

Job description

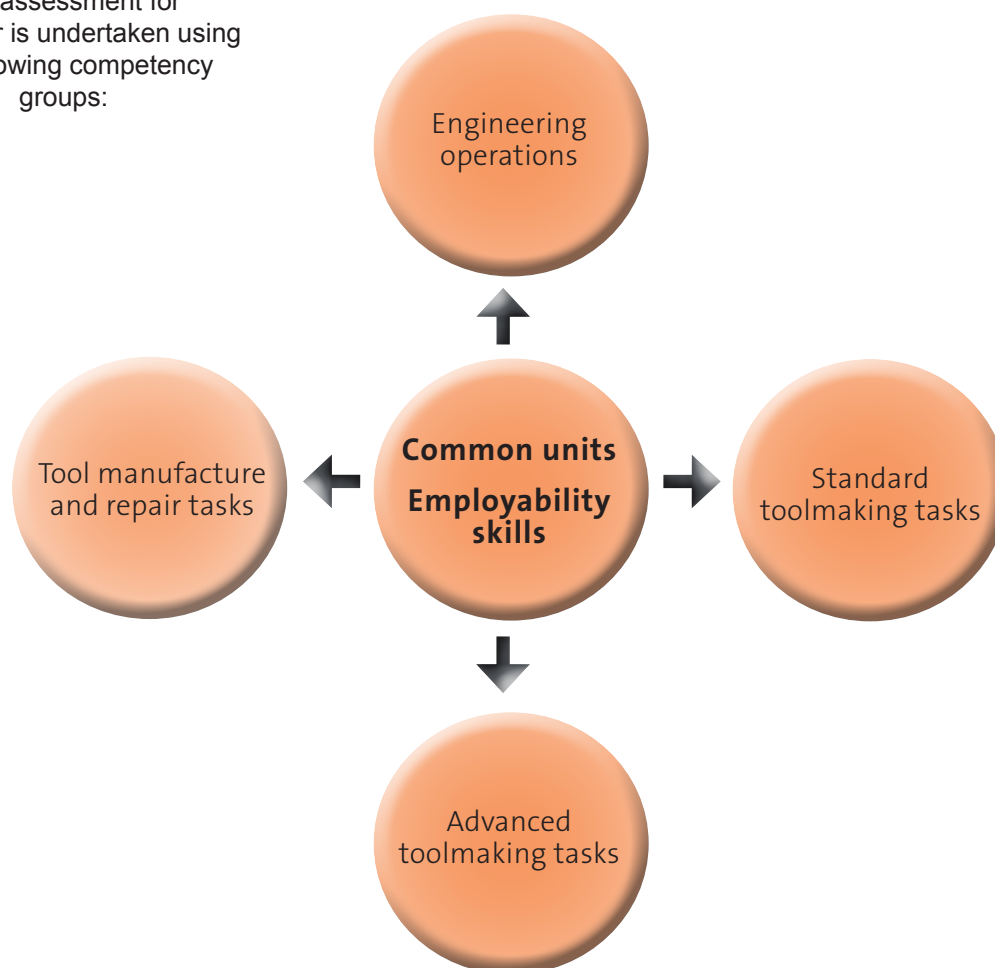
A toolmaker makes and repairs tools, moulds, dies, jigs, press tools, fixtures and other precision equipment in order to produce manufactured components. A toolmaker would use a range of machining operations including semi-automatic and automatic processes and precision fit and assemble parts of dies etc.

Competency assessment

The VETASSESS assessment uses competency groups. These groups consist of units of competency for the Certificate III in Engineering - Mechanical Trade qualification (MEM30205). They represent groups of tasks, skills and knowledge that are used to assess an applicant's competence in an occupation and are from the Metals, Engineering and Manufacturing Training Package (MEM05).

The minimum requirement for achievement of the Australian qualification is to demonstrate competence (employment and training evidence) in all of the units of competency. Please read the [Portfolio Builder](#) document for more information about how to complete a competency assessment for an Australian qualification.

