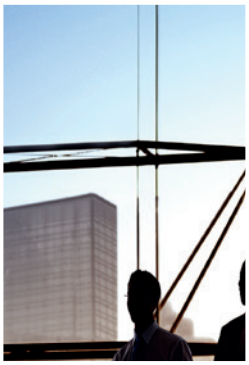
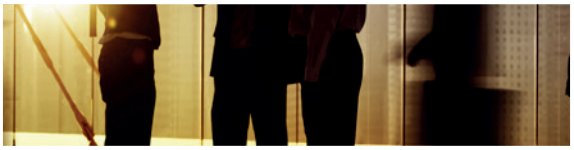
IChemE ADVANCING CHEMICAL ENGINEERING WORLDWIDE

Chartered Member (MIChemE) application guidance







Led by members, supporting members, serving society

Introduction

This document contains information to help you with your application to Chartered Member (MIChemE) and the title of Chartered Chemical Engineer, with emphasis on how to complete and submit your Competence and Commitment (C&C) report.

All candidates applying to become a Chartered Member need to complete a C&C report. Once submitted, this report is used to assess your professional experience in the practical application of chemical engineering against the minimum required level for a Chartered Member (MIChemE). It also demonstrates that you're committed to the profession and your continuing development as an engineer.

We recognise the wide range of careers possible for graduate chemical engineers and the diversity of training and experience they will have received by the time they are ready to apply for Chartered membership. The C&C report is structured to allow all candidates to present examples that demonstrate a strong understanding and application of chemical engineering practice.

Document control

Version no.	Date issued	Changes
V2.0	June 2019	General application information added including application process, interviews, CV, plagiarism and referees.
V1.0	November 2018	Final published version

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Part one: Your application

When applying for Chartered membership you will be asked to provide the following:

1. Personal and current employment details: name, address, date of birth, current employer etc.
2. Academic details: degree certificate/s etc.
3. Experience: employer/job information in chronological order.
4. Referees: details of two referees who support your cpplication for Chartered membership.
5. Data protectoin: tell us about your communication preferences.

Referees

Two referees are needed to provide a reference in support of your Chartered Member application. Your referees must be:

- a Chartered Member or Fellow of IChemE;
- willing to provide you with a reference;
- ready to respond to IChemE when contacted – ask their permission.

Your referees do not need to work with you, or be in the same organisation/country, but they should be sufficiently familiar with your work and career to support your application. They should not be a family member.

We'll contact your referees by email and ask them to complete a form which contains a small number of questions such as:

- how long they've known you, and in what capacity;
- if you are employed in a responsible post in chemical engineering;
- whether they recommend your election to MIChemE.

Note: a third referee who is not a Chartered Member or Fellow can be included if you think it will benefit your application - ie a current/recent line manager.

CV

The Competence and Commitment (C&C) report should be able to stand alone on its own merit, but your CV can be used to help assessors to understand your background, provide a more detailed context of any projects referenced in the C&C report, technical jargon, career progression etc.

You can also use your CV to provide additional clarification to examples in the C&C report eg scale of equipment and/or project and its phase, any documentation you had to develop, meetings attended, details of processes, HAZOP undertaken, how many people in your team for each task or project, specific role etc.

We strongly recommend that you prepare a tailored CV to support your Chartered application. Although similar to the CV you would use for a job application, there are stylistic differences that we encourage you to consider:

- list your professional skills and background clearly and concisely;
- avoid business jargon - the assessor may not work in the same field as you;
- only mention the work you have completed - don't include work done by others;
- write in the first person: "I wrote", "I presented" etc;
- there's no need to include a photograph or contact details. This information is already included in your application;
- the CV is not a refereed document and will not be assessed (however, it must be an accurate and true representation of your career).

Also, activities outside of work should only include IChemE events, engineering, commercial or leadership activities. For instance, being the captain of your local football team or having a cycling hobby are not relevant to your Chartered membership application.

Application and assessment process

All applications are peer-reviewed. Our volunteer assessors and interviewers are Chartered Members and Fellows of IChemE and receive training to ensure consistency and to maintain standards.

