



## Becoming a Chartered Scientist

### Competence report – advice to applicants and mentors

Applicants for CSci will need to demonstrate competence across five areas. Guidance on what the assessors will be looking for under each competence is provided below but the examples are just indicative – there will be many other valid examples you can choose.

Here are some tips you should bear in mind when compiling your application:

- Make sure you address the expected competencies in the form and also align them to what is expected of someone working at the level of a level 7 qualification see <https://istonline.org.uk/wp-content/uploads/2016/10//csci-admissions-equivalence-info.pdf>
- When you are thinking about how to structure your answers, you will need to consider examples of your experience in terms of what **you** did, how you went about it, why you did it and most **importantly the impact of your actions or non-actions on your area of work/department/organisation.**
- You should describe your role in the examples you present and the **level of decision making that you** were responsible for; ideally you should be **driving the actions and have a high degree of autonomy**
- You need to demonstrate a high level of expertise in your area of work
- You should think about using examples that are fairly recent i.e. from the last three years, although you can also draw on relevant experience from further back in your career.
- You can use and refer to a particular example more than once, but do ensure you make it clear how and why it applies to a competence.
- You can use examples from broad professional experiences, but you must be able to show how you have applied the skills developed in your current job role.
- There is no expected word count, but you need to ensure that you have provided enough detail to fulfil all the guidance points in the competency form as succinctly as possible
- **More than one example will be needed for each competency.**
- Each of the guidance points below and on the form must be addressed

#### **A: Application of knowledge & understanding**

##### **A1: Use specialist experiential knowledge and broader scientific understanding to optimise the application of existing and emerging science and technology**

*You should provide sufficient detail to show your specialist experiential knowledge 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

**A2: Exercise sound judgement in the absence of complete information and in complex or 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:*

- Considering when you have approached a piece of work or project flexibly and in a novel or different way, or reacted to an unexpected outcome.
- Demonstrating how you were the responsible person for driving the change and why it is important
- Examples of tangible changes in the output or deliverables of the project/ work, following your intervention

**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, the conclusions you draw and how you overcome any barriers or issues. Examples could include but are not limited to:*

- Undertaking experimental design and testing
- Reviewing relevant literature, manuals or designs
- Peer reviewing your findings with others

**B: Personal responsibility**

**B1: Work autonomously and take responsibility for the work of yourself and others**

*It is important for this competence to ensure you describe your contribution, responsibility and impact on a certain task and make it clear what you personally have achieved i.e. "I" not "we". In formulating your answers, you should consider the following:*

- You will be expected to undertake much of 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 it is necessary for you 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 and implement robust policies and protocols relating to health, safety and security**

*You should demonstrate that you understand the policies and protocols relating to health, safety and security that apply to the work you are undertaking and describe any responsibilities that you have related to this. Security can include issues associated with data, Intellectual Property, confidentiality, prevention of contamination, traceability of documents and information. In formulating your answers, you should consider the following:*

- These policies and protocols will document how relevant aspects of your work must be carried out. Demonstrate that you know where these policies and protocols are documented, and that you are able to apply them in your practice
- Your awareness of the risks related to the security aspects of the work you carry out, and how you seek to mitigate these risks
- How you “promote” the awareness and application of these policies and protocols with others, especially peers and more junior colleagues
- Demonstrate how, through your work, you contribute to the development of policies and protocols and how they are amended to reflect your inputs.

**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. In formulating your answers, 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

**B4: Oversee the implementation of solutions with due regard to the wider environment and broader context.**

*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

**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:*

- How you synchronise an appropriate level of scientific detail with the intended audience
- How you consider and implement the mode or style of delivery that is most suitable for the intended audience
- The feedback loop/s you rely upon 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 **tangible impact**
- Demonstrate how you have managed change within your organisation or overseen the implementation of any new processes
- Explain how you have led a project/ team and used your position of influence to assist others in developing their roles within that team

## **C3: Demonstrate the ability to mediate, develop and maintain positive working relationships**

*You should describe or define the “working relationship” and provide at least two examples which focus 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: Scope, plan and manage multifaceted projects**

*Describe at least two projects that you have managed and make it clear the level of autonomy you had while working on the projects, especially if you were in a team. You should show how you contributed to determining the resulting courses of action, and **the impact of the project**. Examples could include but are not limited to:*

- 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 the projects you have discussed under D1, or other projects with which you have been involved, you should describe your roles and responsibilities in managing the activities to achieve the desired outcomes. Examples could include but are not limited to:*

- What was your expertise in the area and how did you apply it
- Identifying the resources (people and/or money) needed to undertake the activities
- The development of a resource capacity model (people and/or equipment) and how you used this to effectively manage team effort to achieve the desired goals.
- 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 performance improvement at both a personal level and in a wider organisational context**

*Your examples should indicate what actions you take to make improvements to your personal performance and 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:*

- 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
- Evaluation of the performance of specialists 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

**E: Professionalism**

**E1: Demonstrate understanding and compliance with relevant codes of conduct**

*You should describe how the codes of conduct under which you practice relate to the work that you carry out and give examples of how they govern your professional practice. Within this, you should include any ethical considerations, both in terms of scientific and business practices. Examples you may wish to use may relate to:*

- Standards of professional practice in respect of your profession, employer, clients or patients
- Standards of professional behaviour in respect of attitudes, respect and confidentiality

- Standards of professional competence in respect of personal development and the development of others
- Standards of professional competence in respect to any commercial aspects of your work, such as the protection of intellectual property

**E2: Demonstrate a commitment to professional development through continuing advancement of 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 should describe how your engagement in CPD has benefited your practice and the users of your work.*

*Examples can be taken from any of the five categories of activity (work based learning, professional activity, formal/educational, self-directed learning and other) defined and exemplified at:*

*<http://istonline.org.uk/wp-content/uploads/2016/01/CSci-categories-CPD-learning-activities.pdf>*