

MSL LABORATORY OPERATIONS

TRAINING PACKAGE

Version 2

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 2 of the MSL Laboratory Operations was released by Training.Gov.Au (TGA) on the 20/07/2018.

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.

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 Package content information, please contact:
Training Curriculum Services
Tel: (08) 6551 5541
Email: 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
MSL20118	Certificate II in Sampling and Measurement	280
MSL30118	Certificate III in Laboratory Skills	580
MSL40118	Certificate IV in Laboratory Techniques	900
MSL50118	Diploma of Laboratory Technology	1370
MSL60118	Advanced Diploma of Laboratory Operations	550

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
MSL904002	Perform standard calibrations	60
MSL905004	Perform non-standard calibrations	60
MSL905005	Create or modify calibration procedures	80
MSL905006	Create or modify automated calibration procedures	80
MSL912001	Work within a laboratory or field workplace (induction)	40
MSL913003	Communicate with other people	20
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
MSL916006	Develop and maintain laboratory documentation	40
MSL916007	Manage and develop teams	40
MSL916008	Supervise laboratory operations in work or functional area	40
MSL916009	Maintain registration and statutory or legal compliance in work or functional area	40
MSL916010	Manage complex projects	60
MSL922001	Record and present data	60
MSL924003	Process and interpret data	60
MSL924004	Use laboratory application software	60
MSL925003	Determine measurements of uncertainty	50
MSL925004	Analyse data and report results	120
MSL933005	Maintain the laboratory/field workplace fit for purpose	20
MSL933006	Contribute to the achievement of quality objectives	60
MSL933007	Apply critical control point requirements	40

MSL933008	Perform calibration checks on equipment and assist with its maintenance	35
MSL934004	Maintain and calibrate instruments and equipment	120
MSL934005	Contribute to the ongoing development of HACCP plans	40
MSL934006	Apply quality system and continuous improvement processes	60
MSL934007	Maintain and control stocks	40
MSL935005	Authorise the issue of test results	50
MSL935006	Assist in the maintenance of reference materials	60
MSL935007	Monitor the quality of test results and data	120
MSL936003	Maintain quality system and continuous improvement processes within work or functional area	40
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	20
MSL946002	Implement and monitor WHS and environmental management systems	40
MSL952001	Collect routine site samples	20
MSL952002	Handle and transport samples or equipment	40
MSL953003	Receive and prepare samples for testing	40
MSL953004	Operate a robotic sample preparation system	50
MSL954003	Relate anatomical and physiological features to laboratory samples	90
MSL954004	Obtain representative samples in accordance with sampling plan	40
MSL954005	Prepare mineral samples for analysis	40
MSL955002	Supervise a robotic sample preparation system	45
MSL972001	Conduct routine site measurements	40
MSL973013	Perform basic tests	80
MSL973014	Prepare working solutions	80
MSL973015	Prepare culture media	20
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	50
MSL973022	Conduct laboratory-based acceptance tests for construction materials	45
MSL973023	Perform fire pouring techniques	45
MSL973024	Perform site investigation activities	80
MSL974016	Perform physical and mechanical tests	125
MSL974017	Prepare, standardise and use solutions	60
MSL974018	Conduct geotechnical site investigations	50
MSL974019	Perform chemical tests and procedures	60
MSL974020	Perform food tests	60
MSL974021	Perform biological procedures	120
MSL974022	Undertake environmental field-based monitoring	60
MSL974023	Capture and manage scientific images	40
MSL974024	Undertake field-based, remote-sensing monitoring	60
MSL974025	Prepare tissue and cell cultures	40
MSL974026	Perform tests to determine the properties of construction materials	80
MSL974027	Monitor performance of structures	80
MSL974028	Classify soils	80
MSL974029	Operate an automated mineral analysis system	100
MSL975028	Apply advanced embedding and microtomy skills	135
MSL975029	Perform histological tests	120
MSL975030	Perform immunohaematological tests	120
MSL975031	Supervise sampling, inspections and testing at construction sites	70
MSL975032	Provide input to production trials	120
MSL975033	Perform tissue and cell culture techniques	120
MSL975034	Perform molecular biology tests and procedures	120

