The global network for the materials cycle

Institute of Materials, Minerals & Mining

Guide to Application

Chartered Engineer CEng

Chartered Environmentalist CEnv

Chartered Scientist CSci

- **Competence & Commitment Requirements**
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All enquiries and questions should be addressed to the membership department:

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1. Introduction

Applications for professional registration at the Chartered level are welcome from engineers, scientists, chemists, physicists, geologists, and technologists including those from the packaging and wood, industrial, academic, and related sectors. Applicants are expected to have practical experience and be able to apply the underpinning technical principles relating to their discipline. They must also be able to exercise competent managerial skills and judgment. IOM3 applies the following definitions to the Chartered level professional registrations it offers:

Chartered Engineers (CEng) develop solutions to engineering problems using new or existing technologies, through innovation creativity and change. They may be accountable for complex systems with significant levels of risk.

Chartered Environmentalists (CEnv) apply sustainable thinking throughout their work, particularly in the use of natural resources. In addition, they take a lead in communicating the environmental case.

Chartered Scientists (CSci) demonstrate effective leadership and use specialist knowledge and broader scientific understanding to improve the application of science.

There are four stages to satisfy in order to gain Chartered professional registration. These are:

Educational Base: minimum of an accredited RQF Level 7/SCQF Level 11 qualification or equivalent such as a Masters' first degree or alternative equivalent package of qualifications, such as a Bachelor's first degree topped up with an MSc or PhD or completion of an accredited company training scheme, which will need to be assessed.

In the case of CEng, if an individual **commenced their degree studies before 1999**, the academic threshold is an accredited Bachelor's first degree or an alternative package of qualifications, which will need to be assessed.

Those who wish to apply for CEng and do not hold a RQF Level 7/SCQF Level 11 qualification or equivalent package of qualifications can still do so through the **Technical Report Route (TRR)** and should consult the TRR guide.

Those who wish to apply for CEnv or CSci and do not hold a RQF Level 7/SCQF Level 11 qualification or equivalent package of qualifications can still do so through the **Equivalence Route (EQR)** and should contact the Membership Department for further information.

Professional Development (PD): demonstrating development in the early and formative years of related employment, including responsible experience. This may be through a formal PD scheme or general professional work experience.

Professional Review: submission and testing of evidence by a peer review process to ascertain whether the applicant has achieved professional competence, and a commitment to professional standards and codes.

Continuing Professional Development (CPD): a commitment to maintaining competence to practise.

Applicants are assessed against the respective Competence requirements for which they have made an application. Applicants for CEng will be assessed against the Engineering Council UK-SPEC; those for CSci against the Science Council standard; and those for CEnv against the Practice Direction of the Society for the Environment. Full details of these frameworks are given in the appendices.

2. Forms

a) Application form

It is important to complete all sections of the form in the spaces provided, particularly those that are indicated as required, even when information is repeated elsewhere in the application or IOM3 already holds the information.

b) Referees and supporters

There are different referee/supporter requirements for the Chartered level professional registrations offered, these are:

CEng – one supporter is required to sign-off the application form.
CEnv – two supporters are required to sign-off a 'CEnv Competence Supporter Verification Form'.
CSci – one supporter is required to complete and sign-off a 'CSci Supporter Review Form'.

Individuals suitable to act as referees/supporters should ideally hold the professional registration for which the applicant is applying, failing that individual holding a different Chartered level registration can act instead. Please contact the Membership Department if you have any questions about this or problems in finding suitable supporters.

Completed forms can be returned directly to the Membership Department unless it is preferred to give it to the applicant for submission.

c) Academic certificates

Applicants must provide copies of their further and/or higher education qualification certificate(s) unless these have been previously submitted to IOM3.

3. Supporting documentation

a) Professional review report (CEng, CEnv & CSci)

The Professional Review Report (PRR) is presented in the form of an expanded CV, which details the applicant's career and professional development. For each position, the applicant should provide a description of their function and responsibilities, giving examples of projects and activities they have undertaken, and materials or natural resources, techniques, processes, and equipment they have become familiar with.

