
Overview

This standard covers the competences you need to provide technical advice and guidance for scientific or technical activities in science related work activities, in accordance with approved procedures and practices.

You will need to ensure you have accurate, up-to-date information, analyse problems and provide appropriate information, advice and guidance to a range of people.

The activity is likely to be undertaken by someone in a science related work setting, including individuals working in hospitals, scientific laboratories, schools and universities.

Performance criteria

- You must be able to:*
- P1 ensure that your work is carried out in accordance with workplace procedures
 - P2 use safe practices and the appropriate personal protection equipment (PPE) when performing scientific or technical activities
 - P3 work safely at all times, complying with health and safety legislation, regulations and other relevant guidelines
 - P4 ensure that you have accurate and up-to-date information on the scientific or technical activities for which advice and guidance is being sought
 - P5 determine the extent of the advice and guidance required
 - P6 Provide valid and up-to-date information, advice and guidance, as necessary
 - P7 analyse any problems in full and provide effective advice that will maintain the quality and progress of the work
 - P8 communicate the required information about the work done, in accordance with departmental and organisational procedures

Knowledge and understanding

- You need to know and understand:*
- K1 the health and safety requirements of the area in which you are carrying out the scientific or technical activities
 - K2 the implications of not taking account of legislation, regulations, standards and guidelines when conducting scientific or technical activities
 - K3 the scientific or technical techniques and processes you must use correctly in the workplace
 - K4 the importance of wearing protective clothing, gloves and eye protection for scientific or technical activities
 - K5 the importance of correct identification, and any unique workplace coding system
 - K6 the organisational requirements for maintaining the security of the workplace
 - K7 the lines of communication and responsibilities in your department, and their links with the rest of the organisation
 - K8 the limits of your own authority and to whom you should report if you have problems that you cannot resolve
 - K9 the regulations and guidelines that are relevant to the work area
 - K10 how to obtain information on regulations and guidelines
 - K11 how to obtain and interpret drawings, charts, specifications and other documents that can be used when giving technical advice and guidance
 - K12 a sound understanding of the activities in which the technical guidance is being given
 - K13 how to identify opportunities for giving technical advice, guidance and support
 - K14 how to plan and prepare for providing technical guidance
 - K15 the methods and techniques involved in problem solving
 - K16 how to deal with customer complaints and requests.
 - K17 how to review and adjust approaches to the provision of technical guidance, in the light of experience gained
 - K18 the techniques for offering and providing technical guidance
 - K19 how to use a variety of communication methods, in appropriate combination
 - K20 the document control and reporting procedures that should be used
 - K21 the reasons why effective communication is important, and the methods used for communicating effectively

Scope/range

1. provide technical advice and guidance for two of the following groups of people:
 - 1.1 colleagues
 - 1.2 customers (e.g. distributors, end users, clients)
 - 1.3 contractors
 - 1.4 others in related technical activity areas

2. provide technical support for two of the following scientific or technical activities:
 - 2.1 providing technical support
 - 2.2 complex sampling
 - 2.3 demonstration and instruction
 - 2.4 planning sampling and testing
 - 2.5 carrying out investigations
 - 2.6 team leading/coaching
 - 2.7 complex testing
 - 2.8 small scale processing

3. provide technical advice and guidance on four of the following:
 - 3.1 equipment operating detail (function)
 - 3.2 specific or specialist equipment required
 - 3.3 equipment performance parameters
 - 3.4 resource usage
 - 3.5 physical characteristics (dimensions, weight)
 - 3.6 timing/delivery details
 - 3.7 environment considerations/operating conditions
 - 3.8 cost/budget estimation/details
 - 3.9 scientific or technical methods
 - 3.10 quality requirements/control
 - 3.11 processing requirements
 - 3.12 maintenance/cleaning/calibration frequency
 - 3.13 work instructions or procedures
 - 3.14 aseptic procedures
 - 3.15 output volume required
 - 3.16 training required
 - 3.17 resource requirements
 - 3.18 customer interface requirements
 - 3.19 equipment/component interfacing
 - 3.20 safety/regulations/guideline requirements

4. Deal appropriately with all of the following:
 - 4.1 reported problems found during the scientific or technical activity
 - 4.2 recorded deviations from agreed plans and schedules
 - 4.3 customer requests/complaints

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5. record and communicate details of work done, to the appropriate people, using:
 - 5.1 verbal report plus one method from the following:
 - 5.2 written or typed report
 - 5.3 computer-based record
 - 5.4 specific workplace documentation
 - 5.5 electronic mail

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