MSL975035	Perform microbiological tests	120
MSL975036	Perform haematological tests	120
MSL975037	Perform chemical pathology tests	120
MSL975038	Conduct sensory analysis	60
MSL975039	Apply electrophoretic techniques	120
MSL975040	Apply routine chromatographic techniques	120
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
MSL975045	Perform laboratory-based ecological techniques`	120
MSL975046	Perform complex tests to measure chemical properties of materials	120
MSL975047	Apply complex instrumental techniques	120
MSL975048	Apply routine spectrometric techniques	120
MSL975049	Apply routine electrometric techniques	120
MSL975050	Perform food analyses	120
MSL975051	Supervise geotechnical site investigations	70
MSL975052	Locate, record and collect forensic samples	80
MSL975053	Perform complex laboratory testing of forensic samples	100
MSL975054	Perform physical examination of forensic samples	90
MSL975055	Classify building sites	60
MSL976004	Prepare plans and quality assurance procedures for environmental field activities	60
MSL976005	Evaluate and select appropriate test methods and/or procedures	60
MSL977005	Validate test methods	40
MSL977006	Contribute to the development of products and applications	40
MSL977007	Troubleshoot equipment and/or production processes	40
MSL977008	Develop or adapt analyses and procedures	40

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
MSLSS00001	Histotechnology Skill Set	465

Mapping Qualifications

The following table provides an overview of the qualifications from version 2, which replace qualifications from the existing version of the MSL Laboratory Operations.

MSL Current Qualification				MSL Replacement Qualification		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
MSL20116	Certificate II in Sampling and Measurement	280	E	MSL20118	Certificate II in Sampling and Measurement	280
MSL30116	Certificate III in Laboratory Skills	580	E	MSL30118	Certificate III in Laboratory Skills	580
MSL40116	Certificate IV in Laboratory Techniques	850	E	MSL40118	Certificate IV in Laboratory Techniques	900
MSL50116	Diploma of Laboratory Technology	985	E	MSL50118	Diploma of Laboratory Technology	1370
MSL60116	Advanced Diploma of Laboratory Operations	550	E	MSL60118	Advanced Diploma of Laboratory Operations	550

Mapping Units of Competency

The following table provides an overview of the units of competency from version 2, which replace units of competency from the existing version of the MSL Laboratory Operations.

MSL Current Unit				MSL Replacement Unit		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
MSL904001	Perform standard calibrations	60	E	MSL904002	Perform standard calibrations	60
MSL905001	Perform non-standard calibrations	60	E	MSL905004	Perform non-standard calibrations	60
MSL905002	Create or modify calibration procedures	80	E	MSL905005	Create or modify calibration procedures	80
MSL905003	Create or modify automated calibration procedures	80	E	MSL905006	Create or modify automated calibration procedures	80
MSL913001	Communicate with other people	20	E	MSL913003	Communicate with other people	20
MSL913002	Plan and conduct laboratory/field work	40	E	MSL913004	Plan and conduct laboratory/field work	40
MSL914001	Prepare practical science classes and demonstrations	80	E	MSL914002	Prepare practical science classes and demonstrations	80
MSL915001	Provide information to customers	60	E	MSL915003	Provide information to customers	60
MSL915002	Schedule laboratory work for a small team	60	E	MSL915004	Schedule laboratory work for a small team	60
MSL916001	Develop and maintain laboratory documentation	40	E	MSL916006	Develop and maintain laboratory documentation	40
MSL916002	Manage and develop teams	40	E	MSL916007	Manage and develop teams	40
MSL916003	Supervise laboratory operations in work or functional area	40	E	MSL916008	Supervise laboratory operations in work or functional area	40
MSL916004	Maintain registration and statutory or legal compliance in work or functional area	40	E	MSL916009	Maintain registration and statutory or legal compliance in work or functional area	40
MSL916005	Manage complex projects	60	E	MSL916010	Manage complex projects	60
MSL924001	Process and interpret data	60	E	MSL924003	Process and interpret data	60
MSL924002	Use laboratory application software	60	E	MSL924004	Use laboratory application software	60
MSL925002	Analyse measurements and estimate uncertainties	50	E	MSL925003	Determine measurements of uncertainty	50
MSL925001	Analyse data and report results	120	E	MSL925004	Analyse data and report results	120
MSL933001	Maintain the laboratory/field workplace fit for purpose	20	E	MSL933005	Maintain the laboratory/field workplace fit for purpose	20
MSL933002	Contribute to the achievement of quality objectives	60	E	MSL933006	Contribute to the achievement of quality objectives	60
MSL933003	Apply critical control point requirements	40	E	MSL933007	Apply critical control point requirements	40