The PRR should link the applicant's career and professional development to the competence requirements of the professional registration(s) they are applying for, which are listed in the appendices. The PRR should ideally be four (4) to five (5) sides of A4.

An example of a PRR excerpt for an individual applying for both CEng and CEnv is shown below.

Project Manager – Recycled Resources (7 June 2019 – present)	**CEng**	**CEnv**
General description of role: Technical leader for our company's development programmes concerned with a range of recycled metallic and non-metallic materials. Projects vary in size from £150k to £3m over timescales of 6 months to 3 years. Role includes customer presentation and liaison, and the writing of tenders, including descriptions of technical risk. Bidding work also includes the construction and negotiation of non-disclosure (NDA) and intellectual property (IP) agreements, in association with the Contracts Department. In addition to driving technical strategy, I am also responsible for project management, implementing our environmental and ethical practice assessment procedures, which I co-wrote, and the generation of safe working practices. I also supervise and mentor 6 members of staff. Mentoring activities focus on both professional and career progression. All work is performed to conform to quality standards (accredited to ISO 9001:2015). I have increased both the depth and breadth of my technical knowledge substantially during this period, both through on the job training and a programme of CPD which has included self-directed learning and attending formal courses and IOM3 events. I have also spoken about our environmental practices at a recent SocEnv webinar. Due to the varied nature of the work involved in this position, I have broken down my most recent project to better indicate how the Engineering Council and Society for the Environment requirements have been met.	A1-A2 B1-B3 D2 D1, E3, E5 C1, C2, C3 E1-E2 E4 D1	 A1-A3 B1-B2 B3, C1-C2 D1-D3
Responsibilities: Technical leader for a team of 10 people. Responsible for setting up collaborative work between the company and an Indian supplier to source copper metal for specific applications. Oversaw the initial selection of appropriate extraction method and materials testing procedures and standards. Regularly prepare presentations and review reports for Customer Consortium. Responsible for controlling budgets for individual work packages.	C1, C2, C3 A1-A2 B1-B3 D1-D3 C4	 A1-A3 B1-B2 C1-C2 A1-A3, D4
Technicalities of project include: An environmental impact assessment of several brown field sites marked for future built development was required; metal characterisation studies to ensure material integrity compliance for a range of defence-related processes and products; a study of Indian regulations around reclamation operations in an IS5572:2009 hazardous environment and their associated codes of practice.	A1, E3, E5 E4 E1, E2	 D3-D4

Applicants should be able to demonstrate their competence in all areas, but the depth and extent of their experience and competence will vary with the nature and requirements of their role. They will need to demonstrate a level of competence in each area and at a level which is consistent with their specific role. It is to be expected that they will have a higher level of competence in some areas than others, however they need to demonstrate an understanding of, and familiarity with, the key aspects of competence in all areas as a minimum requirement while demonstrating higher levels of competence in those areas which are critical to their role. Overall, they will demonstrate an appropriate balance of competences to perform their role effectively at a Chartered level.

b) Competence report template (alternative for CSci only)

Applicants for CSci may complete one of these templates instead of presenting their PRR in expanded CV form. The template is designed so that the applicant can provide information from their professional experience and achievements against each of the individual competences.

c) Presentation

Applicants are required to submit the summary of a presentation they will make at their professional review interview (PRI). The summary should relate to a project, which will demonstrate their range of knowledge, experience, technical ability, and depth of responsibility. Those applying for CEng should demonstrate the engineering dimension of the work; for CEnv, the environmental dimension; and for CSci the scientific dimension.

Applicants are requested to use PowerPoint and must ensure that they have obtained any necessary permissions for the use of the project. In the event of the project being commercially sensitive, applicants should seek advice from the Membership Department.

A suggested slide order for the presentation is:

1. Title slide.
2. Project outline and the applicant's role in it.
3. Methodology applied.
4. Technical and management challenges encountered.
5. Outcomes – this can be financial, technical and include potential applications.
6. Key lessons learnt.

Presentation Summary

This should be no more than 300 words, but with sufficient detail to brief the Assessors.

