

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	Criteria for a positive Skills Assessment			
	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	+ 0 0 1 YEAR minimum
2		No highly + relevant major	Minimum AQF Certificate IV level with highly relevant major	+ 0 0 1 YEAR minimum
3	+	No highly +	No additional highly relevant qualifications	+ 0 0 2 YEARS minimum
Pre-qualification methodology can apply to Group C occupations				
	Highly relevant employment duration**	With or without highly relevant major field of study	Additional highly relevant qualifications*	Minimum comparable Diploma or higher AQF level
4	3 YEARS minimum Within last 5 years	+ N/A +	N/A	+ AQF

^{*} Additional qualifications in a highly relevant field of study include those comparable to the following levels:

- AQF Diploma
- AQF Advanced Diploma
- > AQF Associate Degree or
- AQF Graduate Diploma

** Highly relevant paid employment duration

(20 hours or more per week)

1_3

minimum years of employment highly relevant to the nominated occupation, completed at an appropriate skill level in the five years before the date of application for a Skills Assessment.

4

minimum 4 years of relevant employment required – three years of relevant employment (can be outside the last 5-year period) in addition to at least one year of highly relevant employment within the last five years before applying.

*If employment is prior to the completion of the qualification at the required level, an applicant must have at least one year of highly relevant employment at an appropriate skill level within the last five years. The remaining three years of pre-qualifying period may be within the last ten years. A positive assessment of both qualification level and employment duration is required for a positive Skills Assessment outcome.

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 abovementioned 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).