IChemE ADVANCING CHEMICAL ENGINEERING WORLDWIDE

Getting Chartered







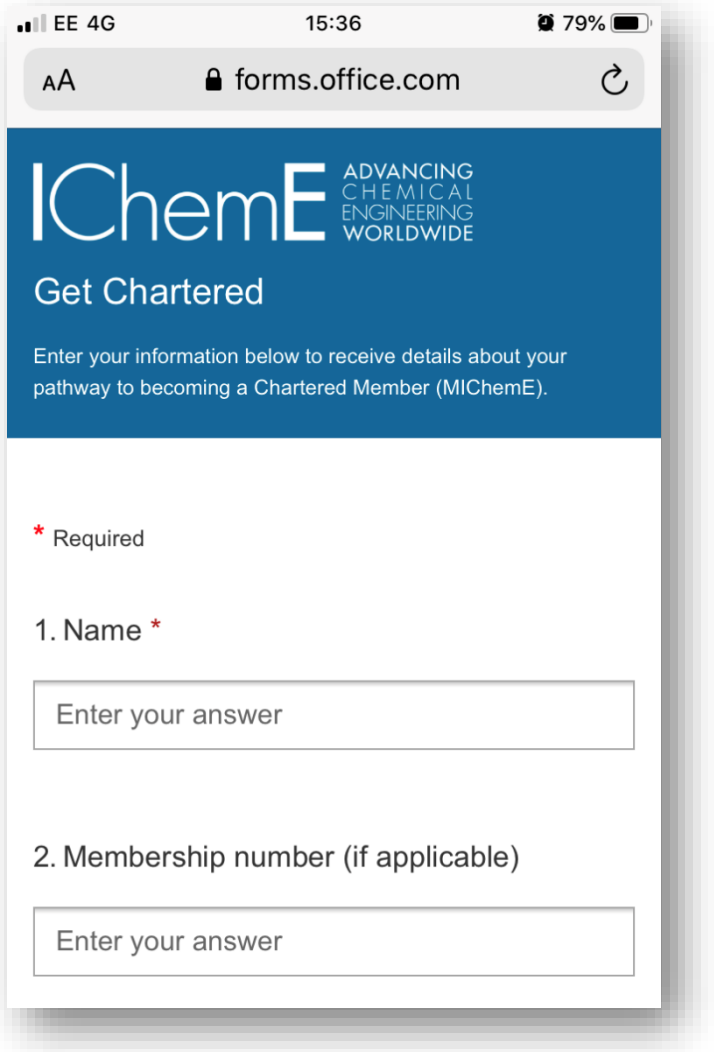

Heather Black
Regional Support Executive

Presentation outline

- about IChemE
- what is a Chartered Chemical Engineer?
- qualification requirements
- Chartered Chemical Engineer competencies
- application process
- hints and tips

Questions?

Complete the form at www.icheme.org/gcform to find out more about your pathway



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A learned society with international reach