Our election panel, the Professional Formation Forum (PFF), are made up of IChemE Fellows who are invited to sit on the panel and make the final decision on whether candidates are elected to Chartered membership.

Once you have uploaded the above information to our online portal your application will follow this process:

Interviews

Once your C&C report has been successfully assessed, your application will proceed to the interview stage. All Chartered Member applications require a Professional Review Interview (PRI) based around the content of your C&C report where the interviewers can determine the following:

- your C&C report is a true account of your professional experience;
- you have the required level of responsibility;
- your competence and commitment are adequate in all categories.

Two interviewers will be in attendance and sessions are often held virtually. Our membership team will send further information about the interview – including preparation notes and suggestions to candidates at the appropriate time.

Your interviewers will submit an interview report in confidence to IChemE's Professional Formation Forum (PFF) election panel who will make the final decision about your election to Chartered membership

Note: in some circumstances a second Professional Review Interview may be requested by the interviewers, or by the PFF, to further explore/discuss your professional experience. If this happens a different set of interviewers will be used.

Part two: The C&C report

Report writing

Your Competence and Commitment (C&C) report will be assessed by Chartered Members and Fellows of IChemE who volunteer their time to uphold the standards of IChemE and support the professional development of members.

Please complete your report in accordance with these guidelines and provide evidence from your professional practice that you meet the requirements for Chartered membership. This will help IChemE to use the valuable time of volunteer assessors effectively and to obtain a decision on your application as soon as possible.

If your report does not meet the requirements, or if the assessors require further information, you'll have two chances to make corrections and re-submit your report, after which your application will be closed and you'll need to re-apply.

Things to consider:

- your report should be approximately 3,000 words in total (and no more than 20% over);
- make sure that your report accurately reflects your own experience;
- ensure that you can discuss the work described in your report in further depth at interview.

Do:

- be concise across all sections using clear, correct English;
- minimise the use of acronyms (unless defined in full when first appearing in the report or in a glossary);
- show application of chemical engineering principles;
- show appreciation for, and specific application of health and safety principles, sustainability etc;
- provide evidence of problem solving (describe the problem, the action you took, and the outcome);
- write the report in first person singular so your role and actions are clear ("I did", "I designed", "my report..." etc);
- use active tense;
- check for consistency between your report and additional details in your CV;
- emphasise what you actually did for each example.

Don't:

- plagiarise others' work (ie from the internet, IChemE website examples, a colleague's application);
- use more words than necessary;
- write the report in third person (singular or plural) so that your role and actions are unclear;
- write in the passive tense. "I was involved in…", "I was told that...";
- use words like "we" or "they";
- supply insufficient chemical engineering related examples in Section A;
- exaggerate your role or importance in the task being described;
- provide limited evidence of problem solving (describe the problem, the action you took, and the outcome);
- spend time explaining the context of the example, thereby using valuable words that could be better spent explaining what you did (CV can give the context if needed);
- talk in generalities ("I've been involved in many projects...", "I have several examples...") provide specific examples;
- expect the assessor to "read between the lines" and make assumptions about your experience and competence;
- forget to spell-check the application before submitting (it is good practice to prepare the full report in a word processor document and when the report is fully ready to submit, cut and paste into the C&C report template).

Personal role

Within each section, you should identify the most appropriate examples from your own professional development that best reflect your chemical engineering experience.

Be specific when describing your individual role in, and contribution to, a piece of work. The Chartered Chemical Engineer title is awarded based on your own chemical engineering competence, and not on the success of a project or organisation.

Responsibility

To become a Chartered Member, IChemE requires that candidates have reached the standards of competence and commitment to the profession that can reasonably be expected for someone who has had a broad and good quality experience, who is operating in a position of responsibility within chemical engineering and using chemical engineering principles routinely in their day to day work.

The experience cited in your C&C report should demonstrate that you are professionally responsible for the consequences of your technical judgements and decisions. It is understood that in your early career you will probably be under close supervision, but as you prepare to apply for Chartered status there should be a progression towards increased responsibility. You do not need management experience, but work activities showing some (or all) of the following features suggest a suitable level of responsibility:

- you show a proactive approach and use your initiative;
- take ownership of an area of work or project;
- colleagues rely on your engineering judgement or advice on chemical engineering aspects;
- budgetary accountability.