Presentation at the PRI

Applicants will be allowed 10 minutes during the PRI to deliver their presentation, which will be followed by up to 10 minutes of questioning by the interviewers. In certain instances, the Q&A session may be extended at the discretion of the interviewers, but this will not extend the length of the interview.

d) CPD record & annual professional development plan

Applicants must include in their application a record of their CPD activities, covering a partial record for the calendar year in which they are making their application and completed records for the three previous calendar years. In addition, they must also submit a plan of their proposed CPD activity for the year in which they are making their application – the Annual Professional Development Plan – a template showing examples is available from the IOM3 website.

It is a requirement of the Engineering Council, Science Council and Society for the Environment that registrants and those seeking registration participate in and record their CPD activities. IOM3 requires its registrants and applicants to undertake and record a minimum of 35 hours CPD each calendar year.

Ideally CPD should be a mixture of learning activities relevant to current or future practice and could include the following categories:

1. Work-based learning (WBL).
2. Professional activity (PA).
3. Formal education (FE).
4. Self-directed learning (SDL).
5. Conferences, Seminars, and Workshops (CSW).
6. Other activities which extend or broaden an individual's professional knowledge, skills, understanding or experience (O).

Information to be included in the CPD record is:

1. Date.
2. Type, i.e., work-based learning.
3. CPD hours.
4. Title & provider for formal activities.
5. Outcome and Benefits, which should be a short but concise reflective statement on how the activity has benefitted the individual's professional knowledge, skills, understanding or experience.

Finally, a photocopy of the personal details page from the applicant's passport should also be submitted.

4. Application completion

We require applications to be submitted electronically to membership@iom3.org ensuring that any scanned documents are legible.

Applications will be acknowledged within five (5) working days of submission. Please contact us by email if you do not receive an acknowledgement.

At this stage, all applications will be checked for completeness and applicants notified if any further information is required.

5. Professional review interview (PRI)

Following review by a Scrutineer Review Panel (SRP), applicants for CEng and CEnv are required to attend a PRI and at the discretion of the Membership Committee for those applying for CSci. This provides the applicant with an opportunity to demonstrate that they are practicing at the level for which they are seeking recognition.

The PRI will be conducted by a Professional Review Panel (PRP) consisting of two trained assessors who are members of IOM3 and hold the professional registration for which the applicant has applied.

Applicants are required to bring to the PRI their passport to confirm their identification, which will be verified before the PRI commences.

The PRI will be held online using MS Teams and last between 45 to 60 minutes. It will cover the applicant's professional development, technical experience and achievements, management and commercial awareness, and commitment to professional standards including Continuing Professional Development. The PRP will use the Competence requirements as the framework and assessment matrix for the PRI.

Following the PRI, the PRP will submit an evaluation report and recommendation which will be used by the Membership Committee to reach a decision on the applicant's suitability for professional registration.

6. The approval process

The Membership Committee will consider the reports submitted by the SRP and PRP, together with a copy of the applicant's full application when making their decision. Applicants will be notified in writing of the Committee's decision within 10 working days of it being made.

We aim to complete the approval process within 90 working days of the complete application being submitted, provided that a mutually convenient date for the PRI can be arranged.

Upon election as a registrant, the member may use the respective post nominal letters **CEng, CEnv or CSci** alongside their Institute membership grade and the title Chartered Engineer, Chartered Environmentalist or Chartered Scientist as appropriate.

The general data protection regulation (GDPR) and data protection act 2018

The Institute will hold and use the data provided in your application for the purposes of assessing your application. It will also pass data necessary to complete your registration onto the respective registration bodies, i.e., Engineering Council, Science Council, or the Society for the Environment.

