VETASSESS

Information sheet

Earth Science Technician

ANZSCO: 311412

Group C

About this document

- The following Information Sheet is for your reference only and should be used as a guide to assist with your Skills Assessment application to VETASSESS. This information is subject to change.
- Please note that a Skills Assessment of the qualification involves assessment of both the qualification level and content. Qualifications are assessed according to the guidelines published by the Australian Government Department of Education.
- The employment assessment involves determining the skill level and relevance of the tasks undertaken.
- Integrity checks may be conducted to verify the qualification and employment claims made in an application.

Job description

Collects and tests earth and water samples, records observations and analyses data in support of Geologists or Geophysicists.

Occupations considered suitable under this ANZSCO code:

- Earth Science Laboratory Technician
- Geochemical Laboratory Technician
- Geological Technical Officer
- Geoscience Laboratory Technician
- Hydrographer
- Hydrographical Technical Officer
- Hydrological Technical Officer
- Meteorological Observer
- Seismology Technical Officer
- Soil Science Technical Officer
- Water Resources Technical Officer

This occupation requires a qualification assessed as comparable to the educational level of an Australian Qualifications Framework (AQF) Diploma or higher. Applicants can fulfil the assessment criteria for this occupation in four different ways.

GROUP C	Criteria for a positive Skills Assessment							
Post-qualification Pathways								
	Minimum comparable Diploma or higher AQF level*		With highly relevant major field of study		Additional highly relevant qualifications**		Highly relevant employment duration***	
1	AQF	+		+	N/A	+	1 YEAR minimum	
2	AQF	+	No highly relevant major	+	AQF Minimum AQF Certificate IV level with highly relevant major	+	1 YEAR minimum	
3	AQF	+	No highly relevant major	+	No additional highly relevant qualifications	+	2 YEARS minimum	
Pre-qualification Pathway								
	Minimum comparable Diploma or higher AQF level*				Highly Relevant employment duration***			
4	AQF	+	With or without highly relevant major field of study	+	3 YEARS minimum	+	1 YEAR minimum Within last 5 years	

Description of Pathways

The information below describes the available pathways for a Skills Assessment under**Group C**. Please note that in order to achieve a successful Skills Assessment Outcome, a suitable assessment for both qualifications and employment is required.

Pathway 1

This pathway requires a qualification assessed as comparable to the education level of an Australian Qualifications Framework (AQF) Diploma or higher and in a field highly relevant to the nominated occupation.

Diploma or higher includes AQF Advanced Diploma, Associate Degree, Bachelor Degree, Graduate Diploma, Master Degree or Doctoral Degree.

In addition, it is essential for applicants to meet the following employment criteria:

- at least **one** year of post-qualification employment at an appropriate skill level, undertaken in the last five years,
- working 20 hours or more per week, and
- highly relevant to the nominated occupation.

Pathway 2

This pathway requires a qualification assessed as comparable to the education level of an Australian Qualifications Framework (AQF) Diploma or higher and in a field not highly relevant to the nominated occupation.

Diploma or higher includes AQF Advanced Diploma, Associate Degree, Bachelor Degree, Graduate Diploma, Master Degree or Doctoral Degree.

An additional qualification in a highly relevant field of study at a minimum AQF Certificate IV level is required. Additional qualifications in a highly relevant field of study include those comparable to the AQF Certificate IV.

In addition, it is essential for applicants to meet the following employment criteria:

- at least **one** year of post-qualification employment at an appropriate skill level, undertaken in the last five years,
- working 20 hours or more per week, and
- highly relevant to the nominated occupation.

For example, an applicant for the occupation Program or Project Administrator completed a non-relevant AQF Diploma qualification in April 2024 and later completed an AQF Certificate IV in Project Management in May 2026. The applicant commenced employment with the organisation in May 2024 and remains employed there.

Under Pathway 2, the applicant satisfies the minimum educational requirement for a Group C occupation through the AQF Diploma qualification.

Qualification

Laboratory Technology is a field of study which provides training for personnel to provide para-professional support in a wide range of scientific laboratories.

PML50104 Diploma in Laboratory Technology within the Laboratory Operations Training Package PML04 includes core units and electives:

Core units:

- Communicate with other people
- Provide information to customers
- Process and interpret data
- Analyse data and report results
- Use laboratory application software
- Maintain laboratory/field workplace safety
- Plan and conduct laboratory/field work
- Apply quality system and continuous improvement processes

Electives may be viewed in the PMLO4 Training Package on the NTIS website.

Geoscience is the study of the physical properties of the Earth's crust and the characteristics of its soil, landforms, climate, hydrosphere and atmosphere.

Subjects in this field include:

- Atmospheric Stability, Moisture and Motion
- Climatology
- Meteorology
- Coastal and Marine Geoscience
- Sedimentology
- Mineralogy
- Petrology
- Tectonics
- Volcanology
- Electrical Properties of Rocks and Minerals
- Geomagnetism
- Petrophysics
- Seismology
- Hydrogeochemistry
- Sediment Geochemistry
- Soil Nutrient and Water Supply
- Soils in the Landscape
- The Soil Environment
- Soil Mineralogy

- Flood Estimation Models and Procedures
- Groundwater Modelling
- Water Catchments
- Water Resources
- Chemical and Physical Properties of Seawater
- Currents, Waves and Tides
- Ocean Floor Topography
- Physical Geography
- Chemistry
- Mathematics
- Physics
- Biology

Employment Criteria

Highly relevant tasks include, but are not limited to:

- Collecting information and samples
- Conducting field and laboratory experiments, tests and analyses
- Presenting results in graphic and written form by preparing maps, charts, sketches, diagrams and reports

Additional tasks may include:

- Collects and collates information from geological field surveys, seismic surveys, meteorological observations and other earth science surveys
- Prepares and tests samples
- Analyses data using methodologies prescribed by earth scientists to interpret survey results
- Checks, calibrates and maintains testing equipment
- May investigate various geographical, geophysical or geological specialties such as water resources, climate and weather, mineral extraction, magnetic measures or gravity measurement