



## Course Outline

# MSL40118 Certificate IV in Laboratory Techniques

### Specialisation - Food

<b>Student Name</b>	
<b>Qualification</b>	MSL40118 Certificate IV in Laboratory Techniques
<b>Packaging Rules</b>	The following packaging rules apply for completion of this qualification: Total number of units = 15 <ul style="list-style-type: none"> <li>• 5 core units</li> <li>• 10 elective units</li> </ul>
<b>Entry requirements</b>	To study this qualification with LTT students will need to: <ul style="list-style-type: none"> <li>• Have access to a computer and the Internet and have basic computer skills</li> <li>• Have a good understanding of written and spoken English</li> <li>• Prior to enrolment complete a LLN assessment and Pre-Training Review</li> </ul>
<b>Overview of specialisation</b>	This stream is suitable for laboratory technicians who may be working in a broad range of laboratory industries conducting general testing activities such as: food contents, additives and food containers  They may undertake sample preparation, calibration, solution preparation, routine tests with multiple steps, data processing and interpretation of results
<b>Work placement requirements</b>	This qualification is delivered in the workplace. These students are currently employed on a full time or part time basis. Any changes in the employment status must be reported to LTT. Upon completion of this qualification students may progress in the pathways stated below.
<b>Study Pathways</b>	MSL50118 Diploma of Laboratory Technology MSL60118 Advanced Diploma of Laboratory Operations <i>Note: MSL40118 Certificate IV in Laboratory Techniques or equivalent qualification is a pre-requisite for MSL50118 Diploma of Laboratory Technology.</i> <i>MSL50118 Diploma of Laboratory Technology or an equivalent qualification is a pre-requisite for MSL60118 Advanced Diploma of Laboratory Operations</i>
<b>Employment opportunities</b>	Site and Laboratory workers
<b>Delivery method</b>	<input checked="" type="checkbox"/> Face-to-face workplace delivery <input checked="" type="checkbox"/> On-the-job <input type="checkbox"/> Online <input type="checkbox"/> Correspondence
<b>Duration / Amount of Training</b>	Completion of the full qualification typically takes 12 - 18 months. Training duration may differ where eligible for Credit Transfer (CT) and or RPL (Recognition of Prior Learning). Credit Transfers (CT) for consideration must be indicated on this Course Outline and applied to the initial Training Plan once approved. Where RPL is being applied for a Skills Checklist must be completed and reviewed by an assessor to determine eligibility. Study, training and assessment is comprised of the following components: <ul style="list-style-type: none"> <li>• Face to face workplace delivery</li> <li>• On-the-job activities and workplace observation</li> <li>• Workplace implementation</li> <li>• Self-study and research</li> <li>• Assessment work</li> <li>• On-going follow-up support via email, phone and or virtual conference</li> </ul>
<b>Learning Resources</b>	The following learning resources will be available to ensure students are able to obtain and absorb the required skills and knowledge required prior to assessment: <ul style="list-style-type: none"> <li>• Training Plan</li> <li>• Study Guide for each unit of competency</li> <li>• Contextualised assessments for each unit</li> <li>• Course Outline</li> <li>• Access to company policies and procedures</li> </ul>
<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Knowledge Questions: Comprises of short questions</li> <li>• Practical Tasks: E. g. written questions, creating checklists, written reports, workplace evidence, scenarios, field work and calculations.</li> </ul>