Appendix 1 - Chartered engineer (CEng) competence requirements

CEng shall:	The applicant shall demonstrate that they:
A. Use a combination of general and specialised engineering knowledge and understanding to optimise the application of advanced and complex systems.	1. Have maintained and extended a sound theoretical approach to enable them to develop their particular role.
	2. Are developing technological solutions to unusual or challenging problems, using their knowledge, and understanding and/or dealing with complex technical issues or situations with significant levels of risk.
B. Apply appropriate theoretical and practical methods to the analysis and solution of engineering problems.	1. Take an active role in the identification and definition of project requirements, problems, and opportunities.
	2. Can identify the appropriate investigations and research needed to undertake the design, development and analysis required to complete an engineering task and conduct these activities effectively.
	3. Can implement engineering tasks and evaluate the effectiveness of engineering solutions.
C. Demonstrate technical and commercial leadership.	1. Plan the work and resources needed to enable effective implementation of a significant engineering task or project.
	2. Manage (organise, direct and control) programme or schedule, budget and resource elements of a significant engineering task or project.
	3. Lead teams or technical specialisms and assist others to meet changing technical and managerial needs.
	4. Bring about continuous quality improvement and promote best practice.
D. Demonstrate effective communication and interpersonal skills.	1. Communicate effectively with others, at all levels, in English.
	2. Clearly present and discuss proposals, justifications, and conclusions.
	3. Demonstrate personal and social skills and awareness of diversity and inclusion issues.
E. Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession, and the environment.	1. Understand and comply with relevant codes of conduct.
	2. Understand the safety implications of their role and manage, apply, and improve safe systems of work.
	3. Understand the principles of sustainable development and apply them in their work.
	4. Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice.
	5. Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner.

These competences are expanded on the following pages.

When drafting their professional review report, applicants could use the following as evidence to meet the various competences:

A1 Have maintained and extended a sound theoretical approach to enable them to develop their particular role.

- Formal training related to your role.
- Learning and developing new engineering knowledge in a different industry or role.
- Understanding the current and emerging technology and technical best practice in your area of expertise.
- Developing a broader and deeper knowledge base through research and experimentation.
- Learning and developing new engineering theories and techniques in the workplace.

A2 Are developing technological solutions to unusual or challenging problems, using their knowledge, and understanding and/or dealing with complex technical issues or situations with significant levels of risk.

- Carry out technical research and development
- Developing new designs, processes or systems based on new or evolving technology.
- Carrying out complex and/or non-standard technical analyses.
- Developing solutions involving complex or multidisciplinary technology.
- Developing new and evaluating continuous improvement systems.
- Developing solutions in safety critical industries or applications.

B1 Take an active role in the identification and definition of project requirements, problems, and opportunities.

- Identifying projects or technical improvements to products, processes, or systems.
- Preparing specifications, taking account of functional and other requirements.
- Establishing user requirements.
- Reviewing specifications and tenders to identify technical issues and potential improvements.
- Carrying out technical risk analysis and identifying mitigation measures.
- Considering and implementing new and emerging technologies

B2 Can identify the appropriate investigations and research needed to undertake the design, development and analysis required to complete an engineering task and conduct these activities effectively.

- Identifying and agreeing appropriate research methodologies
- Investigating a technical issue, identifying potential solutions, and determining the factors needed to compare them
- Identifying and carrying out physical tests or trials and analysing and evaluating the results
- Carrying out technical simulations or analysis
- Preparing, presenting, and agreeing design recommendations, with appropriate analysis of risk, and taking account of cost, quality, safety, reliability, accessibility, appearance, fitness for purpose, security (including cyber security), intellectual property constraints and opportunities and environmental impact.

B3 Can implement engineering tasks and evaluate the effectiveness of engineering solutions.

- Ensuring that the application of the design results in the appropriate practical outcome.
- Implementing design solutions, taking account of critical constraints, including due concern for safety, sustainability and disposal or decommissioning.
- Identifying and implementing lessons learned.
- Evaluating existing designs or processes and identifying faults or potential improvements including risk, safety, and life cycle considerations.
- Actively learning from feedback on results to improve future design solutions and build best practice.

C1 Plan the work and resources needed to enable effective implementation of a significant engineering task or project.

- Preparing budgets and associated work programmes for projects or tasks.
- Systematically reviewing the factors affecting the project implementation including safety, sustainability and disposal or decommissioning considerations.
- Carrying out a task or project risk assessment and identifying mitigation measures.
- Leading on preparing and agreeing implementation plans and method statements.
- Negotiating and agreeing arrangements with customers, colleagues, contractors, and other stakeholders, including regulatory bodies.
- Ensuring that information flow is appropriate and effective.

