

# MSL30116 Certificate III in Laboratory Skills

Release 1



## **MSL30116 Certificate III in Laboratory Skills**

### **Modification History**

Release 1. Supersedes and is equivalent to MSL30109 Certificate III in Laboratory Skills

# **Qualification Description**

This qualification covers the skills and knowledge required to perform a limited range of laboratory operations across all industry sectors and is the entry level required for laboratory personnel across all industry sectors.

Employment outcomes targeted by this qualification include laboratory technicians, instrument operators and similar personnel.

Laboratory technicians perform straightforward laboratory work. They follow set procedures and recipes, and apply well developed technical skills and basic scientific knowledge. They generally work inside a laboratory but may also perform technical tasks in the field or within production plants. They may also perform a range of laboratory maintenance and office tasks.

The majority of their work involves a predictable flow of parallel or similar tasks within one scientific discipline. Laboratory technicians:

perform straightforward technical tasks to prepare and test samples using relevant procedures, Australian Standards and readily available advice. These tasks generally require close attention to detail and to the accuracy and precision of measurements. They may require the use of manual or semi-automated techniques

- operate test equipment and instruments and make limited adjustments to their controls
- process and record data and recognise trends and out of control conditions
- solve predictable problems using clear information or known solutions. Where alternatives exist, they are limited and apparent
- work under close and regular supervision, although they may have autonomy for specific tasks and responsibility for their own outputs
- take decisions within defined limits of responsibility
- work as part of a team.

No licensing, legislative or certification requirements apply to this qualification at the time of publication.

# **Entry Requirements**

There are no entry requirements for this qualification.

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### **Packaging Rules**

To be awarded the MSL30116 Certificate III in Laboratory Skills, competency must be achieved in a total of **thirteen** (13) units of competency, consisting of:

- six (6) core units
- **seven** (7) elective units from Groups A and B, chosen as specified below.

**Note**: Units marked with an asterisk have one or more prerequisite requirements and must be included in the total number of units chosen. Please refer to individual units for details.

#### Core units of competency

Select **all six** (6) of the following units of competency.

Unit code	Unit title
MSL913001	Communicate with other people
MSL913002	Plan and conduct laboratory/field work
MSL922001	Record and present data
MSL933002	Contribute to the achievement of quality objectives
MSL943002	Participate in laboratory/field workplace safety
MSMENV272	Participate in environmentally sustainable work practices

#### **ELECTIVE UNITS**

- Select seven (7) elective units from Groups A and B, as specified below:
  - a minimum of **four** (**4**) units must be chosen from Group A.
  - the remainder may be chosen from Groups A and B, to bring the total number of electives to seven (7).

Note that **two** (2) of the electives units may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where those units are available at Certificate III.

#### **Group A Elective units**

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Unit code	Unit title	Prerequisites
MSL933001	Maintain the laboratory/field workplace fit for purpose	
MSL933003	Apply critical control point requirements	
MSL933004	Perform calibration checks on equipment and assist with its maintenance	
MSL943001	Work safely with instruments that emit ionising radiation	
MSL953001	Receive and prepare samples for testing	
MSL953002	Operate a robotic sample preparation system	
MSL963001	Operate basic handblowing equipment	
MSL963002	Repair glass apparatus using simple glassblowing equipment	*
MSL973001	Perform basic tests	
MSL973002	Prepare working solutions	
MSL973003	Prepare culture media	
MSL973004	Perform aseptic techniques	
MSL973005	Assist with fieldwork	
MSL973006	Prepare trial batches for evaluation	
MSL973007	Perform microscopic examination	
MSL973008	Perform histological procedures	
MSL973009	Conduct field-based acceptance tests for construction materials	
MSL973010	Conduct laboratory-based acceptance tests for construction materials	
MSL973011	Perform fire pouring techniques	
MSL973012	Perform site investigation activities	
HLTPAT317C	Operate effectively within a pathology testing	

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	environment	
TAEDEL301A	Provide work skill instruction	

# **Group B Elective units**

Unit code	Unit title	Prerequisites
MSL912001	Work within a laboratory/field workplace (induction)	
MSL952001	Collect routine site samples	
MSL952002	Handle and transport samples or equipment	
MSL972001	Conduct routine site measurements	
MSL904001	Perform standard calibrations	
MSL914001	Prepare practical science classes and demonstrations	
MSL924001	Process and interpret data	
MSL924002	Use laboratory application software	
MSL934001	Contribute to the ongoing development of HACCP plans	
MSL934002	Apply quality system and continuous improvement processes	
MSL934003	Maintain and control stocks	
MSL944001	Maintain laboratory/field workplace safety	
MSL954001	Obtain representative samples in accordance with sampling plan	
MSL954002	Prepare mineral samples for analysis	
MSL974001	Prepare, standardise and use solutions	
MSL974002	Conduct geotechnical site investigations	
MSL974003	Perform chemical tests and procedures	
MSL974004	Perform food tests	

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MSL974005	Perform physical tests	
MSL974006	Perform biological procedures	
MSL974007	Undertake environmental field-based monitoring	
MSL974008	Capture and manage scientific images	
MSL974009	Undertake field-based, remote-sensing monitoring	
MSL974010	Perform mechanical tests	
MSL974011	Prepare tissue and cell cultures	*
MSL974012	Perform tests to determine the properties of construction materials	*
MSL974013	Monitor performance of structures	*
MSL974014	Classify soils	*
MSL974015	Operated an automated mineral analysis system	
HLTPAT419C	Perform Pathology Tests	
MSMENV472	Implement and monitor environmentally sustainable work practices	

# **Qualification Mapping Information**

Release 1. Supersedes and is equivalent to MSL30109 Certificate III in Laboratory Skills

### Links

MSA Training Package Implementation Guides - http://mskills.org.au/training-packages/info/

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