

# **MSL Laboratory Operations**

## **TRAINING PACKAGE**

### **Version 4**

## **WA NOMINAL HOURS GUIDE**

## Introduction

This Guide has been generated to enable the stakeholders in this Industry in Western Australia to participate in the managed implementation of the National MSL Laboratory Operations Training Package.

This Guide is designed to aid Registered Training Organisations (RTOs) to convert from existing Training Package qualifications to new Training Package qualifications within the scope of their training delivery.

The Guide should be read in conjunction with the endorsed components of the Training Package.

Version 4 of the MSL Laboratory Operations was released by Training.Gov.Au (TGA) on the 20/12/2022.

## Transition Arrangements

Registered Training Organisations (RTOs) are required to deliver Training Package qualifications in accordance with the Standards for RTOs. For further information visit the Training Accreditation Council website [www.tac.wa.gov.au](http://www.tac.wa.gov.au).

## Nominal Hours

Nominal hours are the hours of training notionally required to achieve the outcomes of units of competency.

Nominal hours are identified for nationally endorsed qualifications. Nominal hours may vary for a qualification depending on the selection of units of competency.

In Western Australia, nominal hours are used as a mechanism for funding allocation.

## Contact Details

For Training Packages content information, please contact:

Training Curriculum Services

Tel: (08) 6551 5541

Email: [trainingpackages@dtwd.wa.gov.au](mailto:trainingpackages@dtwd.wa.gov.au)

### Qualifications and Nominal Hours

The following table provides a summary of the qualifications and nominal hours in the training package.

National Code	National Title	Nominal Hours
MSL20122	Certificate II in Sampling and Measurement	280
MSL30122	Certificate III in Laboratory Skills	580
MSL40122	Certificate IV in Laboratory Techniques	915
MSL50122	Diploma of Laboratory Technology	1345
MSL60122	Advanced Diploma of Laboratory Management	455

## Skill Sets and Nominal Hours

The following table provides a summary of the skill sets and nominal hours in the training package.

National Code	National Title	Nominal Hours
MSLSS00003	Histotechnology Skill Set	275
MSLSS00004	Point of care testing using capillary blood specimens	100
MSLSS00005	Anatomical Pathology Simple and Non-complex Surgical cut-up Skill set	255
MSLSS00006	Laboratory Quality Skillset	165
MSLSS00007	Haematology and Transfusion Skillset	440
MSLSS00008	Microbiology Skillset	360
MSLSS00009	Chemical Pathology Skillset	400
MSLSS00010	Pathology Multi-discipline Laboratory Skillset	680
MSLSS00011	Molecular Biology Skill set	280

## Units of Competency and Nominal Hours

The following table provides a summary of the units of competency and nominal hours in the training package.

National Code	National Title	Nominal Hours
MSL904003	Perform standard calibrations	60
MSL905004	Perform non-standard calibrations	60
MSL905005	Create or modify calibration procedures	80
MSL912002	Work within a laboratory or field workplace	40
MSL913004	Plan and conduct laboratory/field work	40
MSL914002	Prepare practical science classes and demonstrations	80
MSL915003	Provide information to customers	60
MSL915004	Schedule laboratory work for a small team	60
MSL916011	Develop and maintain laboratory documentation	40
MSL916012	Manage and develop teams	40
MSL916013	Supervise laboratory operations in work or functional area	40
MSL916014	Maintain compliance in work or functional area	40
MSL916015	Manage complex projects	60
MSL922002	Record and present data	60
MSL924005	Process and interpret data	60
MSL924006	Use laboratory application software	60
MSL925005	Analyse measurements and estimate uncertainties	80
MSL925006	Analyse data and report results	120
MSL933005	Maintain the laboratory/field workplace fit for purpose	20
MSL933007	Apply critical control point requirements	40
MSL933008	Perform calibration checks on equipment and assist with its maintenance	35
MSL933009	Contribute to the achievement of quality objectives	60
MSL934008	Maintain instruments and equipment	120

MSL934009	Apply quality system and continuous improvement processes	60
MSL934010	Maintain and control stocks	40
MSL935005	Authorise the issue of test results	50
MSL935006	Assist in the maintenance of reference materials	60
MSL935008	Monitor the quality of test results and data	45
MSL936005	Maintain quality system and continuous improvement processes within work or functional area	40
MSL936006	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	20
MSL946003	Implement and monitor WHS and environmental management systems	40
MSL952003	Collect routine site samples	20
MSL952004	Handle and transport samples or equipment	40
MSL953004	Operate a robotic sample preparation system	50
MSL953005	Receive and prepare samples for testing	40
MSL954005	Prepare mineral samples for analysis	40
MSL954006	Relate anatomical and physiological features to laboratory samples	90
MSL954007	Obtain representative samples in accordance with sampling plan	45
MSL972002	Take routine site measurements	40
MSL973015	Prepare culture media	20
MSL973017	Assist with fieldwork	40
MSL973018	Prepare trial batches for evaluation	40
MSL973021	Conduct field-based acceptance tests for construction materials	50
MSL973022	Conduct laboratory-based acceptance tests for construction materials	45
MSL973023	Perform fire pouring techniques	45
MSL973024	Perform site investigation activities	80
MSL973025	Perform basic tests	80

