



Australian Government

MSL40122 Certificate IV in Laboratory Techniques

Release 1

MSL40122 Certificate IV in Laboratory Techniques

Modification History

Release 1. Supersedes and equivalent to MSL40118 Certificate IV in Laboratory Techniques (Release 3). Total number of units increased by one. MSL953005 Receive and prepare samples for testing removed from core and now sits in newly created Group A to support use of the qualification in school laboratories. Slight increase in number of units that may be imported from other Training Packages (from three to four). Elective units added, including MSL units and imported units from Business Services, Health and Food, Beverage and Pharmaceutical Training Packages.

Qualification Description

This qualification reflects the role of workers who perform a range of laboratory techniques, including manual, semi-automated and fully automated, to collect and prepare samples in a laboratory. They conduct a wide range of basic, and limited range of specialist tests across a variety of industry sectors. Workers may be required to assist other personnel to solve technical problems and to adjust formulations and production mixes. They may also train them to collect samples and conduct basic tests reliably.

Workers have responsibility for their own outputs according to established procedures. Work is carried out according to established procedures often under the direction and supervision of laboratory or quality managers, or scientific/medical professionals. Work is normally subject to frequent progress and quality checks.

No licensing, legislative or certification requirements exist at the time of publication.

Entry Requirements

Nil.

Packaging Rules

Total number of units = 16

- 4 core units
- 12 elective units, consisting of:
 - at least 1 unit from Group A
 - at least 7 additional units from Group A or B
 - 4 units from the electives listed below or any endorsed Training Package or accredited course – these units must be relevant to the work outcome

CORE UNITS

Unit code	Unit title	Prerequisites

MSL924005	Process and interpret data	
MSL934008	Maintain instruments and equipment	
MSL934009	Apply quality system and continuous improvement processes	
MSL944002	Maintain laboratory or field workplace safety	

ELECTIVE UNITS

Group A

Unit code	Unit title	Prerequisites
MSL914002	Prepare practical science classes and demonstrations	
MSL953005	Receive and prepare samples for testing (not to be selected with HLTPAT006)	
HLTPAT006	Receive, prepare and dispatch pathology specimens (not to be selected with MSL953005)	

Group B

Unit code	Unit title	Prerequisites
BSBLDR413	Lead effective workplace relationships	
FBPFST4004	Perform microbiological procedures in the food industry	
FBPFSY4001	Supervise and maintain a food safety plan	
FBPTEC4009	Identify the physical and chemical properties of materials, food and related products	
MSL904003	Perform standard calibrations	
MSL924006	Use laboratory application software	

Unit code	Unit title	Prerequisites
MSL934010	Maintain and control stocks	
MSL954005	Prepare mineral samples for analysis	
MSL954006	Relate anatomical and physiological features to laboratory samples	
MSL954007	Obtain representative samples in accordance with sampling plan	
MSL973021	Conduct field-based acceptance tests for construction materials	
MSL973022	Conduct laboratory-based acceptance tests for construction materials	
MSL973025	Perform basic tests	
MSL973026	Prepare working solutions	
MSL973027	Perform techniques that prevent cross-contamination	
MSL973028	Perform microscopic examination	
MSL973029	Perform histological procedures	
MSL974016	Perform physical and mechanical tests	
MSL974018	Conduct geotechnical site investigations	
MSL974022	Undertake environmental field-based monitoring	
MSL974023	Capture and manage scientific images	
MSL974026	Perform tests to determine the properties of construction materials	MSL973022 Conduct laboratory-based acceptance tests for construction materials

Unit code	Unit title	Prerequisites
MSL974028	Classify soils	MSL973021 Conduct field-based acceptance tests for construction materials MSL973022 Conduct laboratory-based acceptance tests for construction materials
MSL974029	Operate an automated mineral analysis system	
MSL974031	Prepare, standardise and use solutions	
MSL974032	Perform chemical tests and procedures	
MSL974033	Perform food tests	
MSL974034	Perform biological procedures	
MSL974035	Prepare tissue or cell cultures	MSL973027 Perform techniques that prevent cross-contamination
MSL974036	Process body fluid specimens using a point of care testing device	
MSL974037	Triage and allocate tissue specimens	
MSL974038	Use techniques to complete simple tissue specimen transfers	
MSL975057	Perform histological tests	MSL973028 Perform microscopic examination MSL954006 Relate anatomical and physiological features to laboratory samples
MSL975062	Perform microbiological tests	MSL973027 Perform techniques that prevent cross-contamination MSL973028 Perform microscopic examination

Unit code	Unit title	Prerequisites
MSL975066	Apply routine chromatographic techniques	MSL974032 Perform chemical tests and procedures
MSL975069	Apply routine spectrometric techniques	MSL974032 Perform chemical tests and procedures
MSL975073	Perform laboratory-based ecological techniques	MSL974034 Perform biological procedures
MSMENV472	Implement and monitor environmentally sustainable work practices	
TAEDEL311	Provide work skill instruction	

Qualification Mapping Information

Supersedes and equivalent to MSL40118 Certificate IV in Laboratory Techniques.

Links

MSL Laboratory Operations Companion Volume Implementation Guide is available from VETNet --

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>