MSL933004	Perform calibration checks on equipment and assist with its maintenance	35	E	MSL933008	Perform calibration checks on equipment and assist with its maintenance	35
MSL935004	Maintain instruments and equipment	120	E	MSL934004	Maintain and calibrate instruments and equipment	120
MSL934001	Contribute to the ongoing development of HACCP plans	40	E	MSL934005	Contribute to the ongoing development of HACCP plans	40
MSL934002	Apply quality system and continuous improvement processes	60	E	MSL934006	Apply quality system and continuous improvement processes	60
MSL934003	Maintain and control stocks	40	E	MSL934007	Maintain and control stocks	40
MSL935003	Authorise the issue of test results	50	E	MSL935005	Authorise the issue of test results	50
MSL935002	Assist in the maintenance of reference materials	60	E	MSL935006	Assist in the maintenance of reference materials	60
MSL935001	Monitor the quality of test results and data	120	E	MSL935007	Monitor the quality of test results and data	120
MSL936001	Maintain quality system and continuous improvement processes within work or functional area	40	E	MSL936003	Maintain quality system and continuous improvement processes within work or functional area	40
MSL936002	Conduct an internal audit of the quality system	40	E	MSL936004	Conduct an internal audit of the quality system	40
MSL943001	Work safely with instruments that emit ionising radiation	60	E	MSL943003	Work safely with instruments that emit ionising radiation	60
MSL943002	Participate in laboratory or field workplace safety	40	E	MSL943004	Participate in laboratory or field workplace safety	40
MSL944001	Maintain laboratory or field workplace safety	20	E	MSL944002	Maintain laboratory or field workplace safety	20
MSL946001	Implement and monitor WHS and environmental management systems	40	E	MSL946002	Implement and monitor WHS and environmental management systems	40
MSL953001	Receive and prepare samples for testing	40	E	MSL953003	Receive and prepare samples for testing	40
MSL953002	Operate a robotic sample preparation system	50	E	MSL953004	Operate a robotic sample preparation system	50
			-	MSL954003	Relate anatomical and physiological features to laboratory samples	90
MSL954001	Obtain representative samples in accordance with sampling plan	40	E	MSL954004	Obtain representative samples in accordance with sampling plan	40
MSL954002	Prepare mineral samples for analysis	40	E	MSL954005	Prepare mineral samples for analysis	40
MSL955001	Supervise a robotic sample preparation system	45	E	MSL955002	Supervise a robotic sample preparation system	45
MSL973001	Perform basic tests	80	E	MSL973013	Perform basic tests	80
MSL973002	Prepare working solutions	80	E	MSL973014	Prepare working solutions	80
MSL973003	Prepare culture media	20	E	MSL973015	Prepare culture media	20
MSL973004	Perform aseptic techniques	40	E	MSL973016	Perform aseptic techniques	40
MSL973005	Assist with fieldwork	40	E	MSL973017	Assist with fieldwork	40