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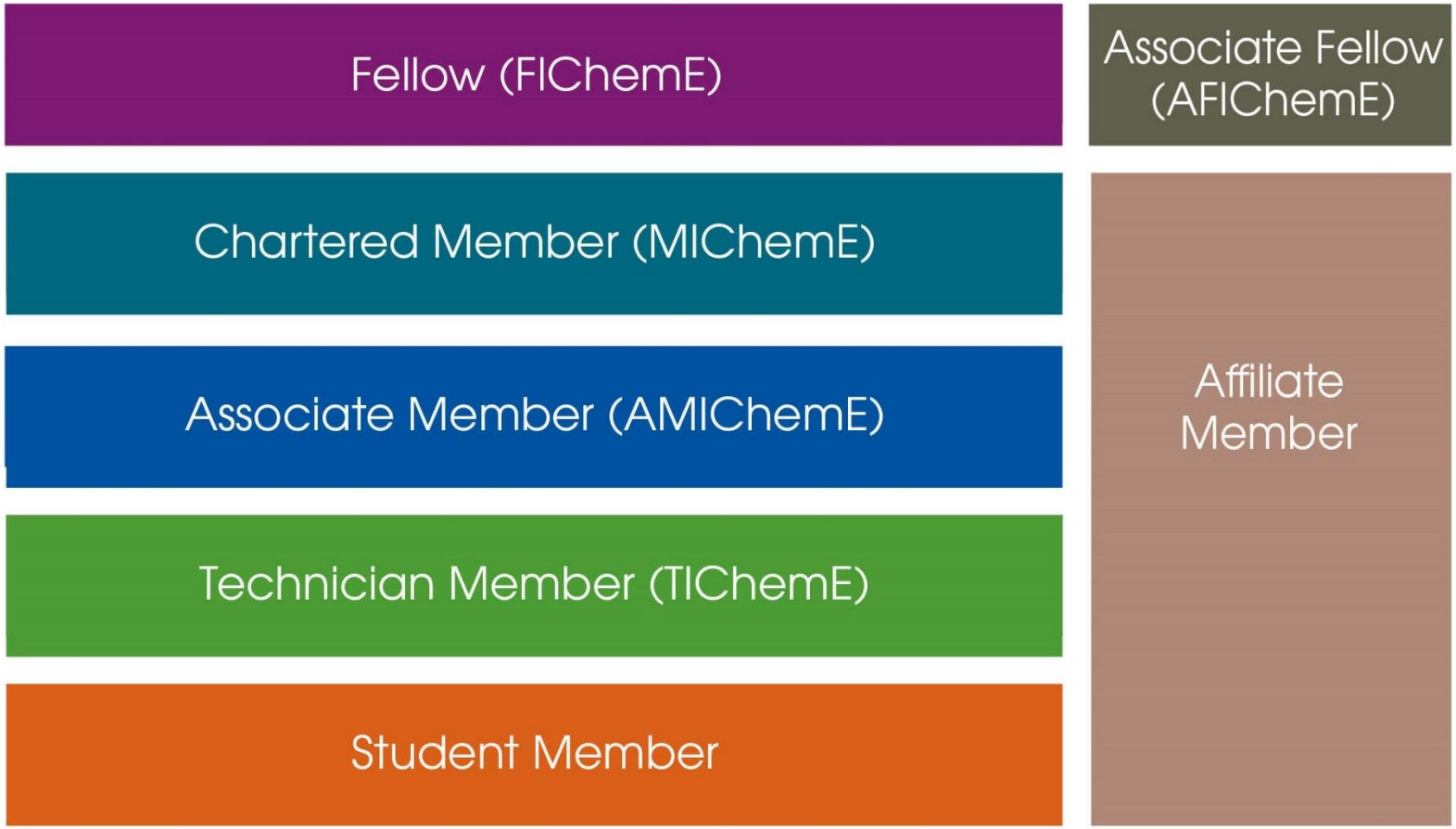
Pathways to membership



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What is a Chartered Chemical Engineer?

"a competent practitioner committed to the highest, professional standards"

- ☑ widely recognised
- ☑ externally validated
- ☑ peer reviewed

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Why get Chartered?

- career development and salary progression
- employer expectations
- client requirements
- peer recognition
- postnominals - MIChemE
- professional pride and commitment

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Additional professional registrations

At time of application

- Chartered Engineer (CEng)
- Chartered Scientist (CSci)
- Registered Professional Engineer Queensland (RPEQ)

Once Chartered

- Professional Process Safety Engineer
- European Engineer (EurIng)
- Chartered Environmentalist (CEnv)

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How to get Chartered

Chartered application requirements

Knowledge & understanding

- core principles
- advanced chemical engineering & design

Professional experience

- competence
- commitment

Submit application

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Supporting evidence requirements

Knowledge & understanding	Professional experience
Degree accredited to M-Standard = no additional evidence required. Degree accredited to B-Standard or non-accredited= further evidence required.	Competence and Commitment (C&C) report.