Your C&C report should focus primarily on your career post-graduation, whether in industry or academia. However, you may include appropriate evidence from an industrial placement, or skills and experience gained in long term employment during your undergraduate studies, if it involved a professional level of responsibility and provides the best example for that specific question.

C&C report overview

Competence (sections A–C)

The primary requirement within the first three sections of the C&C report is to demonstrate that your personal academic knowledge has translated into chemical engineering competence. You may reference formal training as well as work-based learning and you should refer to the chemical engineering principles that back up your work where relevant. You should aim to write 100–200 words maximum in each sub-section.

Depth

Ensure that you provide adequate technical detail in sections A–C. Consider the following model with indications of how much to write for each:

- context – provide brief detail about the circumstances of the work you are describing (~20%);
- action – detail the actions you took (~60%);
- result – describe the outcomes, whether successful or otherwise, or still pending (~20%).

Breadth

Through the examples that you provide in sections A–C, you should show that that you have had a broad range of experience.

The table below covers what IChemE believes to be a comprehensive overview of the varied technical areas of chemical engineering practice. These apply to both industrial and academic environments and include practical applications within postgraduate study.

As long as you can demonstrate that you are applying chemical engineering principles and can provide evidence appropriate to each section, the IChemE assessment process is designed to value and assess your experience on equal merit - whatever your particular career path.

Within your C&C report, we would expect you to match your experience across four to six of these areas:

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

Commitment (sections D–E)

Sections D and E require you to write a narrative demonstrating to the assessor that you are committed to high standards of professional and ethical conduct and recognise obligations to society, the profession and the environment. You're required to maintain your professional development and competence and keep your knowledge up to date as a consolidated part of your professional duties. Each of these sections underlines a key factor of the Chartered Chemical Engineer title and you should give due consideration to their completion.

Confidentiality

Use the C&C report to demonstrate to IChemE that your individual competence meets the minimum level expected of a Chartered Chemical Engineer. The assessors need to understand the technical aspects of your work and the engineering challenges involved. You should be specific about what you did, but you're not required to disclose confidential information contrary to your employer's confidentiality policy. For example, you can remove specific projects' details with client names and refer to them as "client A" etc. Remember to do likewise in the CV too.

Note that all the assessors and interviewers are bound by the IChemE Code of Conduct and the Data Protection Act 2018.

Number/type of examples per section

You should provide a sufficient number of examples that will demonstrate the depth and breadth of your technical and professional experience.

For each sub-section, we recommend that you provide one in-depth example, with a second (or even a third) example to show application in different instances to demonstrate the breadth of your experience. Make sure to consider the word count when adding examples to ensure you don't overrun the limit.

C&C report checklist

Before submitting, please consider whether you have met all of the points below:

Practical application	
Relevant theory	
Responsibility	
Personal contribution (I did…)	
Skills and experience (not time)	
Technical depth	
Breadth (four to six technical areas)	
Word count (cut superfluous information)	
Spelling/typos	
Verification	

C&C report - section breakdown

Section A: application of knowledge

Provide evidence of your ability to apply knowledge and understanding of engineering or science to practical chemical engineering situations.

The examples provided must involve the use of chemical engineering principles and knowledge. Having an awareness of methodologies, the use of standard formulae or data entry into standard spreadsheets of other models, without an apparent understanding of the underlying chemical engineering principles, does not demonstrate adequate experience.

Examples of chemical engineering principles include, but are not limited to:

- laws of conservation;
- chemical thermodynamics;
- mathematical modelling;
- economic evaluation;
- understanding of process technologies;
- understanding of underlying chemistry;
- systemic approach to safety and sustainability in process design;
- systemic approach to the analysis of systems.

Ai. Identifying or defining a problem, opportunity or project

How are you proactive in anticipating problems in your work and how do you subsequently go about overcoming these problems or finding solutions? Please specify particular calculations, research, analysis modelling etc you may have used in your work (you do not have to include workings or appendices).

