Toolmakers make and repair tools, dies, jigs, fixtures and other precision parts and equipment to fine tolerances for machine tools and other production machinery.

Their job involves:

» studying drawings and specifications to determine dimensions and tolerances of articles to be manufactured

» measuring and marking out metal stock and castings using various gauges

» cutting, shaping and forming metal and other materials using machine tools

» checking accuracy of manufactured articles to fine tolerances, using precision measuring instruments

» testing and modifying manufactured articles

» diagnosing and repairing faults with tools and machinery, and performing regular maintenance.

How will I be assessed?

Stage 1: Documentary Evidence Assessment

We will review your documentary evidence to ensure it meets the employment and training requirements and indicates that you have the necessary skills, knowledge and experience as a Toolmaker.

You can find information about the employment and training requirements, and the documents required in the Pathway 1, Pathway 2 and Evidence guides on our website.

Stage 2: Technical Assessment

If you are successful in Stage 1, you will then complete a technical interview with our assessor. The technical interview is conducted in English with no interpreters allowed.

For more information about the technical interview, see the Stage 2 Assessment Guide on our website.

The qualification relevant to this occupation is MEM31519 Certificate III in Engineering – Toolmaking Trade.

To be awarded this qualification, you must demonstrate your skills and knowledge in the following units of competency. Each unit of competency defines a selection of knowledge and skills required in Australian workplaces.

You must achieve 33 units of competency:

» 24 core units

» 9 elective units

What skills and knowledge do I need?

The qualification relevant to this occupation is MEM31519 Certificate III in Engineering – Toolmaking Trade.

To be awarded this qualification, you must demonstrate your skills and knowledge in the following units of competency. Each unit of competency defines a selection of knowledge and skills required in Australian workplaces.

You must achieve 33 units of competency:

» 24 core units

» 9 elective units
You must demonstrate competency in all core and elective units of competency (you can choose between MEM18097 and MEM18014 units) and all of their pre-requisite units.

**NOTE:**
* — indicates that a unit requires a pre-requisite/s

### Core Units

**Safety, Communication and Quality in Engineering**
- MEM13015: Work safely and effectively in manufacturing and engineering
- MEM16006: Organise and communicate information*
- MEM14006: Plan work activities*
- MEM11011: Undertake manual handling*
- MSMENV272: Participate in environmentally sustainable work practices
- MEM16008: Interact with computing technology*
- MEM17003: Assist in the provision of on-the-job training*

**Calculations and Data**
- MEM12024: Perform computations*
- MEM12026: Perform advanced trade calculations in a manufacturing, engineering or related environment*

**Engineering Measurements**
- MEM12023: Perform engineering measurements*
- MEM12003: Perform precision mechanical measurement*

**Engineering Tools**
- MEM18001: Use hand tools*
- MEM18002: Use power tools/hand held operations*
- MEM18003: Use tools for precision work*

**Technical Skills: Interpretation of Engineering Specifications**
- MEM09002: Interpret technical drawing*
- MEM12006: Mark off/out (general engineering)*

**Technical Skills: Work with Engineering Components**
- MEM18055: Dismantle, replace and assemble engineering components*
- MEM18006: Perform precision fitting of engineering components*
- MEM06007: Perform basic incidental heat/quenching, tempering and annealing*

**Machining Components**
- MEM07005: Perform general machining*
- MEM07006: Perform lathe operations*
- MEM07007: Perform milling operations*
- MEM07008: Perform grinding operations*
- MEM18015: Maintain tools and dies*

### Elective Units

**MEM18097**: Manufacture cavity dies*
**OR**
**MEM18014**: Manufacture press tools and gauges*
**MEM13003**: Work safely with industrial chemicals and materials*

**Mechanical Heating and Cutting**
- MEM05005: Carry out mechanical cutting*
- MEM05007: Perform manual heating and thermal cutting*
- MEM05004: Perform routine oxy fuel gas welding*
- MEM05012: Perform routine manual metal arc welding*

**Machining Computer Processes**
- MEM07015: Set computer controlled machines and processes*
- MEM07016: Set and edit computer controlled machines and processes*
- MEM16005: Operate as a team member to conduct manufacturing, engineering or related activities*

You must demonstrate competency in all core and elective units of competency (you can choose between MEM18097 and MEM18014 units) and all of their pre-requisite units.

**NOTE:**
* — indicates that a unit requires a pre-requisite/s
How do I find out more about each unit of competency?

You are strongly encouraged to review each of the units of competency shown above.

To do this:

» Go to the following website: http://training.gov.au/Search/Training

» Enter a unit code (e.g. MEM12023A) into the ‘Title or code’ search box.

» Tick the ‘Units of competency’ check box

» Select the ‘Search’ button

» Select the unit from the search results

» Read the Unit of Competency information

What will I receive after the assessment?

If you successfully complete Stage 2 you will receive:

» a Skills Assessment Result Letter to support your visa application

And if applying under Pathway 1:

» An Australian Certificate III qualification and a Statement of Results

If you are unsuccessful in Stage 2 you will receive:

» a Skills Assessment result letter

And if applying under Pathway 1:

» a Statement of Attainment that lists the units of competency you have successfully achieved

» a Statement of Results that lists the units of competency you have successfully achieved and those that were not achieved

Where can I find more information?

Please refer to our website:

If you have further questions, contact us at:

» Phone: +61 3 9655 4801

» Email: tradeassess@vetassess.com.au