Submit application

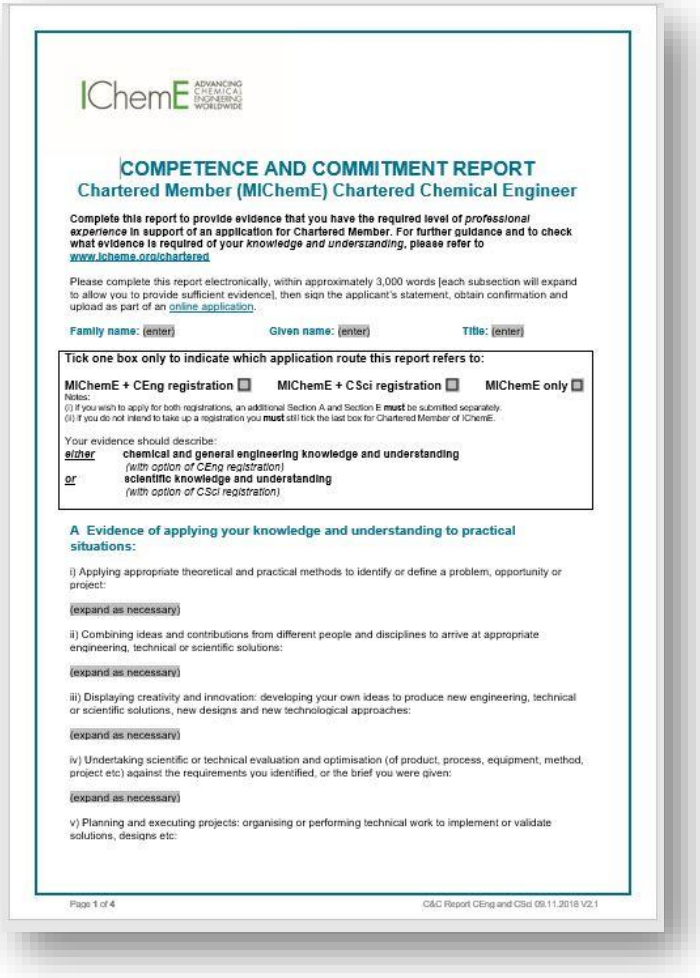





Preparing your Competence and Commitment report

C&C report

- proof of professional competence
- 3,000 words max
- templates, examples and guidance available at: www.icheme.org/candc



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COMPETENCE AND COMMITMENT REPORT

Chartered Member (MIChemE) Chartered Chemical Engineer

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Family name: (enter) **Given name:** (enter) **Title:** (enter)

Tick one box only to indicate which application route this report refers to:

MIChemE + CEng registration ☐ **MIChemE + CSci registration** ☐ **MIChemE only** ☐

Notes:
(i) If you wish to apply for both registrations, an additional Section A and Section E **must** be submitted separately.
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or **scientific knowledge and understanding** *(with option of CSci registration)*

A Evidence of applying your knowledge and understanding to practical situations:

i) Applying appropriate theoretical and practical methods to identify or define a problem, opportunity or project:

(expand as necessary)

ii) Combining ideas and contributions from different people and disciplines to arrive at appropriate engineering, technical or scientific solutions:

(expand as necessary)

iii) Displaying creativity and innovation: developing your own ideas to produce new engineering, technical or scientific solutions, new designs and new technological approaches:

(expand as necessary)

iv) Undertaking scientific or technical evaluation and optimisation (of product, process, equipment, method, project etc) against the requirements you identified, or the brief you were given:

(expand as necessary)

v) Planning and executing projects: organising or performing technical work to implement or validate solutions, designs etc:

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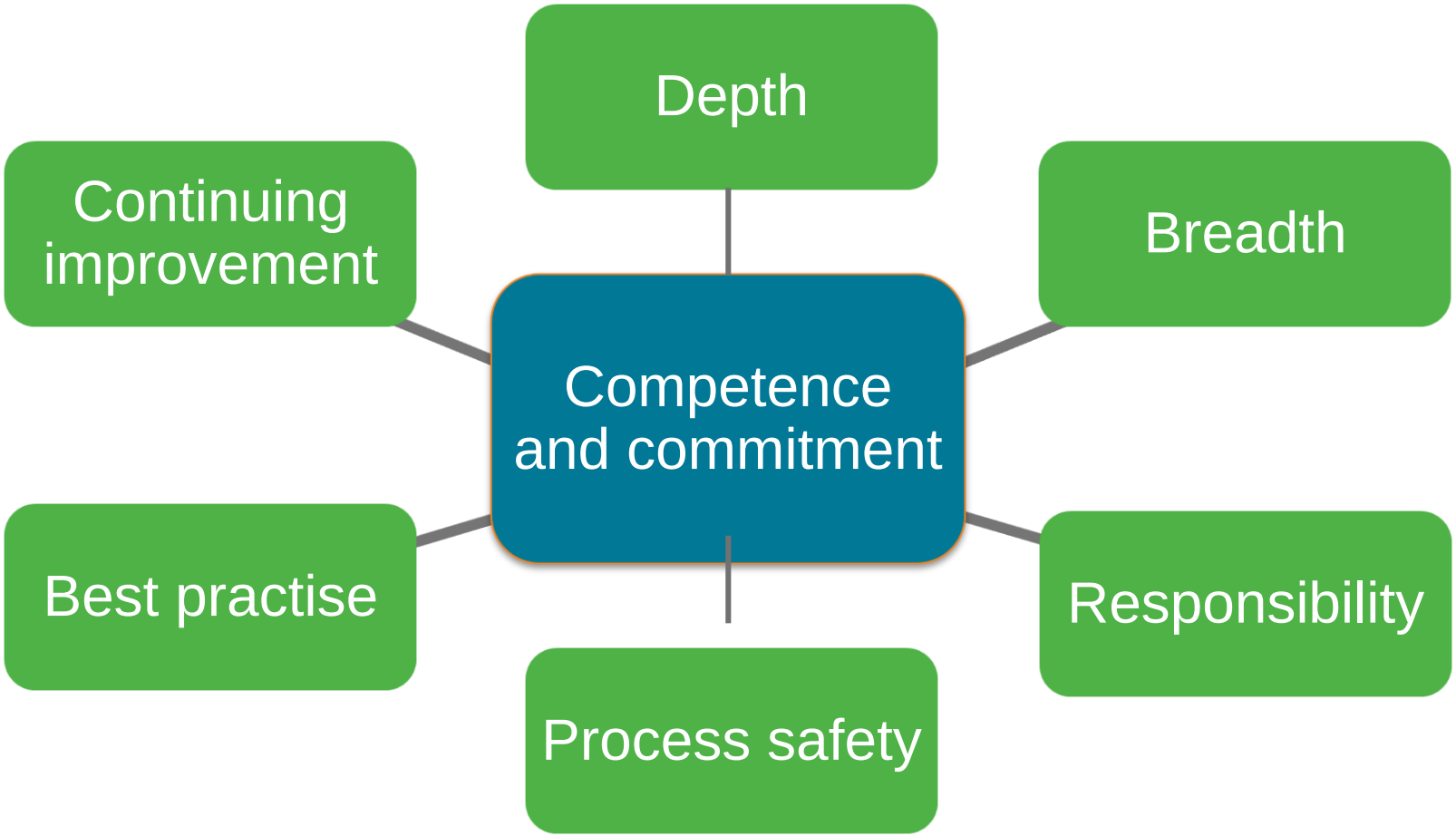
Show your experience



Examples of professional experience

Process plant operation	Legalisation, regulation	Computer application
Development of products, services	Project management, administration	Teaching, managing, training
Instrumentation & control	Quality & assurance	Technical/economic evaluation
Research & development	Economic accountancy, cost estimation	Technical sales, marketing, contracts
Health, safety, risk aspects	Design of process plant & equipment	Sustainability & environmental aspects

Professional responsibility

- working under own supervision
- training others
- budget control
- acting on your own initiative
- responsible for consequences of your technical judgements

You **do not** need to lead a team of engineers.

The Competence and Commitment report

A Demonstrates ability to apply chemical engineering knowledge and understanding to practical situations.

B Shows ability to handle the wider social, environmental, and economic implications of your work.

C Shows interpersonal, leadership and communication skills.