**Course Outline**  
**MSL40118 Certificate IV in Laboratory Techniques**  
 Specialisation - Food

<b>Student Name</b>	
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Code	Title	C/E	CT	Gap
<b>Work Health &amp; Safety and Environment</b>				
MSL944002	Maintain laboratory or field workplace safety	C	<input type="checkbox"/>	<input type="checkbox"/>
MSMENV472	Implement and monitor environmentally sustainable work practices	E	<input type="checkbox"/>	<input type="checkbox"/>
<b>Laboratory Skills</b>				
CHCDIV001	Work with diverse people	E	<input type="checkbox"/>	<input type="checkbox"/>
MSL934007	Maintain and control stocks	E	<input type="checkbox"/>	<input type="checkbox"/>
<b>Sampling</b>				
MSL953003	Receive and prepare samples for testing	C	<input type="checkbox"/>	<input type="checkbox"/>
MSL954004	Obtain representative samples in accordance with sampling plan	E	<input type="checkbox"/>	<input type="checkbox"/>
<b>Data</b>				
MSL924003	Process and interpret data	C	<input type="checkbox"/>	<input type="checkbox"/>
<b>Calibration</b>				
MSL904002	Perform standard calibrations	E	<input type="checkbox"/>	<input type="checkbox"/>
MSL934004	Maintain and calibrate instruments and equipment	C	<input type="checkbox"/>	<input type="checkbox"/>
<b>Testing</b>				
MSL973016	Perform aseptic techniques	E	<input type="checkbox"/>	<input type="checkbox"/>
MSL973019	Perform microscopic examination	E	<input type="checkbox"/>	<input type="checkbox"/>
MSL974021	Perform biological procedures	E	<input type="checkbox"/>	<input type="checkbox"/>
MSL974019	Perform chemical tests and procedures	E	<input type="checkbox"/>	<input type="checkbox"/>
<b>Quality</b>				
MSL934005	Contribute to the ongoing development of HACCP plans	E	<input type="checkbox"/>	<input type="checkbox"/>
MSL934006	Apply quality system and continuous improvement processes	C	<input type="checkbox"/>	<input type="checkbox"/>
<b>Other Units of Competency to consider for Credit Transfer</b>				
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

<b>Student's Declaration</b>	
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I confirm that all assessment tasks and requirements to achieve competencies for this qualification have been explained and understood by me.

For Credit Transfer:

I have provided LTT with appropriate documentation (certification and or Unique Student Identifier (USI) Transcript) to evidence eligibility for Credit Transfer.

I hereby grant LTT permission to view my USI Transcript or contact relevant certifying organisation(s) for the purpose of verifying Credit Transfer documentation.

<b>Student Name</b>	
<b>Signature</b>	
<b>Date</b>	

<b>RTO Judgement and Declaration</b>	
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I declare that I have verified all required certification documentation supplied as legitimate, true and correct.

<b>RTO Signature</b>	
<b>Date</b>	



## Course Outline

# MSL50118 Diploma of Laboratory Technology

## Specialisation – Diploma of Laboratory Technology (Food)

<b>Student Name</b>	
<b>Qualification</b>	MSL50118 Diploma of Laboratory Technology
<b>Packaging Rules</b>	The following packaging rules apply for completion of this qualification: Total number of units = 15 <ul style="list-style-type: none"> <li>• 5 core units</li> <li>• 10 elective units</li> </ul>
<b>Entry requirements</b>	To study this qualification with LTT students will need to: <ul style="list-style-type: none"> <li>• Hold a Certificate IV in Laboratory Techniques or a relevant Certificate IV or higher-level qualification in a relevant science discipline or can demonstrate equivalent skills and knowledge in a relevant science discipline to any of the above qualifications</li> <li>• Have access to a computer and the Internet and have basic computer skills</li> <li>• Have a good understanding of written and spoken English</li> <li>• Prior to enrolment complete a LLN assessment and Pre-Training Review</li> </ul>
<b>Overview of specialisation</b>	This stream is suitable for laboratory technicians who may be working in a broad range of laboratory industries conducting general testing activities such as: food contents, additives and food containers  They may undertake sample preparation, calibration, solution preparation, routine tests with multiple steps, data processing and interpretation of results
<b>Study Pathways</b>	MSL60118 Advanced Diploma of Laboratory Operations <i>NOTE: MSL50118 Diploma of Laboratory Technology or an equivalent qualification is a pre-requisite for MSL60118 Advanced Diploma of Laboratory Operations</i>
<b>Employment opportunities</b>	Site and Laboratory Technician
<b>Delivery method</b>	<input checked="" type="checkbox"/> Face-to-face workplace delivery <input checked="" type="checkbox"/> On-the-job <input type="checkbox"/> Online <input type="checkbox"/> Correspondence
<b>Duration / Amount of Training</b>	Completion of the full qualification typically takes 12-18 months. Training duration may differ where eligible for Credit Transfer (CT) and or RPL (Recognition of Prior Learning). Credit Transfers (CT) for consideration must be indicated on this Course Outline and applied to the initial Training Plan once approved. Where RPL is being applied for a Skills Checklist must be completed and reviewed by an assessor to determine eligibility. Study, training and assessment is comprised of the following components: <ul style="list-style-type: none"> <li>• Face to face workplace delivery</li> <li>• On-the-job activities and workplace observation</li> <li>• Workplace implementation</li> <li>• Self-study and research</li> <li>• Assessment work</li> <li>• On-going follow-up support via email, phone and or virtual conference</li> </ul>
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<b>Assessment methods</b>	<ul style="list-style-type: none"> <li>• Knowledge Questions: Comprises of short questions</li> <li>• Practical Tasks: E. g. written questions, creating checklists, written reports, workplace evidence, scenarios, field work and calculations.</li> </ul>



