VETASSESS

Information sheet

Metallurgical or Materials Technician

ANZSCO: 312912 | **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

A Metallurgical or Materials Technician tests materials as part of mineral and metal processing and refining, or for research into metals, ceramics, polymers and other materials in support of Metallurgists and Materials Engineers.

Occupations considered suitable under this ANZSCO code:

- Dye Penetrant Testing Technician
- Heat Treatment Technician
- Magnetic Testing Technician
- Metallurgy Laboratory Technician
- Non-destructive Testing Technician
- Petroleum Products Laboratory Technician
- Petroleum Refinery Laboratory Technician
- Pressure Testing Technician
- Ultrasound Technician

Occupations not considered under this ANZSCO code:

- Metallurgist

These occupations are classified elsewhere in ANZSCO or are not at the required skill level.

Metallurgical or Materials Technician is a VETASSESS Group C occupation

This occupation requires a qualification assessed as comparable to the educational level of an Australian Qualifications Framework (AQF) Diploma or higher.

Applicants must have fulfilled at least one of the following four criteria (1-4):

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	+	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							
	Highly Relevant employment duration						**Minimum comparable Diploma or higher AQF level**	
4	3 YEARS minimum + 1 YEAR minimum (Within last 5 years)	+			With or without highly relevant major field of study	+	AQF	

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. Accordingly, employment is counted from the completion date of the Diploma qualification, meaning employment from May 2024 onwards may be considered toward both the required Qualifying Period (QP) and any remaining eligible period for the points test.

As the later Certificate IV qualification is highly relevant to the occupation, the applicant may access the reduced employment requirement applicable under Pathway 2. In this case, only one year of QP is required, and that employment may be counted from the post-Diploma period rather than from the Certificate IV qualification completion date.

Pathway 3

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.

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

- at least **two** years 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 4

This pathway requires a qualification assessed as comparable to the education level of an Australian Qualifications Framework (AQF) Diploma or higher with or without a highly relevant major field of study 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 **four** years of employment at an appropriate skill level that includes at least **one** year of highly relevant employment within the last five years before applying,
- working 20 hours or more per week, and
- highly relevant to the nominated occupation.

Qualification

This includes qualifications assessed at AQF Advanced Diploma, Associate Degree, Bachelor, Master and Doctoral level.

Manufacturing Engineering and Technology is the study of the planning, organisation and operation of manufacturing methods, processes, facilities and systems.

Metallurgical Technology is a field of study that prepares individuals to apply basic engineering principles and technical skills in support of engineers and metallurgists engaged in developing and using industrial metals and manufacturing processes.

Materials Engineering is the study of assaying, producing and refining materials, including metals, alloys, ceramics and polymers, timber, pulp and paper

Highly relevant major fields of study may include:

- Manufacturing Engineering and Technology
- Metallurgical Technology
- Materials Engineering

Employment

Highly relevant tasks include, but are not limited to:

- Testing materials as part of mineral and metal processing and refining.
- Conducting mineral research for application to study of metals, ceramics, polymers and other materials in support of Metallurgist and Materials Engineers.

Additional tasks may include:

- Subjecting materials to test procedures often using complex equipment under the direction of metallurgists and other professionals.
- Analysing, recording and reporting results.
- Setting up, operating and cleaning laboratory and other scientific equipment.
- Conducting studies of metals and alloys before and during processing to determine their properties.
- Working out temperature adjustments, raw material mixtures and other processing variables to make metals.

Employment information

For the occupation of Metallurgical or Materials Technician, applicants are required to demonstrate employment in a role that is primarily focused on performing testing, analysis or research tasks regarding metals or synthetic materials. As this is a technician skill level occupation, it is important to note the distinction between Metallurgical or Materials Technicians and the separate occupation of Metallurgist (ANZSCO Code 234912).

Categories of acceptable employment contexts include (but are not limited to):

- Mining sites
- Metal refineries
- Technical services providers
- External testing certification companies

For employment undertaken in a commercial manufacturing plant setting, employment may be considered relevant if there is clear evidence that the applicant performs the above-mentioned tasks in relation to product development, research, process improvement or quality control activities. However, experience in performing day-to-day production line activities within such a context would not be deemed relevant to this occupation.

Supporting material for assessment

When applying for a Skills Assessment, please ensure you submit sufficient evidence supporting proof of identity, qualification and employment claims. Applicants nominating this occupation are required to provide evidence in line with VETASSESS documentation requirements (see List of Required Documents).