D Demonstrates commitment to a high standards of professional and ethical conduct.

E Demonstrates effective continuing professional development.

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Competence and Commitment report

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Section A

i - Identifying a problem

For example:
environmental hazard, safety or product quality.

Example solutions

- new technology
- new product development (NPD)
- market growth

Section A

ii - Interdisciplinary working

Combining ideas of different people and disciplines to arrive at appropriate engineering, solutions.

Example collaborators

- other engineers
- specialists
- public authorities
- finance
- sales and marketing

Section A

iii - Creativity & innovation

Example ideas

Your ideas, designs technical solutions, processes for cost reduction, efficiency or improvements.

- suitability of design
- lateral thinking
- novel approaches
- link to proven solutions
- making process easier

Section A

iv - Scientific or technical evaluation

Product, process equipment vs brief requirement.

Example considerations

- safety
- feasibility
- evaluative approach
- engineering skills requirement

Section A

v - Planning & project delivery

Your contributions and leadership in organising technical work and validating solutions.

Example contributions

- implement or validate solutions, designs
- correction measures

Competence and Commitment report

- **A** Demonstrates ability to apply chemical engineering knowledge and understanding to practical situations
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Section B

i - Handling health and safety aspects

Application of key principles, legislation good practice etc.

Example solutions

- HAZOP
- risk register
- safety inspections
- regulation compliance

Section B

ii - Handling sustainability aspects

Environmental concerns
recognition of risks
social issues.

Example management

- reducing waste
- emissions
- impact assessments
- sustainability

Section B

iii - Show management of commercial and economic aspects

Economic evaluation of process/plant.

Example management

- cost estimating
- tendering
- managing budgets

Competence and Commitment report

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Section C examples

i - working peer & staff relationships

Ensuring you and colleagues are up-to-date.

Example considerations

- managing challenges
- conflict resolution
- cultural awareness
- achieving objectives across teams

Section C examples

ii - Demonstrating leadership

Initiating projects, delegating, training promoting ChemEng.

Example of personal drive

- conveying commitment and enthusiasm
- achieving team results
- working with peers

Section C

iii - Communicating ideas and plans

E.g. show how you communicate effectively

Example of effective communication

- report writing
- technical presentations
- oral presentations
- PhD, EngDoc

Competence and Commitment report

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C Shows interpersonal, leadership and communication skills

D **Demonstrates commitment to a high standards of professional and ethical conduct**

E **Demonstrate effective continuing professional development**

Section D

What you do to help advance profession and ethical conduct?

i - Professional conduct examples:

- working to codes of conduct
- supporting professional body/ mentoring
- schools outreach – promoting ChemEng
- Member group activities, workshops and seminars

ii - Ethical conduct examples:

- decision making
- adherence to policy and procedures
- avoiding conflicts of interest
- health and safety, employee misconduct

Section E

Continuing Professional Development

Need to show goals and potential benefits.

i Recent CPD activity
ii Future CPD goals

Examples of CPD activity:

- in-house/external courses
- IChemE Member Group or Special Interest
- on-the-job learning
- experience of working in different discipline within chemical engineering
- research/publishing

Section E

E Continuing professional development (CPD)

i) Report of recent CPD already undertaken (eg within last two years):

