

**Victorian Purchasing Guide
for
MSL Laboratory Operations
Training Package
Release 2.0**

August 2018

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Victorian Purchasing Guide — Version History

Training Package Version	Date VPG Approved	Comments
MSL Laboratory Operations Training Package Release No 2.0	7 September 2018	<p>Release 2.0 of the MSL Laboratory Operations Training Package incorporates changes to the MSL40118 Certificate IV in Laboratory Techniques and MSL50118 Diploma of Laboratory Technology; in particular, new entry requirements to the Diploma.</p> <p>The codes for the remaining three qualifications in this release have been updated but the qualifications remain equivalent.</p> <p>There are two new units, a new merged unit and while the majority of existing units are equivalent, they have been updated and recoded: The new and merged units are:</p> <ul style="list-style-type: none"> ▪ MSL954003 Relate anatomical and physiological features to laboratory samples ▪ MSL975028 Apply advanced embedding and microtomy skills ▪ MSL974016 Perform physical and mechanical tests (Formerly MSL974005 and MSL974010) <p>For detailed mapping of qualifications and units between MSL Release 2.0 and MSL Release 1.0 please refer to the MSL Companion Volume Implementation Guide CLICK HERE</p>
MSL Laboratory Operations Training Package Release No 1.0	24 April 2016	<p>The MSL Laboratory Operations Training Package reflects the transitioning of the MSL09 Laboratory Operations Training Package to the new Standards for Training Packages.</p> <p>This Victorian Purchasing Guide also reflects the changes made from Maximum Nominal Hours to Maximum and Minimum Payable Hours.</p> <p>For detailed mapping of qualifications and units between MSL Release 1.0 and MSL09 please refer to the MSL Implementation Guide CLICK HERE.</p>

MSL Laboratory Operations Release 2.0 Victorian Purchasing Guide

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INTRODUCTION

What is a Victorian Purchasing Guide?

The Victorian Purchasing Guide provides information for use by Registered Training Organisations (RTOs) in the provision of Victorian government subsidised training.

Specifically the Victorian Purchasing Guide provides the following information related to the delivery of nationally endorsed Training Packages in Victoria:

- The maximum and minimum payable hours available for each qualification.
- Nominal hours for each unit of competency within the Training Package.

Registration

RTOs must be registered by either the Victorian Registration and Qualifications Authority (VRQA) or the Australian Skills Qualification Authority (ASQA) regulatory body to be eligible to issue qualifications and Statements of Attainment under the Australian Qualifications Framework (AQF).

The VRQA is the regulatory authority in Victoria responsible for the registration of education and training providers in VET who provide courses to domestic students only and who offer training in Victoria only or Victoria and Western Australia only.

To register to provide training to international students and in other Australian states and territories you will need to apply with ASQA.

QUALIFICATIONS

Code	Title	Minimum Payable Hours	Maximum Payable Hours
MSL20118	Certificate II in Sampling and Measurement	314	330
MSL30118	Certificate III in Laboratory Skills	684	720
MSL40118	Certificate IV in Laboratory Techniques	1264	1330
MSL50118	Diploma of Laboratory Technology	1463	1540
MSL60118	Advanced Diploma of Laboratory Operations	627	660

UNITS OF COMPETENCY AND NOMINAL HOURS

RTOs are advised that there is a mapping inside the Training Package (Companion Volume) that describes the relationship between new units and any superseded or replaced units from the previous version of **MSL Laboratory Operations Training Package Release 2.0**. Information regarding transition arrangements can be obtained from the state or national VET Regulating Authority (see Contacts and Links section).

You must be sure that all training and assessment leading to qualifications or Statements of Attainment from the **MSL Laboratory Operations Training Package Release 2.0** is conducted against the Training Package units of competency and complies with the assessment requirements.

List of the Units of Competency and Nominal Hours

Unit Code	Unit Title	Nominal Hours
MSL904002	Perform standard calibrations	50
MSL905004	Perform non-standard calibrations	60
MSL905005	Create or modify calibration procedures	40
MSL905006	Create or modify automated calibration procedures	40
MSL912001	Work within a laboratory or field workplace (induction)	40
MSL913003	Communicate with other people	40
MSL913004	Plan and conduct laboratory/field work	40
MSL914002	Prepare practical science classes and demonstrations	60
MSL915003	Provide information to customers	30
MSL915004	Schedule laboratory work for a small team	50
MSL916006	Develop and maintain laboratory documentation	30
MSL916007	Manage and develop teams	40
MSL916008	Supervise laboratory operations in work or functional area	60
MSL916009	Maintain registration and statutory or legal compliance in work or functional area	50
MSL916010	Manage complex projects	50
MSL922001	Record and present data	40
MSL924003	Process and interpret data	70
MSL924004	Use laboratory application software	60
MSL925003	Determine measurements of uncertainty	60
MSL925004	Analyse data and report results	80
MSL933005	Maintain the laboratory/field workplace fit for purpose	30
MSL933006	Contribute to the achievement of quality objectives	30
MSL933007	Apply critical control point requirements	40
MSL933008	Perform calibration checks on equipment and assist with its maintenance	40
MSL934004	Maintain and calibrate instruments and equipment	60
MSL934005	Contribute to the ongoing development of HACCP plans	60
MSL934006	Apply quality system and continuous improvement processes	80

