked to complete induction training. Following approval by the trainer, trainee ICP Reviewers will be advised of their formal appointment.

#### 5. Period of appointment

It is anticipated that ICP Reviewers will serve a minimum of three years in the role.

#### 6. Commitment required

- expected time commitment: 3-4 hours per month
- expected reports received: No more than 6 ICP submissions per year. This includes any subsequent resubmissions or Technical Report Questionnaires and Interviews
- turn around: Target review period for each application is 2 weeks for Technical Biography and 2 weeks for the Technical Report Questionnaire.

#### 7. Training

- all new reviewers are required to undertake induction training and post training assessment.
- all reviewers must be trained or re-trained every 3 years
- other standard volunteer training, eg General Data Protection regulations (GDPR) training, will be required with annual updates.

#### 8. Person specification

- current Chartered Chemical Engineer at Member or Fellow grade
- CEng registered
- ICP Reviewers, whether academics or from industry, are expected to have some understanding of Higher Education as applied to chemical engineering.

#### 9. Others

##### **Benefits of volunteering as an ICP reviewer:**

- supports global engineers in their journey to IChemE Chartered Membership
- maintains the global standards of the chemical engineering profession and IChemE
- allows an up-to-date understanding of the formation of chemical engineers and the implications of this for the profession and their employers.
- enhances volunteer's own CPD for longer term career development and their professionalism in a wider context than their own specific job role.
- exposure to technical developments that may be outside the volunteer's own experience.
- increased understanding of a range of chemical engineering applications in various industries.

##### **Expenses for the activities:**

This is a volunteer role with no significant expenses likely to be incurred. Exceptionally, any expenses to be claimed should be agreed in advance.

## 10. Additional details

<b>Area of interest that relates to the role:</b>	<ul style="list-style-type: none"> <li>• Education</li> <li>• Professional Development</li> <li>• Membership</li> </ul>
<b>Is the role location specific?</b>	No
<b>Total number of volunteers required for this role:</b>	100
<p>To apply for this role or further information, please contact <a href="mailto:volunteer@icheme.org">volunteer@icheme.org</a>, quoting the role and reference number at the top of this document. There is no specific closing date as recruitment is ongoing.</p>	
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Date: 23 April 2023	

## Annex 1: Education bases for Chartered Chemical Engineer membership (MIChemE) and Incorporated Engineer (IEng)

### Education base for Chartered Chemical Engineer membership (MIChemE)

The education base underpinning eligibility for Chartered Chemical Engineer is an IChemE-accredited 'M-Standard' degree or equivalent in chemical engineering.

Candidates with an M-standard accredited degree will have met the formal educational requirements for Chartered status membership in full (Standard Route 1 in Table 1 below).

Candidates with an accredited B-Standard degree will normally need to provide evidence of further learning to the equivalent of an M-Standard degree. This further learning can be achieved through completion of a relevant postgraduate (second cycle) qualification accredited to F-standard, such as MSc (Standard Route 2 in Table 1.)

The ICP provides an alternative route (ICP route in Table 1) where the education base and knowledge gained through other qualifications and experience (the experiential route (on the job)) is assessed and for any gaps identified, further information requested on these specific areas.

**Table 1 Education base for Chartered Chemical Engineer Membership (MIChemE)**

Education base	Qualification for Chartered Chemical Engineer Membership		
Standard Route 1	Accredited M-Standard degree		
Standard Route 2	Accredited B-Standard degree	+	Accredited F-Standard degree
ICP Route	Any qualifications not accredited as above		

### Education base for Incorporated Engineer (IEng)

Candidates with a B-standard accredited degree will have met the formal educational requirements for Incorporated Engineer registration with the Engineering Council in full.

**Table 2 Education base for Incorporated Engineer**

Education base	Qualification for Chartered Chemical Engineer Membership
Standard Route	Accredited B-Standard degree
ICP Route	Any qualifications not accredited as above

## Annex 2: Individual Case Procedure (ICP) process

Candidates interested in achieving Chartered or Incorporated Chemical Engineer status who do not hold accredited qualifications that fully meet the required educational base need to have their academic qualifications appraised via the Individual Case Procedure (ICP).

Candidates are required to submit:

1. Technical Biography which includes: - Scan copies of degree certificate(s)
2. Scan copies of degree module transcripts
3. Scan copies of photo ID, if required.

### Individual Case Procedure (ICP) application

ICP reviewers are required to work in pairs or small groups to conduct a full and expert review of a candidate's qualifications against IChemE requirements on learning outcomes at levels B (and F for Chartered Engineer applications), based on guidance currently under development. The reviewer panel usually comprises one academic and one member from industry, and ideally one is an IChemE trained University Accreditation Assessor. Once completed, ICP reviewers must reach agreement and advise whether the candidate meets the education requirements. The table below shows six possible outcomes of the assessment.