MSL973006	Prepare trial batches for evaluation	40	E	MSL973018	Prepare trial batches for evaluation	40
MSL973007	Perform microscopic examination	40	E	MSL973019	Perform microscopic examination	40
MSL973008	Perform histological procedures	40	E	MSL973020	Perform histological procedures	40
MSL973009	Conduct field-based acceptance tests for construction materials	50	E	MSL973021	Conduct field-based acceptance tests for construction materials	50
MSL973010	Conduct laboratory-based acceptance tests for construction materials	45	E	MSL973022	Conduct laboratory-based acceptance tests for construction materials	45
MSL973011	Perform fire pouring techniques	45	E	MSL973023	Perform fire pouring techniques	45
MSL973012	Perform site investigation activities	80	E	MSL973024	Perform site investigation activities	80
MSL974005	Perform physical tests	60	E	MSL974016	Perform physical and mechanical tests	125
MSL974010	Perform mechanical tests	80	E	MSL974016	Perform physical and mechanical tests	125
MSL974001	Prepare, standardise and use solutions	60	E	MSL974017	Prepare, standardise and use solutions	60
MSL974002	Conduct geotechnical site investigations	50	E	MSL974018	Conduct geotechnical site investigations	50
MSL974003	Perform chemical tests and procedures	60	E	MSL974019	Perform chemical tests and procedures	60
MSL974004	Perform food tests	60	E	MSL974020	Perform food tests	60
MSL974006	Perform biological procedures	120	E	MSL974021	Perform biological procedures	120
MSL974007	Undertake environmental field-based monitoring	60	E	MSL974022	Undertake environmental field-based monitoring	60
MSL974008	Capture and manage scientific images	40	E	MSL974023	Capture and manage scientific images	40
MSL974009	Undertake field-based, remote-sensing monitoring	60	E	MSL974024	Undertake field-based, remote-sensing monitoring	60
MSL974011	Prepare tissue and cell cultures	40	E	MSL974025	Prepare tissue and cell cultures	40
MSL974012	Perform tests to determine the properties of construction materials	80	E	MSL974026	Perform tests to determine the properties of construction materials	80
MSL974013	Monitor performance of structures	80	E	MSL974027	Monitor performance of structures	80
MSL974014	Classify soils	80	E	MSL974028	Classify soils	80
MSL974015	Operate an automated mineral analysis system	100	E	MSL974029	Operate an automated mineral analysis system	100
			-	MSL975028	Apply advanced embedding and microtomy skills	135
MSL975003	Perform histological tests	120	E	MSL975029	Perform histological tests	120
MSL975006	Perform immunohaematological tests	120	E	MSL975030	Perform immunohaematological tests	120
MSL975007	Supervise sampling, inspections and testing at construction sites	70	E	MSL975031	Supervise sampling, inspections and testing at construction sites	70

MSL975012	Provide input to production trials	120	E	MSL975032	Provide input to production trials	120
MSL975013	Perform tissue and cell culture techniques	120	E	MSL975033	Perform tissue and cell culture techniques	120
MSL975014	Perform molecular biology tests and procedures	120	E	MSL975034	Perform molecular biology tests and procedures	120
MSL975001	Perform microbiological tests	120	E	MSL975035	Perform microbiological tests	120
MSL975002	Perform haematological tests	120	E	MSL975036	Perform haematological tests	120
MSL975004	Perform chemical pathology tests	120	E	MSL975037	Perform chemical pathology tests	120
MSL975005	Conduct sensory analysis	60	E	MSL975038	Conduct sensory analysis	60
MSL975008	Apply electrophoretic techniques	120	E	MSL975039	Apply electrophoretic techniques	120
MSL975009	Apply routine chromatographic techniques	120	E	MSL975040	Apply routine chromatographic techniques	120
MSL975010	Perform fire assay techniques	120	E	MSL975041	Perform fire assay techniques	120
MSL975011	Design and supervise complex environmental field surveys	120	E	MSL975042	Design and supervise complex environmental field surveys	120
MSL975015	Prepare animal and plant material for display	120	E	MSL975043	Prepare animal and plant material for display	120
MSL975016	Perform complex tests to measure engineering properties of materials	120	E	MSL975044	Perform complex tests to measure engineering properties of materials	120
MSL975017	Perform laboratory-based ecological techniques	120	E	MSL975045	Perform laboratory-based ecological techniques`	120
MSL975018	Perform complex tests to measure chemical properties of materials	120	E	MSL975046	Perform complex tests to measure chemical properties of materials	120
MSL975019A	Apply complex instrumental techniques	120	E	MSL975047	Apply complex instrumental techniques	120
MSL975019	Apply complex instrumental techniques	120	E	MSL975047	Apply complex instrumental techniques	120
MSL975020	Apply routine spectrometric techniques	120	E	MSL975048	Apply routine spectrometric techniques	120
MSL975021	Apply routine electrometric techniques	120	E	MSL975049	Apply routine electrometric techniques	120
MSL975022	Perform food analyses	120	E	MSL975050	Perform food analyses	120
MSL975023	Supervise geotechnical site investigations	70	E	MSL975051	Supervise geotechnical site investigations	70
MSL975024	Locate, record and collect forensic samples	80	E	MSL975052	Locate, record and collect forensic samples	80
MSL975025	Perform complex laboratory testing of forensic samples	100	E	MSL975053	Perform complex laboratory testing of forensic samples	100
MSL975026	Perform physical examination of forensic samples	90	E	MSL975054	Perform physical examination of forensic samples	90
MSL975027	Classify building sites	60	E	MSL975055	Classify building sites	60
MSL976002	Prepare plans and quality assurance procedures for environmental field activities	60	E	MSL976004	Prepare plans and quality assurance procedures for environmental field activities	60

