



Australian Government

PSPSCI004 Undertake scientific/technological research

Release: 1

PSPSCI004 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 PSPSCI303A 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 perform scientific or technological research. It includes confirming the research issue, employing a selected research methodology, carrying out the research and delivering the results.

This unit applies to those working 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 under supervision, while performing complex tasks in 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. Confirm research issue	1.1 Confirm and clarify issue to be researched with other researchers. 1.2 Identify and handle issues relating to intellectual property. 1.3 Locate and analyse current and published information relevant to the research issue.
2. Employ selected research methodology	2.1 Select research method/s and objectives in consultation with other researchers and in accordance with resource requirements. 2.2 Establish a hypothesis and confirm it with other researcher/s as plausible, relevant and of benefit. 2.3 Confirm tasks, risk management strategies and analytical techniques in consultation with other researcher/s. 2.4 Record research methodology.
3. Carry out research	3.1 Source resources to conduct the research. 3.2 Schedule and carry out tasks under general guidance in accordance with research methodology. 3.3 Monitor research and collect and analyse data in accordance with research plan. 3.4 Discuss and document research results with other researcher/s. 3.5 Prepare research report/s within specified timeframes. 3.6 Write reports.
4. Deliver research results	4.1 Provide research results to the organisation, to the scientific community and/or to the industry. 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 PSPSCI303A 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 PSPSCI004 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.

- carrying out research
- using problem solving techniques
- using technology for data input, analysis and preparation of reports
- interpreting and preparing reports containing scientific research information 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.

- applicable research methodologies
- scientific process
- statistics
- specialist area of expertise
- reporting requirements for scientific and/or technological research, requiring precision of expression and communication styles to suit different audiences and purposes
- public sector standards and legislation including environmental and work health and safety 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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