C2 Manage (organise, direct and control) programme or schedule, budget and resource elements of a significant engineering task or project.

- Operating or defining appropriate management systems including risk registers and contingency systems.
- Managing the balance between quality, cost, and time.
- Monitoring progress and associated costs and cost forecasts, taking appropriate actions when required.
- Establishing and maintaining appropriate quality standards within legal and statutory requirements.
- Interfacing effectively with customers, contractors, and other stakeholders.

C3 Lead teams or technical specialisms and assist others to meet changing technical and managerial needs.

- Agreeing objectives and work plans with teams and individuals.
- Reinforcing team commitment to professional standards.
- Leading and supporting team and individual development.
- Assessing team and individual performance and providing feedback.
- Seeking input from other teams or specialists where needed and managing the relationship.
- Providing specialist knowledge, guidance, and input in your specialism to engineering teams, engineers, customers, management, and relevant stakeholders.
- Delivering or developing a teaching module at Masters' level or leading a university research programme.

C4 Bring about continuous quality improvement and promote best practice.

- Promoting quality throughout the organisation as well as customer and supplier networks.
- Developing and maintaining operations to meet quality standards e.g., ISO 9000, EQFM.
- Supporting or directing project evaluation and proposing recommendations for improvement.
- Implementing and sharing the results of lessons learned.

D1 Communicate effectively with others, at all levels, in English.

- Preparing reports, drawings, specifications, and other documentation on complex matters.
- Leading, chairing, contributing to and recording meetings and discussions.
- Exchanging information and providing advice to technical and non-technical colleagues.
- Engaging or interacting with professional networks.

D2 Clearly present and discuss proposals, justifications, and conclusions.

- Contributing to scientific papers or articles as an author.
- Preparing and delivering presentations on strategic matters.
- Preparing bids, proposals, or studies.
- Identifying, agreeing, and learning work towards collective goals

D3 Demonstrate personal and social skills and awareness of diversity and inclusion issues.

- Knowing and managing own emotions, strengths, and weaknesses.
- Being confident and flexible in dealing with new and changing interpersonal situations.
- Identifying, agreeing, and working towards collective goals.
- Creating, maintaining, and enhancing productive working relationships, and resolving conflicts.
- Being supportive of the needs and concerns of others, especially where this relates to diversity and inclusion.

E1 Understand and comply with relevant codes of conduct.

- Demonstrating compliance with your Licensee's Code of Professional Conduct.
- Identifying aspects of the Code which are particularly relevant to your role.
- Be aware of the legislative and regulatory frameworks relevant to your role and how they conform to them.
- Leading work within relevant legislations and regulatory frameworks, including social and employment legislation.

E2 Understand the safety implications of their role and manage, apply, and improve safe systems of work.

- Identifying and taking responsibility for your own obligations and ensuring that others assume similar responsibility for health, safety, and welfare issues.
- Ensuring that systems satisfy health, safety, and welfare requirements.
- Developing and implementing appropriate hazard identification and risk management systems and culture.
- Managing, evaluating, and improving these systems.
- Applying a sound knowledge of health and safety legislation, for example: HASAW 1974, CDM regulations, ISO 45001, and company safety policies.

E3 Understand the principles of sustainable development and apply them in their work.

- Operating and acting responsibly, taking account of the need to progress environmental, social, and economic outcomes simultaneously.
- Providing products and services which maintain and enhance the quality of the environment and community and meet financial objectives.
- Recognising how sustainability principles, as described in the Engineering Council Guidance on Sustainability can be applied in your day-to-day work.
- Understanding and securing stakeholder involvement in sustainable development.
- Using resources efficiently and effectively in all activities.
- Taking action to minimise environmental impact in your area of responsibility.

E4 Carry out and record the Continuing Professional Development (CPD) necessary to maintain and enhance competence in their own area of practice

- Undertaking reviews of your own development needs.
- Planning how to meet personal and organisational objectives.
- Carrying out planned and unplanned CPD activities.
- Maintaining evidence of competence development.
- Evaluating CPD outcomes against any plans made.
- Assisting others with their own CPD.