MSL976003	Evaluate and select appropriate test methods and/or procedures	60	E	MSL976005	Evaluate and select appropriate test methods and/or procedures	60
MSL977003	Contribute to validation of test methods	40	E	MSL977005	Validate test methods	40
MSL977001	Contribute to the development of products and applications	40	E	MSL977006	Contribute to the development of products and applications	40
MSL977002	Troubleshoot equipment and/or production processes	40	E	MSL977007	Troubleshoot equipment and/or production processes	40
MSL977004	Develop or adapt analyses and procedures	40	E	MSL977008	Develop or adapt analyses and procedures	40

Mapping Skill Sets

The following table provides an overview of the skill sets from version 2, which replace skill sets from the existing version of the MSL Laboratory Operations.

MSL Current Skill Set				MSL Replacement Skill Set		
National Code	National Title	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
			New	MSLSS00001	Histotechnology Skill Set	465

Apprenticeships

The following table provides a summary of the qualifications in the MSL Laboratory Operations and the accredited apprenticeship courses they will replace.

Current Qualification			Replacement Qualification				
National Code	National Title	Apprenticeship	Nominal Hours	E / NE	National Code	National Title	Nominal Hours

No changes occurred between versions 1 and 2.

Traineeships

The following table provides a summary of the qualifications in the MSL Laboratory Operations and the accredited traineeship courses they will replace.

Current Qualification					Replacement Qualification		
National Code	National Title	Traineeship	Nominal Hours	E / NE	National Code	National Title	Nominal Hours
MSL20116	Certificate II in Sampling and Measurement	TR06070: SAMPLING AND MEASUREMENT (LEVEL 2)	280	E	MSL20118	Certificate II in Sampling and Measurement	280
MSL30116	Certificate III in Laboratory Skills	TR08150: LABORATORY SKILLS (LEVEL 3)	580	E	MSL30118	Certificate III in Laboratory Skills	580
MSL40116	Certificate IV in Laboratory Techniques	TR08160: LABORATORY TECHNIQUES (LEVEL 4)	850	E	MSL40118	Certificate IV in Laboratory Techniques	900
MSL50116	Diploma in Laboratory Technology	TR08170: LABORATORY TECHNOLOGY (LEVEL 5)	985	E	MSL50118	Diploma in Laboratory Technology	1370
MSL60116	Advanced Diploma in Laboratory Operations	TR07010: SENIOR LABORATORY TECHNICIAN (LEVEL 6)	550	E	MSL60118	Advanced Diploma in Laboratory Operations	550

Pre-apprenticeships

The following table provides a summary of the qualifications in the MSL Laboratory Operations and the accredited pre-apprenticeship courses they will replace.

Current Qualification					Replacement Qualification		
National Code	National Title	Pre-apprenticeship	Nominal Hours	E / NE	National Code	National Title	Nominal Hours

No changes occurred between versions 1 and 2.