# Course Outline

## MSL50118 Diploma of Laboratory Technology

### Specialisation – Diploma of Laboratory Technology (Food)

<b>Student Name</b>	
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Code	Title	C/E	CT
<b>Communication/Organisation</b>			
MSL915003	Provide information to customers	E	<input type="checkbox"/>
MSL915004	Schedule laboratory work for a small team	E	<input type="checkbox"/>
<b>Data</b>			
MSL924003	Process and interpret data	C	<input type="checkbox"/>
MSL924004	Use laboratory application software	C	<input type="checkbox"/>
MSL925004*	Analyse data and report results (∞MSL924003)	C	<input type="checkbox"/>
<b>Calibration</b>			
MSL934004	Maintain and calibrate instruments and equipment	C	<input type="checkbox"/>
<b>Testing</b>			
FBPFST4004	Perform microbiological procedures in the food industry	E	<input type="checkbox"/>
MSL974019	Perform chemical tests and procedures	E	<input type="checkbox"/>
MSL974020	Perform food tests	E	<input type="checkbox"/>
MSL975038	Conduct sensory analysis	E	<input type="checkbox"/>
MSL975040*	Apply routine chromatographic techniques (∞MSL974019)	E	<input type="checkbox"/>
MSL975047*	Apply complex instrumental techniques (∞MSL974019)	E	<input type="checkbox"/>
MSL975048*	Apply routine spectrometric techniques (∞MSL974019)	E	<input type="checkbox"/>
MSL975050*	Perform food analyses (∞MSL974020)	E	<input type="checkbox"/>
<b>Quality</b>			
MSL935007*	Monitor the quality of test results and data (∞MSL924003)	C	<input type="checkbox"/>
<b>Other Units of Competency to consider for Credit Transfer</b>			
			<input type="checkbox"/>
			<input type="checkbox"/>

<b>Student's Declaration</b>	
<input type="checkbox"/> I confirm that all assessment tasks and requirements to achieve competencies for this qualification have been explained and understood by me.	
<b>For Credit Transfer:</b>	
<input type="checkbox"/> I have provided LTT with appropriate documentation (certification and or Unique Student Identifier (USI) Transcript) to evidence eligibility for Credit Transfer.	
<input type="checkbox"/> I hereby grant LTT permission to view my USI Transcript or contact relevant certifying organisation(s) for the purpose of verifying Credit Transfer documentation.	

<b>Student Name</b>		
<b>Signature</b>		<b>Date</b>

<b>RTO Judgement and Declaration</b>		
<input type="checkbox"/> I declare that I have verified all required certification documentation supplied as legitimate, true and correct.		
<b>RTO Signature</b>		<b>Date</b>