E5 Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner.

- Understanding the ethical issues that you may encounter in your role.
- Giving an example of where you have applied ethical principles as described in the Engineering Council Statement of Ethical Principles.
- Giving an example of where you have applied, or upheld ethical principles as defined by your organisation or company.

Appendix 2 - Chartered scientist (CSci) competence requirements

A	**Application of knowledge and understanding**	
A1	Demonstrate how you use knowledge, experience, skills, and broader scientific understanding to optimise the application of existing and emerging science and technology.	You should provide sufficient detail here to show your deep understanding of your specialist scientific subject and how you have applied it. Further to this, include any examples of where your broader scientific understanding is applied to your area of practice. Examples could include but are not limited to: • Writing and presenting internal papers, reports, or standards. • Conducting appropriate research to facilitate design and development of scientific processes. • Writing primary journal articles and patents.
A2	Exercise sound judgement and understand principles of uncertainty in complex and unpredictable situations.	This competence is asking you to identify and be aware of the limit of your own knowledge and professional competence, to demonstrate an ability to manage your own strengths and weaknesses and to recognise the level of risk attached to your actions. Examples could include but are not limited to: • When you have reacted and dealt with an unexpected outcome. • When you have approached a piece of work or project flexibly and in a novel or different way or reacted to an unexpected outcome.
A3	Demonstrate critical evaluation of relevant scientific information and concepts to propose solutions to problems.	You should think of this competence in terms of selecting the best methodology, the subsequent data analysis, evaluations, and conclusions you draw and how you overcome any barriers or issues. Examples could include but are not limited to: • Engaging in experimental design and testing. • Reviewing relevant literature, databases, manuals, or designs. • Statistical analysis and numerical modelling.
B	**Personal responsibility**	
B1	Work autonomously and take responsibility for the work of self and others.	It is important for this competence to ensure you describe your contribution, responsibility and impact on a certain task or project and make it clear what you personally have achieved i.e. "I" not "we". In formulating your answers and giving relevant examples, you should consider the following: • You will be expected to undertake your work without day-to-day supervision and so you should demonstrate that you are able to achieve this. • You should demonstrate your understanding of when you may need to seek guidance from others and how you would obtain this guidance.

		• If you are responsible for managing the work of others, you should clearly describe how you discharge those responsibilities.
B2	Promote, implement, and take responsibility for robust policies and protocols relating to health, safety, and sustainability.	You should demonstrate that you understand the policies and protocols related to health, safety and sustainability that apply to the work you are undertaking giving examples where you have implemented and promoted them and describe any responsibilities that you have related to this. In formulating your answers, you should consider the following: • Demonstrate that you know where these policies and protocols are documented, and that you are able to apply them in your practice. • How your work contributes to the update and development of your departments/organisations policies and procedures. • How you 'promote' the awareness and application of these policies and protocols with others, especially peers and more junior colleagues.
B3	Promote and ensure compliance with all relevant regulatory requirements and quality standards.	You should demonstrate that you understand which regulatory requirements and quality standards apply to your area of work including data integrity and privacy. In formulating your answers and giving examples, you should consider the following: • Describe what you do to ensure that these requirements and standards are being followed for those activities for which you are responsible. • Describe how you 'promote' the awareness of regulatory requirements and quality standards amongst peers and more junior colleagues. • Describe how you safely store and handle data in line with national and international data protection and cyber security regulations.
B4	Oversee the implementation of solutions and demonstrate an understanding of potential and actual impacts of your work on your organisation, on the profession and on the wider community.	You should demonstrate an understanding of the potential and actual impacts of your work on your organisation, on the profession, on the general public, and on the physical environment. Examples could include but are not limited to: • Indicating that you are aware of the sensitivity of your work and show how this understanding translates into the ways in which you carry out your work. • Showing an awareness of how your profession is portrayed and viewed by the public at large, and how you take responsibility for recognising this in the work you do. • Describing how you seek to avoid reputational damage related to the work you carry out. • Explaining how you set a good example to others in the way you discharge the responsibilities related to the work you undertake and the benefits to the organisation.
C	**Interpersonal skills**	