Examples:

- designing experiments to study heat transfer rates in a fluidised bed combustion chamber;
- selecting design codes for a vacuum vessel and pipework;
- specifying process and equipment modifications to update a pharmaceutical water system;
- identifying thermal cycling problems and developing an improved control system.

You might write:

I calculated the rate of evaporation from concrete impregnated by a very low volatility substance of high odour characteristics to estimate how long a smell would persist…

Aii. Combining ideas and contributions of different people and disciplines

Convey your ability to obtain information from an interdisciplinary team, whether that includes other engineers, scientists, technical sales or marketing professionals. How do you use the skills and knowledge of others to arrive at an outcome you wouldn't be able to achieve individually?

Examples:

- obtaining data from a multidisciplinary team of chemists, biologists and controls engineers to solve a fermentation problem in protein packaging;
- providing a key contribution to a team of chemists, engineers and operators to commission an automatic chemical analysis system;
- consulting reservoir engineers to obtain operating forecasts for process design.

You might write:

I was responsible for coordinating information from geologists and petrophysicists that allowed me to develop a cost effective and optimised well design…

Aiii. Creativity and innovation: developing your own ideas to produce new solutions, designs and technological approaches

How do you go about making improvements/modifications in your work? Innovation is relevant at any level providing you are advancing either a process or equipment in some way, be it reducing cost, improving efficiency, increasing safety aspects etc. You are not expected to be registering your own patents or inventing new formulae. Refer to specific outputs of your work, for example; preparation of front-end design documents, material and energy balances, process flow diagrams (PFD), outline equipment specifications.

Examples:

- developing new commercial standard design software for gas absorption processes;
- developing new materials for artificial organs;
- commercialising a novel consumer washing powder at production scale;
- recommending and installing advanced process control to improve plant performance.

You might write:

I found a new approach in the technical literature to a long-standing problem and investigated how to apply this…

Aiv. Scientific or technical evaluation and optimisation (of product, process, equipment, method, project etc against the requirements you identified, or the brief you were given)

How do you ensure your solutions are safe and feasible before you implement them? If you have had access to data from a processing operation, explain in this section how the materials being processed behave in practice.

Examples:

- corrosion testing of column packing material;
- carrying out sludge dewatering trials to select the most appropriate processes;
- evaluating alternative control schemes for a pasteuriser using a simulation system;
- assessment of the effect of a raw material quality on plant performance.

You might write:

I measured flow and concentrations to produce a mass balance for identifying, then reducing, materials losses…

Av. Planning and execution of projects: organising or performing technical work to implement or validate solutions, designs etc.

How do you contribute to the delivery of projects? Ideally, a few years into your career you should look to lead on a small project to gain experience of working on every stage, eg from planning and research, to development and implementation to manufacture or marketing and sales etc.

In this section you will likely need to consider commercial aspects.

Examples:

- devising changeover procedures to convert to new control hardware;
- commissioning an acid plant conversion section and comparison with designs;
- programming and supervising the erection of a new clean room manufacturing facility;
- managing the development of piping & instrumentation diagrams (P&IDs) for new projects.

You might write:

I benchmarked performance of similar plants and identified where and how the best performed better than the others…

Section B: evidence that you can handle the wider implications of your work as an engineer

Demonstrate your awareness of the safety, environmental and commercial implications of your work. Developing awareness does not mean that you need expert experience working as a safety engineer, environmental consultant or project manager – these issues should be inherent in the work of any chemical engineer.

Bi. Ability to handle health, hazard and safety aspects: to apply appropriate principles, good practice, meet legislative requirements etc.

Give direct examples that describe your contribution to ensuring safety and health in process operations (which may include laboratories). This section is a critical requirement for successful application for Chartered Chemical Engineer status.

In particular, you need to show experience of systematically evaluating either a new design or an existing process to identify, evaluate and address process hazards. The process could either be at pilot scale or full scale.

