



Australian Government

PSPSCI007 Organise and undertake scientific/technological research

Release: 1

PSPSCI007 Organise and undertake scientific/technological research

Modification History

Release	Comments
1	This unit was released in PSP Public Sector Training Package release 1.0 and meets the Standards for Training Packages. This unit supersedes and is equivalent to PSPSCI403A Organise and undertake scientific/technological research. • Unit code updated • Content and formatting updated to comply with new standards • All PC transitioned from passive to active voice

Application

This unit describes the skills required to conduct scientific or technological research at an experienced level where independent judgment is used to determine the means of achieving objectives within generally directed programs. It includes identifying the research issues and research methodology, organising and carrying out the research and communicating the results.

This unit applies to those working in technical support in scientific or technological research.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Those undertaking this unit would work independently, while performing complex tasks in a range of familiar contexts.

No licensing, legislative or certification requirements apply to unit at the time of publication.

Competency Field

Government Science and Technology

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.
1. Identify research issues	1.1 Identify possible research issues through industry analysis and consultation. 1.2 Confirm research issues is relevant to the industry and to the organisation's objectives. 1.3 Identify and handle issues relating to intellectual property. 1.4 Identify and analyse current and published information relevant to the research issues.
2. Identify research methodology	2.1 Establish objectives in consultation with other researcher/s and in accordance with resource requirements. 2.2 Choose appropriate research methodology and analytical techniques 2.3 Determine a hypothesis that is plausible, relevant and of benefit. 2.4 Determine risk management strategies, activities and tasks. 2.5 Record hypothesis and methodology.
3. Organise and carry out research	3.1 Acquire resources to conduct the research. 3.2 Schedule and carry out tasks. 3.3 Monitor research, collect and analyse data and deal with contingencies. 3.4 Document research results and prepare report/s within specified timeframes. 3.5 Write reports.
4. Communicate research results	4.1 Communicate research results to the organisation, to the scientific community and/or the industry via publications and presentations. 4.2 Protect intellectual property.

Foundation Skills

Foundation skills are embedded within the elements and performance criteria of this unit.

Unit Mapping Information

This unit supersedes and is equivalent to PSPSCI403A Organise and undertake scientific/technological research.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=bebbece7-ff48-4d2c-8876-405679019623>

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Assessment Requirements for PSPSCI007 Organise and undertake scientific/technological research

Modification History

Release	Comments
1	These Assessment Requirements were released in PSP Public Sector Training Package release 1.0 and meet the Standards for Training Packages. • Assessment Requirements created drawing upon specified assessment information from superseded unit

Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the candidate must demonstrate evidence of performance of the following on at least one occasion.

- using problem-solving in the context of scientific and/or technological research
- using technology for data input, analysis and preparation of reports
- interpreting and preparing reports containing scientific and/or technological research information using communication styles to suit different audiences and purposes
- presenting research results tailored to different audiences

Knowledge Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the depth of knowledge demonstrated must be appropriate to the job context of the candidate.

- research methodologies
- scientific process
- statistics
- specialist area of expertise
- reporting requirements for scientific research, requiring precision of expression and using communication styles to suit different audiences and purposes
- public sector legislation, including environmental and work health and safety requirements, public sector standards and organisational code of practice as they relate to work in a scientific research and/or technological environment

Assessment Conditions

This unit contains no specific industry-mandated assessment conditions. Guidance on suggested and recommended conditions and methods can be found in the Implementation Guide.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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