C1	Demonstrate the ability to communicate effectively with specialist and non-specialist audiences.	A non-specialist audience is anyone working outside of your particular area of expertise, so it would not necessarily be a non-scientist. Your example(s) should indicate how you have communicated in a way that is effective to each type of audience. In formulating your answers, you should consider the following: • Not just the content of the message but also the mode or style of delivery that is adapted according to the audience. • The feedback loop to gauge the understanding and improve future communications.
C2	Demonstrate effective leadership through the ability to guide, influence, inspire and empathise with others.	This competence is about understanding your leadership skills and is not reserved for those in management roles, it is applicable to all. Examples could include but are not limited to: • Experiences of mentoring or coaching you have had; you should consider how effective this was and the overall impact. • Considering when you have managed change within your organisation or overseen the implementation of any new processes; you should consider how effective this was and the overall impact.
C3	Demonstrate the ability to mediate, develop and maintain positive working relationships.	You should describe or define the "working relationship" and provide at least one example which focuses on your handling of a challenging interpersonal situation and demonstrates your ability to mediate and achieve a positive outcome. You should consider how through your approach you have changed or modified the behaviour or attitudes of others to positive effect. Examples could include but are not limited to: • How you have managed the merger or integration of different teams. • Managing working relationships across different departments or organisations. • Interactions with committees, working groups or other professional body activities. • How you have managed and resolved a difficult relationship situation between members of a team for which you are responsible.
D	**Professional practice**	
D1	Demonstrate how you scope and plan and manage projects.	Describe an example where you have developed a project scope with clearly defined boundaries and project plans. Any problem-solving techniques used should be highlighted along with potential benefits of the project to the business. You should make it clear the level of autonomy you had while working on the project, especially when the project is large covering multiple areas and a significant time span. You should show how you contributed to determining the resulting courses of action. Examples could include but are not limited to:

		• Lead an operational project utilising resources across several disciplines. • A change management project aligning processes across sites. • An industry-wide project establishing guidance on technical standards and requirements.
D2	Demonstrate the achievement of desired outcomes with the effective management of resources and risks.	Using projects with which you have been involved as examples you should describe your roles and responsibilities in managing the activities to achieve the desired outcomes. Examples could include but are not limited to: • Identifying the resources (people and/or money) needed to undertake the activities. • Monitoring and surveillance of the progress of the activities. • Identification, evaluation, and implementation of changes that may be needed to ensure the activities are successfully completed. • Identification and management of risks that could impact on the successful completion of the activities.
D3	Take responsibility for continuous improvement within a scientific or technical environment.	Your examples should indicate what actions you take to make improvements to your organisation as a whole. This could be through encouraging the continuous development of junior staff or through improvements to processes within the organisation. Examples could include but are not limited to: • Evaluation of the performance of specialist methods and tools used. • Development of recommendations for future enhancements or modifications to procedures or working practices in order to achieve performance improvements. • Description of examples where your actions have led to performance improvement by yourself or others. • Identification of lessons learned from activities undertaken by yourself or by others for whom you are responsible, such as what went well, went badly or was lacking.
E	**Professional standards**	
E1	Comply with and promote relevant codes of conduct and practice.	You should provide comprehensive examples of how you have applied and promoted the codes of conduct under which you practice and the outcome. Examples you may wish to include but are not limited to equality, diversity and inclusion, reliability and integrity and ethical practices.
E2	Demonstrate a commitment to professional development through continuing advancement of your own knowledge, understanding and competence.	Your answer should provide specific examples of what you have already done in terms of continuing professional development (CPD) and your plans for the coming year. In your examples you must describe how your engagement in CPD has benefited your practice and the users of your work and reflect on its impact. Examples can be taken from any of the five categories of activity (work-based learning, professional activity, formal/educational, self-directed learning and other). For example:

		• Application of knowledge acquired on an external course that has benefitted the business – how you acquired the knowledge of a new technology and how you planned, implemented, and reviewed its success in your organisation. • Your work to promote careers in the STEM area including the design of materials and reflection on success.