The assessment for toolmaker is undertaken using the following competency groups:



Common units

Units of competency covering common skills and knowledge will be assessed with each of the competency groups. These common units relate to the workplace occupational health and safety requirements, work processes and procedures, engineering industry standards and requirements to work as a toolmaker in Australia.

Employability skills

The assessment includes the following employability skills: teamwork; communication; problem solving; planning & organising; learning; technology; self-management; initiative & enterprise. Competency units contain employability skills that will be assessed with each competency group.

Competency groups

The following is a breakdown of the competency groups shown in the diagram on page 1.

Common units

The following units of competency are common in all groups for assessment purposes.

MEM13014A	Apply principles of occupational health and safety in the work environment
MEM15002A	Apply quality systems
MEM15024A	Apply quality procedures
MEM16006A	Organise and communicate information
MEM16007A	Work with others in a manufacturing, engineering or related environment
MEM13003B	Work safely with industrial chemicals and materials

Note: The tasks, skills, knowledge and employability skills required for the common units are assessed with the following competency groups

Engineering operations

Be able to perform and plan a range of engineering operations such as measurements, manual handling and interpreting technical drawings.

MEM09002B	Interpret technical drawing
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operation
MEM12023A	Perform engineering measurements
MEM12024A	Perform computations
MEM14004A	Plan to undertake a routine task
MEM14005A	Plan a complete activity
MEM16008A	Interact with computing technology
MEM17003A	Assist in the provision of on the job training
MEM11011B	Undertake manual handling

Standard toolmaking tasks

Be able to set and operate a variety of workshop machines.

MEM07001B	Perform operational maintenance of machines/equipment
MEM07005C	Perform general machining
MEM07006C	Perform lathe operations
MEM07007C	Perform milling operations
MEM07008D	Perform grinding operations
MEM07010B	Perform tool and cutter grinding operations
MEM07003B	Perform machine setting (routine)
MEM07024B	Operate and monitor machine/process

Advanced toolmaking tasks

Be able to set and operate machines and equipment to perform complex processes.

MEM07011B	Perform complex milling operations
MEM07012B	Perform complex grinding operations
MEM07015B	Set computer controlled machines/processes
MEM07016C	Set and edit computer controlled machines/processes
MEM07021B	Perform complex lathe operations

Tool manufacture and repair tasks

Be able to use workshop machines and equipment to manufacture or repair tools, dies and gauges.

MEM18014B	Manufacture press tools and gauges
MEM18015B	Maintain tools and dies
MEM06003C	Carry out heat treatment
MEM07029B	Perform routine sharpening/maintenance of production tools and cutters
MEM08010B	Manually finish/polish materials
MEM30012A	Apply mathematical techniques in a manufacturing, engineering or related environment
MEM06007B	Perform basic incidental heat/quenching, tempering and annealing

Assessment outcome

If you **successfully** complete the assessment process you will receive the following:

- an **Australian Certificate III** qualification that lists the units of competency you successfully achieved.

If you are **unsuccessful** in the assessment process you will be issued:

- a **Statement of Attainment** that lists units of competency you have successfully achieved and those that were not achieved

Licensing and industry information

A licence, registration or certification may be required for this occupation.

For further information regarding any licensing requirements refer to:

- Department of Immigration and Citizenship (DIAC) - Australian Skills Recognition Information (ASRI):
www.immi.gov.au/asri
- Mutual recognition for occupational licences in Australia:
www.licencerecognition.gov.au

Additional industry information that may assist you can be found at:

- The myfuture website is Australia's national career information and exploration service, helping people to make career decisions, plan career pathways and manage work transitions:
<http://www.myfuture.edu.au>

Qualification information

If you would like detailed information about the units of competency that make up this qualification please refer to the National Training Information Service (NTIS) website:

<http://www.ntis.gov.au>