Examples:

- attendance of, or contribution to, any kind of process hazard analysis review meeting (eg HAZOP, HAZID, HACCP, "What if…" etc);
- management of hazards eg risk assessment, LOPA/SIL assessment;
- identification of overpressure scenarios and the subsequent design of pressure relief systems;
- training in the correct application of safety principles and procedures in any practical situation (on an operating site, in construction, in a laboratory etc);
- completion of safety awareness training (including behavioural safety);
- understanding of HSE legislation (eg H&S at Work Act, COMAH, COSSH or other local country legislation);
- construction and operating plant safety regulations – permit to work system, handling of hazardous materials, safety risk assessments etc;
- specific design activities – vent dispersion analysis, explosion modelling, hazardous/flammable emission detection systems etc;
- auditing safety compliance of a pilot plant used for teaching in a university;
- designing or evaluating pressure relief, emergency flare and fire-fighting systems;
- carrying out an investigation into a boiler explosion.

You might write:

I prepared a safe working procedure (SWP) for an unusual maintenance task…

Bii. Ability to handle sustainability aspects: ie environmental, public concern and other societal issues, recognition of risks etc.

Demonstrate your understanding of how operations may have an environmental or societal impact and show how you incorporate recognition and remediation of these risks into your work.

Examples:

- investigating the bio-remediation of contaminated soil;
- preparing environmental impact assessment documents for a solvent plant;
- implementing and monitoring an ISO14000 environmental management system at an oil refinery;
- analysis and investigation of ways of reducing energy use;
- undertaking or taking part in a Quantitative Risk Assessment (QRA), Environmental Impact Assessment (EIA);
- attendance in, and contribution to, a Safety Integrity Level (SIL) review meeting;
- contact with the public regarding the resolution of an environmental issue;
- presenting a clear appreciation of the environmental impact and mitigation factors in the design implementation of any new project;
- undertaking design work to remove a sold/liquid/gaseous effluent problem;
- involvement in reduction or better utilisation of waste material or energy streams, contributing to better sustainability;
- specific design activities such as environmental noise mapping, design to mitigate fugitive emissions (seal systems) etc.

You might write:

I ensured that plant emissions controls complied with best available technology…

Biii. Ability to handle commercial and economic aspects

Show how you have contributed, as an engineer, to commercial decisions.

Examples:

- devising a spreadsheet to optimise refinery product mix schedules based on market price data;
- estimating capital and operating costs for alternative designs;
- carrying out an insurance risk assessment for a novel manufacturing process;
- assessing the cost implication of loss of yield versus shut down costs for cleaning;
- gaining experience in a sales or marketing role (eg as part of a training rotation);
- gaining experience in a design equipment and/or procurement role;
- undertaking a technical-commercial optimisation study to find an economically feasible solution;
- planning and managing a small project, or part of a larger project, in terms of schedule, staff/cost budget, equipment costs etc;
- buying of chemicals and equipment for a research laboratory.

You might write:

I set out the cost and non-cost implications of introducing a further production line on site…

Section C: interpersonal, leadership & communication skills

Convey how you effectively communicate and work with professionals at all levels. How do you ensure your colleagues know what you are doing and how do you gather information on issues concerning you?

Ci. Managing interpersonal relationships

Many roles involve the effective use of teamwork, and you should demonstrate your effectiveness in managing interpersonal relationships when working in a team environment. This may be in a project setting but can apply to working with others (including other disciplines and non-engineering professions) on an operating plant or in an academic environment.

Give specific examples where your contribution had an important effect or impact, rather than simply "working in a team". How does the development of professional relationships impact on your ability to do your job successfully? Evidence of liaising with external clients, suppliers and organisations should also be considered.

Examples:

- resolving conflicts and create, maintain and enhance productive working relationships;
- negotiating contractual arrangements with other stakeholders (client, subcontractors, suppliers etc);
- communicating operating plans with production staff.

You might write:

I promoted a project aimed at continuous improvement within a staff group…

Cii. Demonstrating leadership in a professional role

You do not necessarily have to be the manager of a team of engineers to demonstrate leadership. Candidates on a quality graduate training scheme (with IChemE accreditation for instance) should be eligible to apply before the age of 30 and many will not have had experience managing their peers or leading teams.