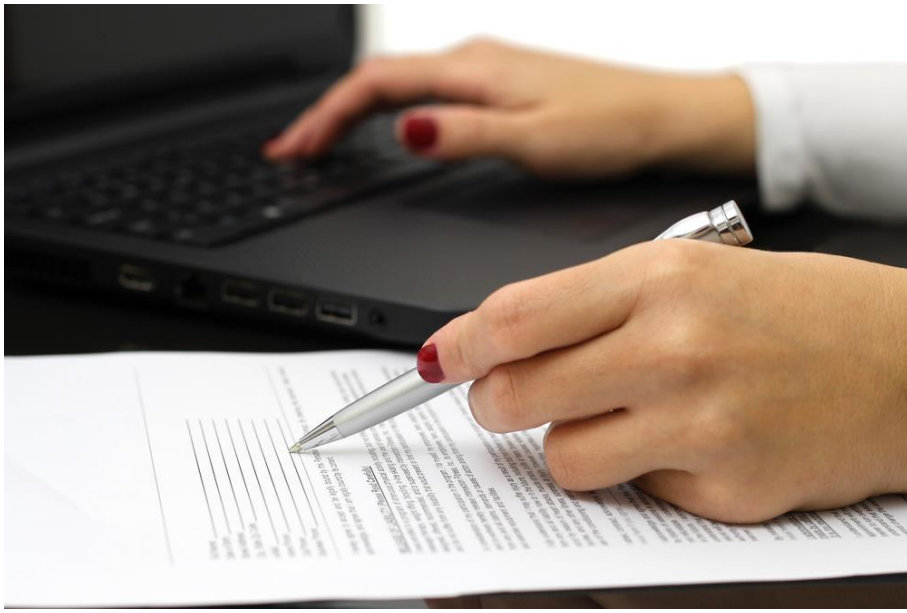
Briefly describe the methods and tools you use to record your CPD activities	(expand as necessary)
Describe the significant CPD activities you have carried out in the last 1-2 working years	For each activity listed, describe the purpose / objective of carrying it out and the benefits you gained from it.
(expand as necessary)	(expand as necessary)

ii) Future CPD Plan

Briefly describe the method and approach/tools that you use to identify your CPD development objectives, and how they are turned into an actionable plan.	(expand as necessary)
Describe the development objectives that you have identified to be addressed in the next 1-2 years and the purpose of each one	For each development objective listed, describe what activities you plan to carry out to achieve it and the expected timescale
(expand as necessary)	(expand as necessary)

Verifying your C&C report

- third party verification of your C&C report is required
- verifiers must be familiar with your work and hold a position of responsibility
- do not necessarily have to be Chartered Members or chemical engineers



Referees

Two referees must be:

- Chartered or Fellow Members of IChemE familiar with you, your work and career

can be:

- superior
- your mentor
- regional group or SIG group member
- university lecturer

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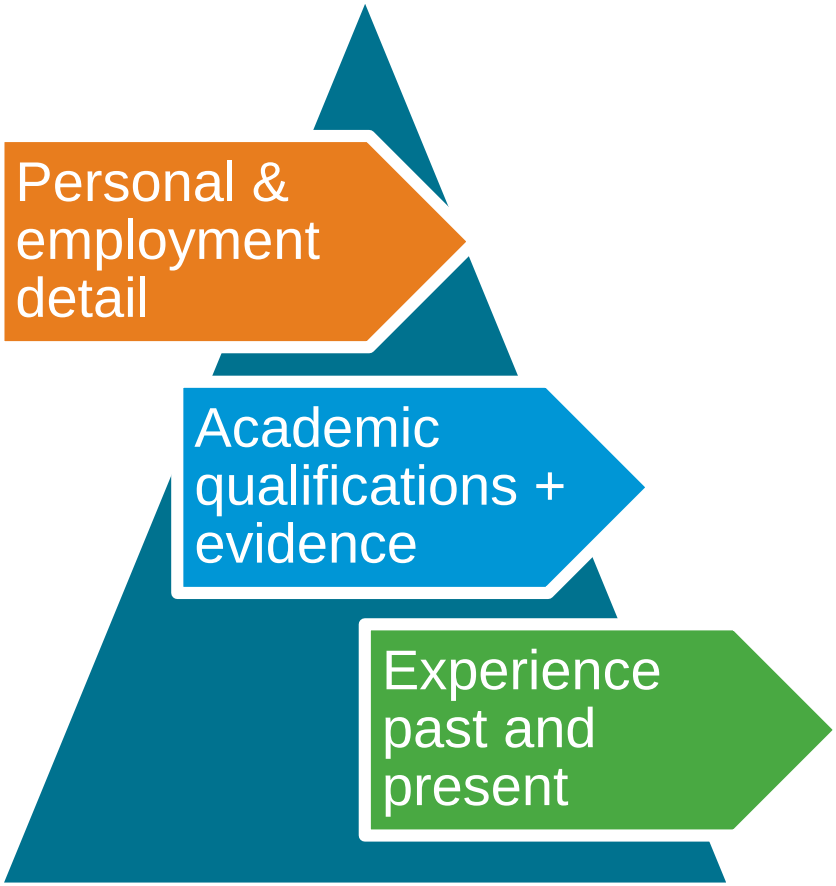
Application process