**Table 3 Six possible outcomes of ICP assessment**

ICP Outcomes	Implication
More learning required	<ul style="list-style-type: none"> <li>▪ Candidate does not currently meet the Learning outcomes of an equivalent M-Standard / B-standard accredited degree and more learning is required.</li> </ul>
More evidence required	<ul style="list-style-type: none"> <li>▪ Candidate is asked to provide more evidence to support their application.</li> </ul>
Technical report Questionnaire (TRQ) required	<ul style="list-style-type: none"> <li>▪ Candidate partially meets the Learning Outcomes of an equivalent M-Standard / B-standard accredited degree.</li> <li>▪ Candidate is required to submit specified sections of a Technical Report Questionnaire (TRQ) within 6 weeks.</li> </ul>
Consider applying to a different membership grade	<ul style="list-style-type: none"> <li>▪ Candidate does not currently meet the Learning outcomes for the grade applied for but may meet those at a lower grade</li> </ul>
Recommend another PEI	<ul style="list-style-type: none"> <li>▪ Application to another PEI may be more suitable for the candidate.</li> </ul>
Exempt	<ul style="list-style-type: none"> <li>▪ Candidate meets in full the educational base requirement of Engineering Council and IChemE at M-Standard to become Chartered Chemical Engineer or at B-Standard to become an Incorporated Engineer.</li> <li>▪ Application will proceed to Assessment Outcome Stage.</li> </ul>

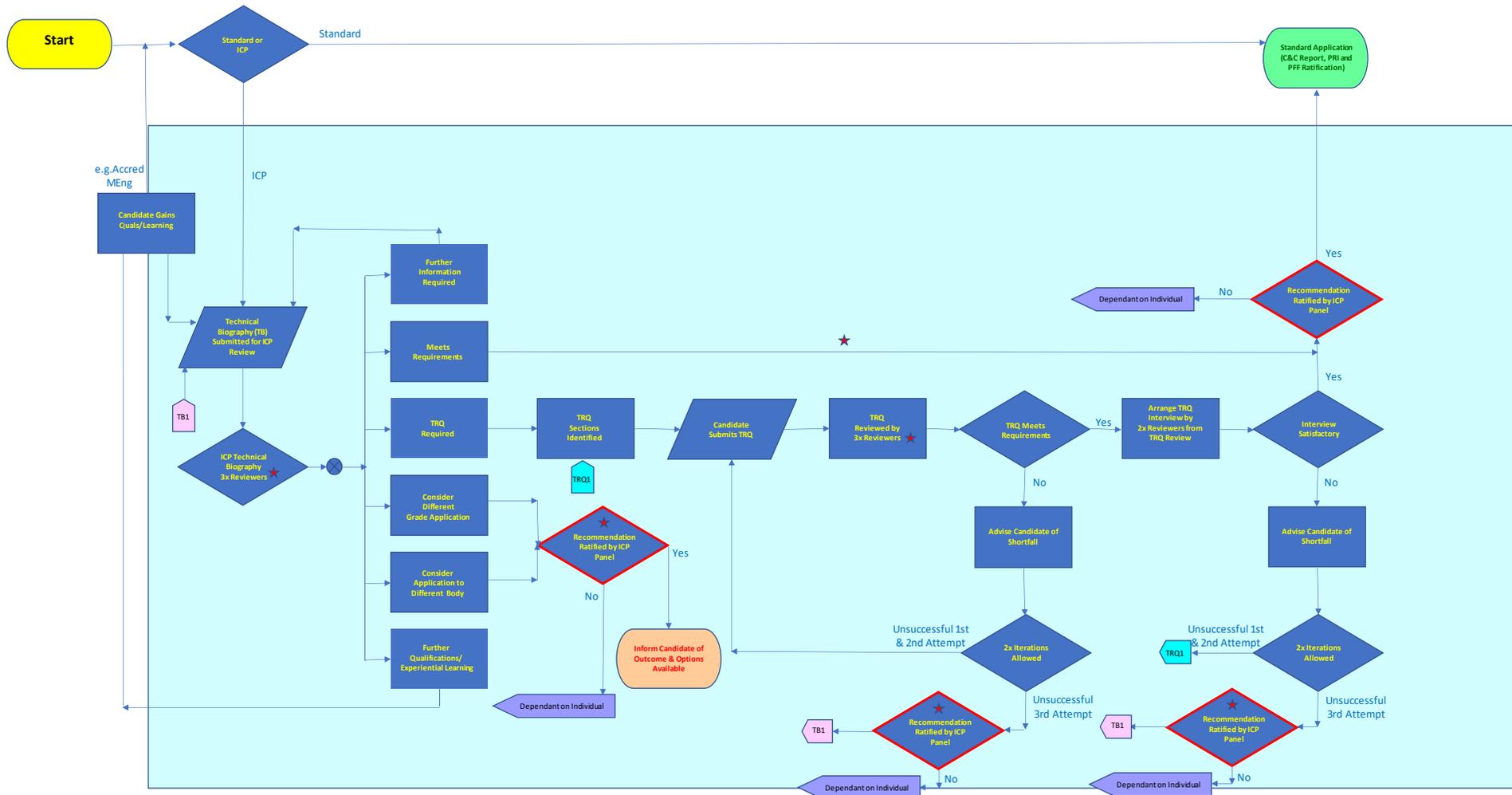


Figure 2: ICP application and assessment process flowchart