MSL973026	Prepare working solutions	80
MSL973027	Perform techniques that prevent cross-contamination	40
MSL973028	Perform microscopic examination	40
MSL973029	Perform histological procedures	40
MSL974016	Perform physical and mechanical tests	125
MSL974018	Conduct geotechnical site investigations	50
MSL974022	Undertake environmental field-based monitoring	60
MSL974023	Capture and manage scientific images	40
MSL974026	Perform tests to determine the properties of construction materials	80
MSL974028	Classify soils	80
MSL974029	Operate an automated mineral analysis system	100
MSL974031	Prepare, standardise and use solutions	60
MSL974032	Perform chemical tests and procedures	60
MSL974033	Perform food tests	60
MSL974034	Perform biological procedures	120
MSL974035	Prepare tissue or cell cultures	40
MSL974036	Process body fluid specimens using a point of care testing device	70
MSL974037	Triage and allocate tissue specimens	25
MSL974038	Use techniques to complete simple tissue specimen transfers	55
MSL975032	Provide input to production trials	120
MSL975038	Conduct sensory analysis	60
MSL975041	Perform fire assay techniques	120
MSL975042	Design and supervise complex environmental field surveys	120
MSL975043	Prepare animal and plant material for display	120
MSL975044	Perform complex tests to measure engineering properties of materials	120
MSL975051	Supervise geotechnical site investigations	70
MSL975052	Locate, record and collect forensic samples	80

MSL975055	Classify building sites	60
MSL975056	Perform advanced histological techniques	135
MSL975057	Perform histological tests	120
MSL975058	Perform immunohaematological tests	120
MSL975059	Supervise sampling, inspections and testing at construction sites	70
MSL975060	Perform tissue or cell culture techniques	120
MSL975061	Perform molecular biology tests and procedures	120
MSL975062	Perform microbiological tests	120
MSL975063	Perform haematological tests	120
MSL975064	Perform chemical pathology tests	120
MSL975065	Apply electrophoretic techniques	120
MSL975066	Apply routine chromatographic techniques	120
MSL975067	Perform complex tests to measure chemical properties of materials	120
MSL975068	Apply complex instrumental techniques	120
MSL975069	Apply routine spectrometric techniques	120
MSL975070	Apply routine electrometric techniques	120
MSL975071	Perform food analyses	120
MSL975072	Use surgical cut-up techniques for non-complex tissue specimens	110
MSL975073	Perform laboratory-based ecological techniques	120
MSL976006	Evaluate and select appropriate test methods and/or procedures	60
MSL977009	Validate test methods	40
MSL977010	Contribute to the development of products or applications	55
MSL977011	Troubleshoot equipment and/or production processes	40
MSL977012	Develop or adapt analyses and procedures	40

## Mapping Qualifications

The following table provides an overview of the qualifications from Version 4 which replace qualifications from the existing version of the MSL Laboratory Operations Training Package.

MSL Current Qualification				MSL Replacement Qualification		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
MSL20118	Certificate II in Sampling and Measurement	280	E	MSL20122	Certificate II in Sampling and Measurement	280
MSL30118	Certificate III in Laboratory Skills	580	E	MSL30122	Certificate III in Laboratory Skills	580
MSL40118	Certificate IV in Laboratory Techniques	900	E	MSL40122	Certificate IV in Laboratory Techniques	915
MSL50118	Diploma of Laboratory Technology	1370	E	MSL50122	Diploma of Laboratory Technology	1345
MSL60118	Advanced Diploma of Laboratory Operations	550	E	MSL60122	Advanced Diploma of Laboratory Management	455

## Mapping Skill Sets

The following table provides an overview of the skill sets from Version 4 which replace skill sets from the existing version of the MSL Laboratory Operations Training Package.

MSL Current Skill Set				MSL Replacement Skill Set		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
MSLSS00001	Histotechnology Skill Set	465	NE	MSLSS00003	Histotechnology Skill Set	275
MSLSS00002	Point of care testing using capillary blood specimens	100	NE	MSLSS00004	Point of care testing using capillary blood specimens	100
			-	MSLSS00005	Anatomical Pathology Simple and Non-complex Surgical cut-up Skill set	255
			-	MSLSS00006	Laboratory Quality Skillset	165
			-	MSLSS00007	Haematology and Transfusion Skillset	440
			-	MSLSS00008	Microbiology Skillset	360
			-	MSLSS00009	Chemical Pathology Skillset	400
			-	MSLSS00010	Pathology Multi-discipline Laboratory Skillset	680
			-	MSLSS00011	Molecular Biology Skill set	280

## Mapping Units of Competency

The following table provides an overview of the units of competency from Version 4 which replace units of competency from the existing version of the MSL Laboratory Operations Training Package.

