

Becoming a Registered Science Technician

Competence report – advice to applicants

Applicants for RSciTech 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:

- For each competence statement, you will need to have given clear examples of the role that **you** play or the contribution **you** make to a task or activity.
- The examples must have sufficient depth, the assessor should be able to visualise what you did from your description.
- You can use the same task or activity more than once, but you should be clear on how it applies to the specific competence you are addressing.
- Most of the examples provided should be recent (in the last three years) but you can draw on relevant experience further back in your career.

A: Application of knowledge and understanding

Identify and use relevant scientific understanding, methods and skills to complete tasks and address well defined problems

A1: Apply knowledge of underlying concepts and principles associated with area of work.

What we are looking for here is an example of how you apply your knowledge in your day-to-day work.

This means that you can explain the major reasons for undertaking your work. You may be, for example:

- working in a subject discipline in an applied science area. You should name and describe in technical detail how you use the main components, elements, materials, or designs involved in your work and why you are carrying it out.
- involved in carrying out a procedure or process. You should explain in technical detail why you are using that procedure or process and why it is relevant to that specific work.
- involved in using an experimental model or computer programme. You should explain why you are using that specific model or programme and describe in technical detail how you are using it and what the results might contribute to.

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A2: Review and select appropriate scientific techniques, procedures and methods to undertake tasks.

This means that you can explain the underlying reasons for undertaking tasks and why a particular procedure, technique, or process is appropriate.

Your example may for instance describe:

- the principles behind the activity that you are undertaking and any associated technology.
- the reasons behind the choice of method used to carry out the activity and the criteria which form the basis of what you need to achieve the end result.

A3: Interpret and evaluate data and make sound judgements in relation to scientific concepts.

This means you can explain how you recognise when your activity appears to have been successfully carried out, or not, and what data, observations, or measurements you are evaluating mean, relating it to the underlying principles. You should also be able describe how you present information in an appropriate manner to explain your judgement.

Examples may include where you have stated whether the activity has worked well or not:

- if successful, your example should describe the rationale/scientific basis behind this conclusion and why the data, observations, or measurements might mean this.
- if not, how you gave reasons why the activity 'failed' and what you proposed to do next time to address this. Your example should also include how you explained/demonstrated the results of the activity. This could include comparing it with results from a number of different activities.

B: Personal Responsibility

Exercise personal responsibility in planning and implementing tasks according to prescribed protocols

B1: Work consistently and effectively with minimal supervision to appropriate standards and protocols and know when to escalate appropriately.

We are looking for an example of how you carry out work with minimal input from your supervisor for certain key tasks, experiments or procedures associated with your role and completing them to the appropriate standards and time frame. We are also looking for evidence that you know when to escalate appropriately and that you are able to make a judgement on when to escalate.

B2: Demonstrate how you apply safe working practices.

This means that you can explain the safe working practices applicable to your area of work and describe how you follow them.

Your examples could include:

- risk assessments associated with your work
- relevant Health and Safety regulations, e.g. COSHH, Noise, Manual Handling
- relevant Home Office Licences
- safety training courses you have successfully completed for your laboratory role
- any monitoring of safety within your work, e.g. for radioactivity, chemical exposure
- safety equipment and control

B3: Take responsibility for the quality of work and the impact on others.

This means that you can describe how you take responsibility for the quality of the work that you undertake and its impact on others within defined parameters and timelines– including if an activity does not work in the way that you expect.

For instance, your example could include how you:

- ensure that an activity is carried out to the agreed standard or protocol (e.g. good laboratory/workshop/design practice) and your example should provide evidence for this.
- understand when something might not have been carried out quite correctly and what impact it could have on the quality and reliability of the outcome.
- point out 'good experimental data' and 'bad experimental data' and the reasons why the bad data might have occurred

C: Interpersonal Skills

Demonstrate effective communication and interpersonal skills

C1: Demonstrate effective and appropriate communication skills.

What we are looking for here is an example that you are an effective communicator. The example can be through appropriate oral, written or electronic means.

Your examples should for instance include a description and details of:

- how you discuss and agree objectives with your supervisor
- how you discuss and agree objectives in team meetings
- how you describe or present your work or other aspects of lab, workshop, or section work (e.g. safety updates, method updates) to your supervisor or colleagues
- how you prepare written reports on your work
- how you train students or staff in the use of equipment or processes
- how you demonstrate the processes or systems
- the part that you play in induction of new staff or students

C2: Demonstrate effective interpersonal and behavioural skills.

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This means that you can demonstrate skills that you use to interact with colleagues in a constructive way within the work setting. In these situations, it may be appropriate to discuss these with your supervisor, as an external perspective is often very useful in this regard.

Your example should also describe how you ensure your method of interaction is appropriate for:

- interacting with researchers, technicians or other members of staff
- interacting with students or trainees face to face
- interacting with external colleagues (such as suppliers, couriers etc)

C3: Demonstrate an ability to work effectively with others.

This means 'team work', which can be in a large team or on a 1:1 basis. Your example should illustrate how you worked collectively with others, what your specific role was within the team, and what the outcome was.

For instance, this might include:

- how you work with researchers, technicians or other members of staff
- how you work with students or trainees face to face
- how you work as part of a team, working group, or committee

D: Professional Practice

Apply appropriate theoretical and practical methods according to protocol

D1: Recognise problems and apply appropriate scientific methods to identify causes and achieve solutions.

What we are looking for here is an example of where you have problem solved or attempted to problem solve.

D2: Demonstrate how you use resources effectively.

This means that you can give examples of work that you have undertaken where the method, procedure, programme, equipment, or materials used was chosen as the best (or most relevant) to use. Your example should describe how you planned and organised these to complete the task, and how you reviewed choices – why the one you selected was the best compared to others that are available.

This might include:

- cost effectiveness
- time taken
- IT considerations
- machine tool time

D3: Participate in continuous process improvement.

What we are looking for is an example of how you have improved the efficiency of a way of working, for example this could include maintenance of stock levels, improved methods, new ways to increase throughput, health and safety or ways to increase cost-effectiveness.

Examples might be your role in:

- looking for cheaper resources
- buying equipment or consumables
- reviewing procedures
- taking part in staff reviews

E: Professional Standards

Demonstrate a personal commitment to professional standards

E1: Comply with relevant codes of conduct and practice.

This means that you can give examples of how you comply with a code of conduct (e.g. of your professional Body) or how you work within all relevant legislative, regulatory and local requirements.

This means that you can give examples of how you, for instance:

- comply with your professional body's code of conduct
- manage your work within all relevant legislative, regulatory and local requirements, frameworks such as Health and Safety Legislation, Home Office Regulations, Good Laboratory Practice (GLP), local Codes of Practice, etc.

E2: Maintain and enhance competence in own area of practice through professional development activity.

This means that you can give an example of an activity you have undertaken to enhance your competence in your own area of practice i.e. Continuing Professional Development (CPD) and reflect on its impact on themselves and others. We are not looking for a list of courses here but evidence of how your CPD benefits your practice and benefits others. Your CPD may include work-based learning, professional activity, formal/educational, self-directed learning.

(Note registrants will need to comply with the Science Council CPD Standards)

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