Unit Code	Unit Title	Nominal Hours
MSL934007	Maintain and control stocks	50
MSL935005	Authorise the issue of test results	60
MSL935006	Assist in the maintenance of reference materials	30
MSL935007	Monitor the quality of test results and data	40
MSL936003	Maintain quality system and continuous improvement processes within work or functional area	50
MSL936004	Conduct an internal audit of the quality system	40
MSL943003	Work safely with instruments that emit ionising radiation	60
MSL943004	Participate in laboratory or field workplace safety	40
MSL944002	Maintain laboratory or field workplace safety	50
MSL946002	Implement and monitor WHS and environmental management systems	60
MSL952001	Collect routine site samples	30
MSL952002	Handle and transport samples or equipment	30
MSL953003	Receive and prepare samples for testing	30
MSL953004	Operate a robotic sample preparation system	60
MSL954003	Relate anatomical and physiological features to laboratory samples	100
MSL954004	Obtain representative samples in accordance with sampling plan	40
MSL954005	Prepare mineral samples for analysis	60
MSL955002	Supervise a robotic sample preparation system	50
MSL972001	Conduct routine site measurements	30
MSL973013	Perform basic tests	60
MSL973014	Prepare working solutions	50
MSL973015	Prepare culture media	30
MSL973016	Perform aseptic techniques	40
MSL973017	Assist with fieldwork	40
MSL973018	Prepare trial batches for evaluation	40
MSL973019	Perform microscopic examination	40
MSL973020	Perform histological procedures	40
MSL973021	Conduct field-based acceptance tests for construction materials	60
MSL973022	Conduct laboratory-based acceptance tests for construction materials	50
MSL973023	Perform fire pouring techniques	50
MSL973024	Perform site investigation activities	40
MSL974016	Perform physical and mechanical tests	140
MSL974017	Prepare, standardise and use solutions	100
MSL974018	Conduct geotechnical site investigations	60
MSL974019	Perform chemical tests and procedures	100
MSL974020	Perform food tests	100
MSL974021	Perform biological procedures	130

Unit Code	Unit Title	Nominal Hours
MSL974022	Undertake environmental field-based monitoring	80
MSL974023	Capture and manage scientific images	40
MSL974024	Undertake field-based, remote-sensing monitoring	60
MSL974025	Prepare tissue and cell cultures	50
MSL974026	Perform tests to determine the properties of construction materials	90
MSL974027	Monitor performance of structures	90
MSL974028	Classify soils	80
MSL974029	Operate an automated mineral analysis system	60
MSL975028	Apply advanced embedding and microtomy skills	150
MSL975029	Perform histological tests	200
MSL975030	Perform immunohaematological tests	80
MSL975031	Supervise sampling, inspections and testing at construction sites	80
MSL975032	Provide input to production trials	40
MSL975033	Perform tissue and cell culture techniques	100
MSL975034	Perform molecular biology tests and procedures	150
MSL975035	Perform microbiological tests	140
MSL975036	Perform haematological tests	130
MSL975037	Perform chemical pathology tests	130
MSL975038	Conduct sensory analysis	40
MSL975039	Apply electrophoretic techniques	100
MSL975040	Apply routine chromatographic techniques	120
MSL975041	Perform fire assay techniques	60
MSL975042	Design and supervise complex environmental field surveys	40
MSL975043	Prepare animal and plant material for display	50
MSL975044	Perform complex tests to measure engineering properties of materials	40
MSL975045	Perform laboratory-based ecological techniques	60
MSL975046	Perform complex tests to measure chemical properties of materials	50
MSL975047	Apply complex instrumental techniques	50
MSL975048	Apply routine spectrometric techniques	150
MSL975049	Apply routine electrometric techniques	40
MSL975050	Perform food analyses	60
MSL975051	Supervise geotechnical site investigations	80
MSL975052	Locate, record and collect forensic samples	90
MSL975053	Perform complex laboratory testing of forensic samples	120
MSL975054	Perform physical examination of forensic samples	100
MSL975055	Prepare tissue and cell cultures	50
MSL976004	Prepare plans and quality assurance procedures for environmental field activities	50
MSL976005	Evaluate and select appropriate test methods and/or procedures	40

Unit Code	Unit Title	Nominal Hours
MSL977005	Validate test methods	40
MSL977006	Contribute to the development of products and applications	50
MSL977007	Troubleshoot equipment and/or production processes	50
MSL977008	Develop or adapt analyses and procedures	50



SAMPLE TRAINING PROGRAMS

A range of Sample Training Plans have been provided to demonstrate the flexibility of qualifications contained in the **MSL Laboratory Operations Training Package Release 2.0**, but are by no means mandatory.