MSL Current Unit				MSL Replacement Unit		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
MSL904002	Perform standard calibrations	60	E	MSL904003	Perform standard calibrations	60
MSL912001	Work within a laboratory or field workplace (induction)	40	E	MSL912002	Work within a laboratory or field workplace	40
MSL916006	Develop and maintain laboratory documentation	40	E	MSL916011	Develop and maintain laboratory documentation	40
MSL916007	Manage and develop teams	40	E	MSL916012	Manage and develop teams	40
MSL916008	Supervise laboratory operations in work or functional area	40	E	MSL916013	Supervise laboratory operations in work or functional area	40
MSL916009	Maintain registration and statutory or legal compliance in work or functional area	40	E	MSL916014	Maintain compliance in work or functional area	40
MSL916010	Manage complex projects	60	E	MSL916015	Manage complex projects	60
MSL922001	Record and present data	60	E	MSL922002	Record and present data	60
MSL924003	Process and interpret data	60	E	MSL924005	Process and interpret data	60
MSL924004	Use laboratory application software	60	E	MSL924006	Use laboratory application software	60
MSL925003	Determine measurements of uncertainty	50	NE	MSL925005	Analyse measurements and estimate uncertainties	80
MSL925004	Analyse data and report results	120	E	MSL925006	Analyse data and report results	120
MSL933002	Contribute to the achievement of quality objectives	60	E	MSL933009	Contribute to the achievement of quality objectives	60
MSL933006	Contribute to the achievement of quality objectives	60	E			
MSL934004	Maintain and calibrate instruments and equipment	120	E	MSL934008	Maintain instruments and equipment	120
MSL934006	Apply quality system and continuous improvement processes	60	E	MSL934009	Apply quality system and continuous improvement processes	60
MSL934007	Maintain and control stocks	40	E	MSL934010	Maintain and control stocks	40
MSL935007	Monitor the quality of test results and data	120	NE	MSL935008	Monitor the quality of test results and data	45

MSL936003	Maintain quality system and continuous improvement processes within work or functional area	40	E	MSL936005	Maintain quality system and continuous improvement processes within work or functional area	40
MSL936004	Conduct an internal audit of the quality system	40	E	MSL936006	Conduct an internal audit of the quality system	40
MSL946001	Implement and monitor WHS and environmental management systems	40	E	MSL946003	Implement and monitor WHS and environmental management systems	40
MSL946002	Implement and monitor WHS and environmental management systems	40	E	MSL946003	Implement and monitor WHS and environmental management systems	40
MSL952001	Collect routine site samples	20	E	MSL952003	Collect routine site samples	20
MSL952002	Handle and transport samples or equipment	40	E	MSL952004	Handle and transport samples or equipment	40
MSL953003	Receive and prepare samples for testing	40	E	MSL953005	Receive and prepare samples for testing	40
MSL954003	Relate anatomical and physiological features to laboratory samples	90	E	MSL954006	Relate anatomical and physiological features to laboratory samples	90
MSL954004	Obtain representative samples in accordance with sampling plan	40	NE	MSL954007	Obtain representative samples in accordance with sampling plan	45
MSL972001	Conduct routine site measurements	40	E	MSL972002	Take routine site measurements	40
MSL973013	Perform basic tests	80	E	MSL973025	Perform basic tests	80
MSL973014	Prepare working solutions	80	E	MSL973026	Prepare working solutions	80
MSL973016	Perform aseptic techniques	40	E	MSL973027	Perform techniques that prevent cross-contamination	40
MSL973019	Perform microscopic examination	40	E	MSL973028	Perform microscopic examination	40
MSL973020	Perform histological procedures	40	E	MSL973029	Perform histological procedures	40
MSL974017	Prepare, standardise and use solutions	60	E	MSL974031	Prepare, standardise and use solutions	60
MSL974019	Perform chemical tests and procedures	60	E	MSL974032	Perform chemical tests and procedures	60
MSL974020	Perform food tests	60	E	MSL974033	Perform food tests	60
MSL974021	Perform biological procedures	120	E	MSL974034	Perform biological procedures	120
MSL974025	Prepare tissue and cell cultures	40	E	MSL974035	Prepare tissue or cell cultures	40
MSL974030	Process body fluid specimens using a point of care testing device	70	NE	MSL974036	Process body fluid specimens using a point of care testing device	70
			-	MSL974037	Triage and allocate tissue specimens	25
			-	MSL974038	Use techniques to complete simple tissue specimen transfers	55