Appendix 3 - Chartered environmentalist (CEnv) competence requirements

A	**Application of knowledge and understanding of the environment to further the aims of sustainability.**	
A1	Have underpinning knowledge of sustainable development principles in the management of the environment.	• Critically analyse, interpret complex environmental information to determine sustainable courses of action. • Understand the wider environmental context in which the area of work or study is being undertaken. • Understand the importance of maintaining and enhancing natural cycles and biodiversity in achieving sustainability • Reformulate and use practical, conceptual, or technological understanding of environmental management to develop way forward in complex situations.
A2	Apply environmental knowledge and principles in pursuit of sustainable environmental management in professional practice.	• Conceptualise and address problematic situations that involve many environmental factors. • Determine and use appropriate methodologies and approaches • Critically evaluate actions, methods, and results and their short- and long-term implications. • Actively learn from results to improve future environmental solutions and approaches, and to build best practice.
A3	Analyse and evaluate problems from an environmental perspective, develop practical sustainable solutions and anticipate environmental trends to develop practical solutions.	• Analyse and evaluate problems, some complex, from an environmental perspective working sometimes with incomplete data. • Demonstrate self-direction and originality in tackling and addressing problems. • Demonstrate a critical awareness of current environmental problems and anticipate the impact of future environmental trends. • Critically analyse and embrace new environmental information and seek new knowledge, skills, and competences in the in the field of environment based on the most recent scientific, social, economic, cultural, and technical developments and understanding.
B	**Leading sustainable management of the environment**	
B1	Promote behavioural and cultural change by influencing others in order to secure environmental improvements that go beyond minimum statutory requirements.	• Develop good practices (best practice) by actively learning from results to improve future environmental solutions and approaches. • Help, mentor, and support others to understand the wider environmental picture. • Advocate sustainability concerns and environmental issues, encourage others to actively contribute to environmental protection and sustainability.
B2	Promote a strategic environmental approach.	• Demonstrate self-direction and originality in developing strategies for sustainable development and environmental improvement. • Actively collaborate and engage with other disciplines and stakeholders and encourage multi- and interdisciplinary approaches to environmental challenges. • Identify constraints and exploit opportunities for the development and transfer of environmentally appropriate technology.

		• Identify areas of uncertainty and risk including health and safety, environmental, technical, business, and reputational.
B3	Demonstrate leadership and management skills.	• Exercise autonomy and judgment across environmental and sustainable issues. • Motivate and influence others to agree and deliver environmental objectives. • Identify individual needs, plan for their development, assess individual performance and provide feedback. • Reflect on outcomes, identify, and pursue improvements on previous practice.
C	**Effective communication and interpersonal skills**	
C1	Communicate the environmental case, confidently, clearly, autonomously, and competently.	• Deliver presentations to a wide spectrum of audiences. • Lead and sustain debates. • Contribute to and chair meetings and discussions. • Identify, engage with, and respond to a range of stakeholders.
C2	Ability to liaise with, negotiate with, handle conflict, and advise others, in individual and/or group environments, (either as a leader or member).	• Understand the motives and attitudes of others and be aware of different roles. • Influence decision making. • Seek the opinions and contributions of others. • Promote development opportunities and activities. • Champion group decisions and manage conflict for the achievement of common goals and objectives.
D	**Personal commitment to professional standards, recognising obligations to society, the profession, and the environment**	
D1	Encourage others to promote and advance a sustainable and resilient approach by understanding their responsibility for environmental damage and improvement.	• Inform and encourage others to consider environmental sustainability issues and the consequence of their decisions and actions.
D2	Take responsibility for personal development and work towards and secure change and improvements for a sustainable future.	• Recognise the value of CPD to the profession. • Have a strong desire to learn. • Value and actively pursue personal professional development.
D3	Demonstrate an understanding of environmental ethical dilemmas.	• Understand the nature of professional responsibility. • Identify the environmental ethical elements in decisions. • Address and resolve problems arising from questionable environmental practice.
D4	Comply with relevant codes of conduct and practice.	