Occupation	Sampling / testing assistant	
Qualification Title	Certificate II in Sampling and Measurement	
Qualification Code	MSL20118	
Description	Appropriate for a person responsible for taking samples and conducting simple tests in a manufacturing or field environment.	
Unit Code	Unit Title	Hours
Core		
MSL912001	Work within a laboratory or field workplace (induction)	40
MSL922001	Record and present data	40
MSL943004	Participate in laboratory or field workplace safety	40
MSMENV272	Participate in environmentally sustainable work practices	30
Elective units		
MSL952001	Collect routine site samples	30
MSL952002	Handle and transport samples or equipment	30
MSL943003	Work safely with instruments that emit ionising radiation	60
MSL973013	Perform basic tests	60
	Total	330

Occupation	Laboratory Assistant	
Qualification Title	Certificate III in Laboratory Skills	
Qualification Code	MSL30118	
Description	Appropriate for a person working in a materials laboratory performing sampling and testing.	
Unit Code	Unit Title	Hours
Core		
MSL913003	Communicate with other people	40
MSL913004	Plan and conduct laboratory/field work	40
MSL922001	Record and present data	40
MSL933006	Contribute to the achievement of quality objectives	30
MSL943004	Participate in laboratory or field workplace safety	40
MSMENV272	Participate in environmentally sustainable work practices	30
Electives		
MSL933008	Perform calibration checks on equipment and assist with its maintenance	40
MSL954005	Prepare mineral samples for analysis	60
MSL973013	Perform basic tests	60
MSL973021	Conduct field-based acceptance tests for construction materials	60
MSL973022	Conduct laboratory-based acceptance tests for construction materials	50
MSL974016	Perform physical and mechanical tests	140
MSL974026	Perform tests to determine the properties of construction materials	90
	Total	720

Occupation	Technical Assistant	
Qualification Title	MSL40118	
Qualification Code	Certificate IV in Laboratory Techniques	
Description	Appropriate for a person working as a laboratory Technical Assistant across a range of laboratory operations.	
Unit Code	Unit Title	Hours
Core		
MSL924003	Process and interpret data	70
MSL934004	Maintain and calibrate instruments and equipment	60
MSL934006	Apply quality system and continuous improvement processes	80
MSL944002	Maintain laboratory or field workplace safety	50
MSL953003	Receive and prepare samples for testing	30
Electives		
MSL935007	Monitor the quality of test results and data	40
MSL954003	Relate anatomical and physiological features to laboratory samples	100
MSL973016	Perform aseptic techniques	40
MSL973019	Perform microscopic examination	40
MSL974019	Perform chemical tests and procedures	100
MSL974021	Perform biological procedures	130
MSL975029	Perform histological tests	200
MSL975034	Perform molecular biology tests and procedures	150
MSL975035	Perform microbiological tests	140
MSL975039	Apply electrophoretic techniques	100
	Total	1330

Occupation	Technical Officer	
Qualification Title	Diploma of Laboratory Technology	
Qualification Code	MSL50118	
Description	Appropriate for a person working in a pathology laboratory performing a range of tests on body tissues and fluids.	
Unit Code	Unit Title	Hours
Core		
MSL924003	Process and interpret data	70
MSL924004	Use laboratory application software	60
MSL925004	Analyse data and report results	80
MSL934004	Maintain and calibrate instruments and equipment	60
MSL935007	Monitor the quality of test results and data	40
Electives		
MSL913004	Plan and conduct laboratory/field work	40
MSL954003	Relate anatomical and physiological features to laboratory samples	100
MSL975029	Perform histological tests	200
MSL975033	Perform tissue and cell culture techniques	100
MSL975034	Perform molecular biology tests and procedures	150
MSL975035	Perform microbiological tests	140
MSL975036	Perform haematological tests	130
MSL975039	Apply electrophoretic techniques	100
MSL975040	Apply routine chromatographic techniques	120
MSL975048	Apply routine spectrometric techniques	150
	Total	1540