MSL975028	Apply advanced embedding and microtomy skills	135	E	MSL975056	Perform advanced histological techniques	135
MSL975029	Perform histological tests	120	E	MSL975057	Perform histological tests	120
MSL975030	Perform immunohaematological tests	120	E	MSL975058	Perform immunohaematological tests	120
MSL975031	Supervise sampling, inspections and testing at construction sites	70	E	MSL975059	Supervise sampling, inspections and testing at construction sites	70
MSL975033	Perform tissue and cell culture techniques	120	E	MSL975060	Perform tissue or cell culture techniques	120
MSL975034	Perform molecular biology tests and procedures	120	E	MSL975061	Perform molecular biology tests and procedures	120
MSL975035	Perform microbiological tests	120	E	MSL975062	Perform microbiological tests	120
MSL975036	Perform haematological tests	120	E	MSL975063	Perform haematological tests	120
MSL975037	Perform chemical pathology tests	120	E	MSL975064	Perform chemical pathology tests	120
MSL975039	Apply electrophoretic techniques	120	E	MSL975065	Apply electrophoretic techniques	120
MSL975040	Apply routine chromatographic techniques	120	E	MSL975066	Apply routine chromatographic techniques	120
MSL975046	Perform complex tests to measure chemical properties of materials	120	E	MSL975067	Perform complex tests to measure chemical properties of materials	120
MSL975047	Apply complex instrumental techniques	120	E	MSL975068	Apply complex instrumental techniques	120
MSL975048	Apply routine spectrometric techniques	120	E	MSL975069	Apply routine spectrometric techniques	120
MSL975049	Apply routine electrometric techniques	120	E	MSL975070	Apply routine electrometric techniques	120
MSL975050	Perform food analyses	120	E	MSL975071	Perform food analyses	120
			-	MSL975072	Use surgical cut-up techniques for non-complex tissue specimens	110
MSL975045	Perform laboratory-based ecological techniques	120	E	MSL975073	Perform laboratory-based ecological techniques	120
MSL976005	Evaluate and select appropriate test methods and/or procedures	60	E	MSL976006	Evaluate and select appropriate test methods and/or procedures	60
MSL977005	Validate test methods	40	E	MSL977009	Validate test methods	40
MSL977006	Contribute to the development of products and applications	40	NE	MSL977010	Contribute to the development of products or applications	55
MSL977007	Troubleshoot equipment and/or production processes	40	E	MSL977011	Troubleshoot equipment and/or production processes	40
MSL977008	Develop or adapt analyses and procedures	40	E	MSL977012	Develop or adapt analyses and procedures	40

## Apprenticeships

The following table provides a summary of the apprenticeships that have been affected by changes in this MSL Laboratory Operations training package update.

Please refer to the current *Register of Class A and B qualifications* found on the Department of Training and Workforce Development website for the official list of apprenticeships in Western Australia.

National Code	National Title	Apprenticeship	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
---------------	----------------	----------------	---------------	--------	---------------	----------------	---------------

No changes occurred between MSL v3.2 & v4.

## Traineeships

The following table provides a summary of the traineeships that have been affected by changes in this MSL Laboratory Operations training package update.

Please refer to the current *Register of Class A and B qualifications* found on the Department of Training and Workforce Development website for the official list of apprenticeships in Western Australia.

National Code	National Title	Traineeship	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
MSL20118	Certificate II in Sampling and Measurement	TR06070: SAMPLING AND MEASUREMENT (LEVEL 2)	280	E	MSL20122	Certificate II in Sampling and Measurement	280
MSL30118	Certificate III in Laboratory Skills	TR08150: LABORATORY SKILLS (LEVEL 3)	580	E	MSL30122	Certificate III in Laboratory Skills	580
MSL40118	Certificate IV in Laboratory Techniques	TR08160: LABORATORY TECHNIQUES (LEVEL 4)	900	E	MSL40122	Certificate IV in Laboratory Techniques	915
MSL50118	Diploma in Laboratory Technology	TR08170: LABORATORY TECHNOLOGY (LEVEL 5)	1370	E	MSL50122	Diploma in Laboratory Technology	1345
MSL60118	Advanced Diploma in Laboratory Operations	TR07010: SENIOR LABORATORY TECHNICIAN (LEVEL 6)	550	E	MSL60122	Advanced Diploma in Laboratory Management	455

## Pre-Apprenticeships

The following table provides a summary of the pre-apprenticeships that have been affected by changes in this MSL Laboratory Operations training package update.

Please refer to the current *list of pre-apprenticeship courses* found on the Department of Training and Workforce Development website for the official list of pre-apprenticeships in Western Australia.

National Code	National Title	Pre-Apprenticeship	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
---------------	----------------	--------------------	---------------	--------	---------------	----------------	---------------

No changes occurred between MSL v3.2 & v4.