You should demonstrate abilities in making decisions that require an expected level of maturity. Such decisions could be primarily in a technical context (eg resolving an operating problem or making a design decision about a piece of equipment) or by supervising a group of engineers. It could also be demonstrated in the training of junior engineers.

Think of other ways you demonstrate leadership, for example working pro-actively as an individual eg initiating projects, delegating work, training your peers, providing direction to operators or technicians.

Examples:

- ensuring that variations from quality standards, programme and budgets are identified and that corrective action is taken;
- agreeing objectives and work plans with teams and individuals;
- leading and supporting team and individual development;
- leading a technical review.

You might write:

I provided leadership for an 'Open Day'…

Ciii. Communicating ideas and plans by report writing and oral presentation

The ability to present ideas, facts and experiences in a clear and concise manner is an important aspect of being a professionally qualified engineer. You should give evidence here of presenting technical data orally and writing reports

about your findings. Work completed for a PhD, EngD or other academic research may be relevant. This needs to be over and above what would be considered as standard tasks in your current role, so examples of doing something in addition to what you are normally expected to do/produce are required here.

Examples:

- writing a user requirement specification (URS) for a control system;
- delivering a presentation to peers/supervisors;
- preparing/presenting a technical paper, report or seminar (eg at an event or conference);
- writing screen displays for an acid plan conversion to computer control;
- provision of technical guidelines to assist in product selection;
- presenting alternative design options to senior management;
- supporting a sales presentation.

You might write:

I devised a slideshow of the implications to the plant of a new product variant, which was specifically tailored to different senior managers' interests...

Section D: show your commitment to high standards of professional and ethical conduct

Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment.

Di. Professional conduct

Demonstrate your commitment to ensuring that your work is of the highest possible standard and that you seek continuous improvement and advancement in your work, both as an individual and by engaging and participating with the wider profession.

You may wish to consider:

- adherence to your organisation or company quality management system and its approved procedures;
- professional activities over and above your core role;
- mentoring or encouraging others to maintain competence;
- appropriate selection and use of technical standards;
- awareness and compliance with relevant code of conduct to your work activities over and above your core role;
- support to wider profession in member group activities, science and technology initiatives, school outreach etc.

You might write:

I am active within my local members group and have organised various technical seminars on the subject of (…) to help others gain an understanding of this field.

I have volunteered in my community to promote engineering to school children with the aim of securing the next generation of chemical engineers.

I have trained younger engineers in … as part of an ongoing scheme to ensure competence across my company.

Dii. Ethical decision making

Give direct examples which illustrate your personal and ethical commitment of working to professional standards laid out by IChemE, your company or organisation, and of the wider community.

You may wish to consider:

- the IChemE Code of Ethics and the Statement of Ethical Principles; how this impacts on your behaviour and influences your decision making;
- issues of confidentiality;
- avoiding conflict of interest;
- knowledge and application of company codes of conduct/standards/behaviours/values.

You might write:

I faced a professional dilemma when my company secured a contract with my previous employer, so I …. (your response)

I noticed a potential hazard that was outside of my core area, but recognised my ethical responsibility and reported it through appropriate mechanism…

Section E: continuing professional development (CPD)

In this section you should outline, within approximately 500 words, your recent development and short to medium term development plans. You should also describe the received and potential benefits associated with these goals. You will also need to describe how you identify and plan your CPD, and how you record activities carried out.

Ei. Report of recent CPD already undertaken

Briefly describe the methods and tools you use to record your CPD activities.	Give an explanation of how and where you maintain your record of CPD activities undertaken. You should also indicate what types of activity you record and what other information you record. See IChemE's website for more information: **www.icheme.org/career/cpd**

Describe the significant CPD activities you have carried out in the last 12 months.	**For each activity listed, describe the purpose/ objective of carrying it out and the benefits you gained from it.**
Provide a list of the significant CPD activities you have undertaken in the last 12 months. These would normally include activities from the broad range of CPD activity types (training courses, work based (on the job), academic learning, volunteering, events/seminars and self-study etc).	For each item listed in the adjacent column, please give a brief description of the purpose/objective that lay behind the activity being performed, and what key benefits you gained by carrying it out.