Occupation	Senior Technical Officer	
Qualification Title	Advanced Diploma of Laboratory Operations	
Qualification Code	MSL60118	
Description	Appropriate for a person working as a senior laboratory technician responsible for planning, coordinating, evaluating and reporting within a work area or for a project team.	
Unit Code	Unit Title	Hours
Core		
MSL916006	Develop and maintain laboratory documentation	30
MSL916007	Manage and develop teams	40
MSL916008	Supervise laboratory operations in work or functional area	60
MSL916009	Maintain registration and statutory or legal compliance in work or functional area	50
MSL936003	Maintain quality system and continuous improvement processes within work or functional area	50
MSL946002	Implement and monitor WHS and environmental management systems	60
MSMENV472	Implement and monitor environmentally sustainable work practices	40
Elective		
MSL916010	Manage complex projects	50
MSL924003	Process and interpret data	70
MSL925004	Analyse data and report results	80
MSL936004	Conduct an internal audit of the quality system	40
MSL976005	Evaluate and select appropriate test methods and/or procedures	40
MSL977006	Contribute to the development of products and applications	50
	Total	660

CONTACTS AND LINKS

Curriculum Maintenance Manager (CMM)		
General Manufacturing	The CMM service is provided by Executive Officers located within Victorian TAFE institutes on behalf of the Higher Education and Skills Group.	Paul Saunders: Address: Chisholm Institute, PO Box 684, Dandenong, Vic. 3175. Phone: 9238 8448 Email: paul.saunders@chisholm.edu.au
Service Skills Organisation (SSO)		
Innovation & Business Skills Australia (IBSA)	This SSO is responsible for developing this MSL Laboratory Operations Training Package and can be contacted for further information. You can also source copies of the Training Package and support material.	Address: Level 11, 176 Wellington Parade, East Melbourne, VIC 3002. Phone: 03 9815 7099 Email: manufacturing@ibsa.org.au IBSA website can be found here .
National Register for VET in Australia		
Training.gov.au (TGA)	TGA is the Australian governments' official National Register of information on Training Packages, qualifications, courses, units of competency and RTOs.	National Register website can be found here .
Australian Government		
Department of Education and Training	The Commonwealth Department is responsible for national policies and programmes that help Australians access quality vocational education and training.	The Commonwealth Department of Education and Training website can be found here
State Government		
Department of Education and Training (DET)	DET is responsible for funding and the implementation of Vocational Education and Training (VET) in Victoria, including Apprenticeships and Traineeships policy.	(03) 9637 2000 The Victorian Department of Education and Training website can be found here
National VET Regulatory Authority		
Australian Skills Quality Authority (ASQA)	ASQA is the national regulator for Australia's VET sector.	Info line: 1300 701 801 ASQA's website can be found here
Victorian State VET Regulatory Authority		
Victorian Registration and Qualifications Authority (VRQA)	The VRQA is a statutory authority responsible for the registration and regulation of Victorian RTOs and for the regulation of apprenticeships and traineeships in Victoria.	(03) 9637 2806 VRQA's website can be found here

Industry Regulatory Bodies		
WorkSafe Victoria	<p>The industry Regulatory body can provide advice on licensing, legislative or regulatory requirements which may impact on the delivery of training or the issuance of qualifications in this Training Package.</p> <p>WorkSafe needs to provide written verification before High Risk Work Units can be added to an RTO's scope of registration.</p>	<p>Address: 222 Exhibition Street, Melbourne, 3000. Phone: (03) 9641 1444 or 1800 136 089 (toll free)</p> <p>Email: info@worksafe.vic.gov.au Worksafe Victoria's website can be found here</p>



GLOSSARY

Code	Nationally endorsed Training Package qualification code.
Title	Nationally endorsed Training Package qualification title.
Unit Code	Nationally endorsed Training Package unit code.
Unit Title	Nationally endorsed Training Package unit title.
Maximum Payable Hours	The maximum number of hours the Victorian Government will subsidise under the Victorian Training Guarantee for the achievement of the minimum realistic vocational outcome of the qualification, as determined by the qualification packaging rules. The Maximum Payable Hours do not cover every possible combination of core and elective units available for a specific qualification.
Minimum Payable Hours	The number of hours the Victorian government designates as the minimum required to deliver a qualification, taking into account contextualisation and integrated delivery efficiencies.
Scope of Registration	Scope of registration specifies the AQF qualifications and/or units of competency the training organisation is registered to issue and the industry training and/or assessment services it is registered to provide.
Nominal Hours	The anticipated hours of supervised learning or training deemed necessary to conduct training and assessment activities associated with the program of study. These hours are determined by the Victorian State Training Authority. Nominal hours may vary for a qualification depending on the units of competency selected.