Application checklist

- C&C report
- academic qualifications
- technical or design evidence report/s (if relevant)
- photo ID and tailored CV

CV must include

- tailored, up-to-date summary of your experience
- relevant information only



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Application process

Interview stage

- approximately one hour interview
- the interviewers ask questions based on the C&C report and your CV
- trained Chartered Members and/or Fellows conduct the interviews





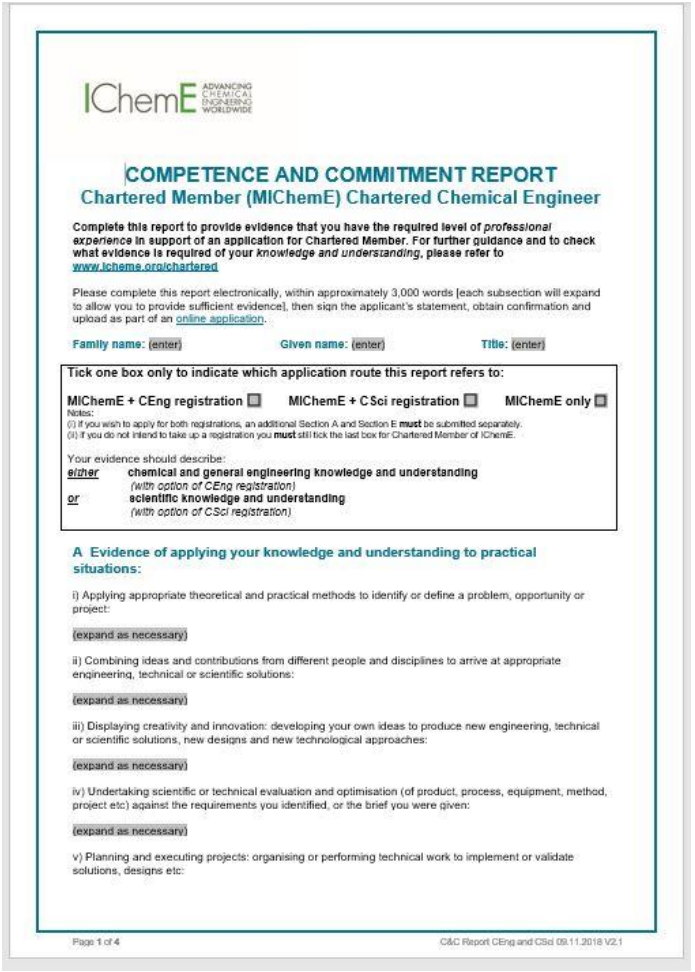





Hints and tips

Competence and commitment report

- **start** application now
- use C&C **template**
- **update** regularly
- **observe** 3000 word limit
- ask for advice from a mentor
- demonstrate **problem- solving**
- show technical **decision-making**
- show professional **responsibility**