EII. 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.	Give a brief outline of the process/steps you follow to create your CPD objectives. You should include as appropriate (a) how your CPD needs are identified and prioritised, (b) how and with whom they are agreed (if required), and (c) how those objectives are then turned into a plan which can be put into action. This process will vary depending on your own personal circumstances and may refer to your employer's annual development review process and tools. Where appropriate, links to longer-term career plans should be included.

Describe the development objectives that you have identified to be addressed in the next 12-18 months and the purpose of each one.	**For each objective listed, describe what activities you plan to carry out to achieve them and the expected timescale.**
Give a brief description of the key development objectives that you have identified for the next 12-18 months, and why those particular ones were chosen.	For each objective in the adjacent column, please provide brief details of the activities you will undertake to complete each one and give an indicative timescale for each objective.

Consider your technical development, as well as your broader professional skills. Show that you are proactive in seeking development opportunities and specify the time scale involved and the intended outcome(s).

CPD: further information

The challenges and opportunities of experience at work will provide the central method for your continuing professional development, however you may support this with formal/structured activities.

When planning and recording CPD consider:

1. Demonstration of commitment to maintaining competence:

- understanding of the use of evidence in your recruitment/employment/appraisals;
- updating particular areas of technical competence, so that your practice is fully in line with current professional and legal/commercial requirements;
- development of interpersonal and management skills (also known as transferable skills);
- broadening of experience leading to new career opportunities.

2. Self-management

- identifying and prioritising development needs and opportunities;
- using appropriate guidelines and competence benchmarks;
- planning and carrying out development action using a range of appropriate learning opportunities;
- recording useful sources, development achievements and forms of evidence;
- evaluating achievements and reviewing against needs.

IChemE does not issue guidance on the specific CPD members should undertake. This should be driven by the most appropriate development for the role, sector and career stage.

Methods of CPD include:

- external courses including distance learning;
- in company training/in-house courses;
- work-based learning, eg codes observed, conflicts resolved;
- shadowing;
- preparation and delivery of lectures and presentations;
- research/publishing;
- attendance at lectures, seminars, conferences, webinars;
- secondment and special projects;
- moving department;
- moving sector;
- coaching, tutoring, monitoring, teaching;
- self-directed private study;
- relevant voluntary work.

More information about continuing professional development including IChemE's CPD Policy and revalidation requirements for membership grades and professional registrations can be found at **www.icheme.org/cpd**

Verification

As part of the application and assessment process, we require that the experience cited in your C&C report is verified as a true account by another individual(s). A verifier's role differs from the referees' - your referees are supporting your application to Chartered membership as a whole, whereas your verifier is confirming the experience cited in your C&C report. However, the same person can act as both verifier and referee providing they fulfil the requirements for each role.

The person(s) verifying your experience should have been:

- in a senior position to you at the time of the work referenced; and
- familiar with the work you were doing at the time.

They do not have to be:

- a member of IChemE;
- Chartered;
- a chemical engineer;
- your referee;
- your current manager;
- in the same country as you.

If one person can vouch for all of the training and experience cited in your C&C report, please ask them to sign the end of your report and provide their professional qualifications (if relevant) and their relationship to you. If more than one person is required to verify, you should ask them to indicate in the relevant boxes, which sections they attest on your behalf, and sign as before. We will also accept electronic verification if your verifier cannot sign the report in person.

If more than 20% of your report cannot be verified, please send a covering letter explaining why. For example, if you have lost contact with the individual concerned. Please expect this section to be discussed more thoroughly in your interview.

Additional Information

Plagiarism

IChemE's plagiarism policy applies to existing members of all grades, and where applicable, to those in the process of applying to become members. It supports sections 3bx and 3bxv of the Code of Conduct that require members to reject bribery and other corrupt practices, and to be mindful of the integrity expected of members of the Institution in their personal conduct.

For further details visit **www.icheme.org/plagiarism**

Further guidance

Examples of report sections can be found at **www.icheme.org/chartered**

If you have any questions or need further information contact **members@icheme.org**

Led by members, supporting members, serving society

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