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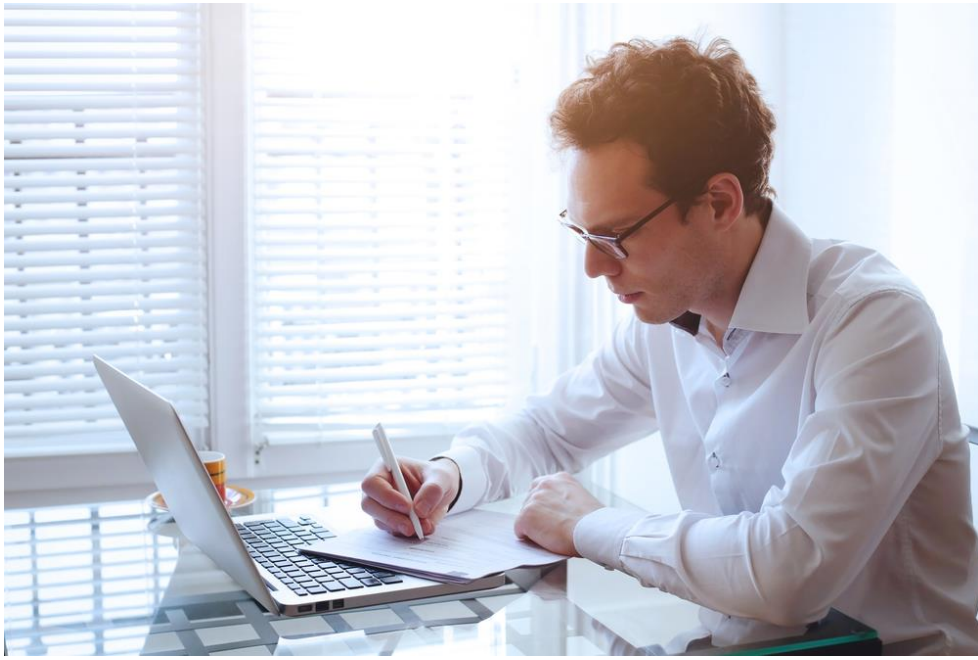
Getting your C&C report right

- include **technical** not sensitive or confidential detail
- choose **one** in-depth example & 1-2 brief points
- use **plain English**
- ask a mentor to check for **gaps** in your experience
- focus on **how** you solve problems



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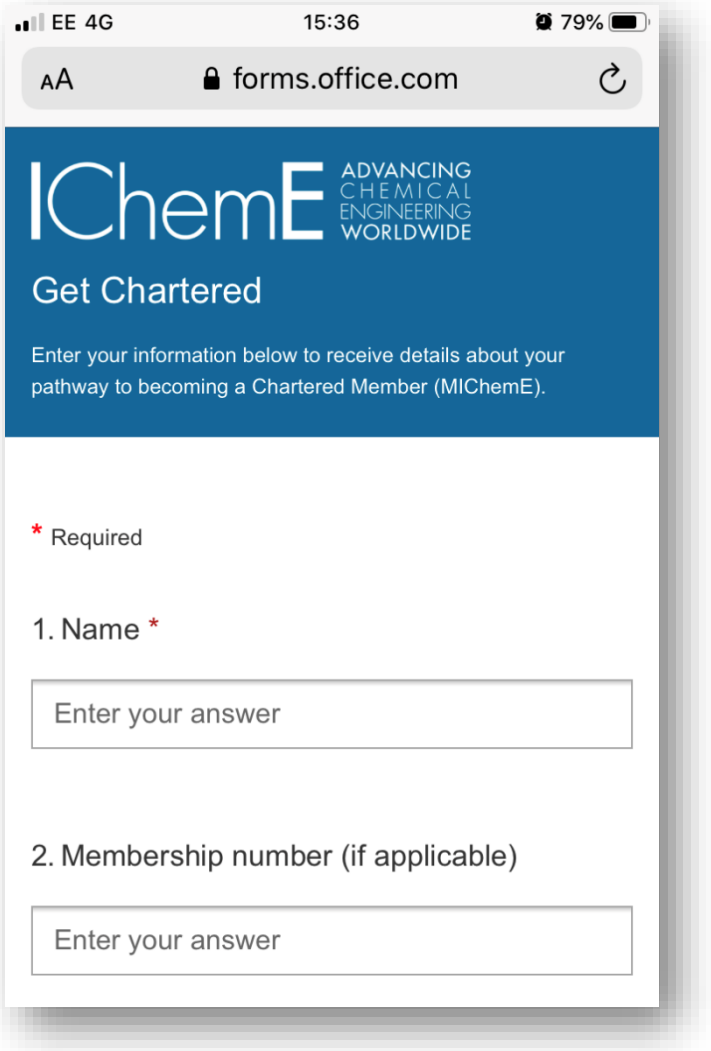

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Getting Chartered Q&A

www.icheme.org/chartered










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