



ENVIRONMENTAL MONITORING AND LABORATORY TECHNOLOGY **COURSES**



If you want practical skills and knowledge in environmental management and laboratory technology, then choose TAFE International Western Australia to get your career started. Our courses will give you the ability to transfer your knowledge across a diverse range of industries.



"Western Australia has the most amazing plants in the world. This made it much easier to study here. The training course helped me to apply for volunteer jobs and casual jobs while I was studying. Luckily I got a job in a company that builds nature playgrounds for children. This was the philosophy that I was looking for, helping reconnect kids with nature. I think kids are the future of a more sustainable world, which is what we need now.

I think the practical classes and all the lecturers were amazing. They really helped us to see what the market and industry were asking for, which made an easier pathway to find a job."

Rui Scheidt Feix | Brazil

52772WA Certificate IV in Landscape Design

ENVIRONMENTAL MONITORING AND TECHNOLOGY

Central Regional TAFE Geraldton campus



North Metropolitan TAFE East Perth campus



All courses listed require an IELTS score (Academic) 6.0 with no band less than 5.0 or equivalent, unless otherwise stated.

 UniPathways — Start your studies at TAFE then continue to university with a UniPathway.



MSS40222 Certificate IV in Environmental Monitoring and Technology

TAFE ID: BIR2 | CRICOS code: 111989D



Why choose this course?

Turn your passion for the environment into a rewarding career with this qualification. With the global urgency for conservation and need to minimise the environmental impact of business, it's a great time to join this industry.

During this course you will gain the practical skills and knowledge to collect and analyse environmental samples and process environmental data for the purpose of minimising the impact of human activity on the environment. You will have the opportunity to undertake a range of field-based activities including vegetation surveys, geological formation recognition, water and soil sampling and testing and the use of global positioning system (GPS) in environmental monitoring applications.

You will learn how to collect routine site samples, undertake environmental field-based monitoring, work and communicate effectively as an environmental technician, and process and present environmental data. In addition you will implement environmental management plans and procedures.

College	February intake	July intake
Central Regional TAFE Geraldton campus	■	■



Course units

To achieve this qualification, you must demonstrate competency in 16 units comprising:

- » eight core units; and
- » eight electives.



Core units

- » MSL943004 Participate in laboratory or field workplace safety
- » MSL952001 Collect routine site samples
- » MSL974022 Undertake environmental field-based monitoring
- » MSMENV272 Participate in environmentally sustainable work practices
- » MSS024025 Work and communicate effectively as an environmental technician
- » MSS024026 Apply environmental management procedures
- » MSS024027 Participate in environmental field work
- » MSS024028 Process and present environmental data

Central Regional TAFE Geraldton campus

Tuition fee \$12,804 | **Resource fee** \$370 | **Materials fee** \$50
Duration two semesters (12 months)

Electives

- » MSL924004 Use laboratory application software
- » MSL904002 Perform standard calibrations
- » MSS024029 Collect spatial and discrete environmental data
- » MSL974019 Perform chemical tests and procedures
- » MSS024030 Perform sampling and testing of water
- » MSS024032 Document simple geological information for a site
- » MSS025024 Produce site maps
- » MSS025033 Provide environmental information to customers

Learning resources, facilities and equipment

Learning resources may include access to a fully equipped wet and analytical laboratory, computers, staff driven vehicles, handouts, PowerPoint presentations, learning games, safety meeting minutes and historical data sheets.

Facilities and equipment may include access to field and laboratory record forms and coats, safety glasses, gloves and sampling equipment.



Work placement information

There is no work placement requirement for this course.



Career opportunities

- » Environmental assistant
- » Environmental technician
- » Water resources officer

MSS50222 Diploma of Environmental Monitoring and Technology

TAFE ID: BIRO | CRICOS code: 111991K



Why choose this course?

Advance your career in the management of environmental issues with this qualification. Environmental management is a global concern as we search for ways to maximise conservation and minimise the environmental impacts of business. It is a growing industry linked to our resources sector and increasing issues with the degradation of ecosystems.

This course covers the skills and knowledge you need to apply a range of methods and technologies to conduct environmental sampling, testing and monitoring. These skills are used in most industry sectors and to assist environmental scientists, engineers and planners with site assessment, minimising environmental impacts of processes and remediation/rehabilitation of sites. Gain practical experience to report and present environmental data, and assess environmental risks. In addition, you will learn how to implement environmental management plans and sustainable work practices. This course covers a range of learning methods including field trip activities, laboratory work, teamwork and online learning.

Colleges	February intake	July intake
North Metropolitan TAFE East Perth campus	■	
Central Regional TAFE Geraldton campus	■	■



Course units

To achieve this qualification, you must demonstrate competency in 20 units comprising:

- » 11 core units; and
- » nine electives.



Core units

- » MSL943004 Participate in laboratory or field workplace safety
- » MSL952001 Collect routine site samples
- » MSL974022 Undertake environmental field-based monitoring
- » MSMENV472 Implement and monitor environmentally sustainable work practices
- » MSS024026 Apply environmental management procedures
- » MSS024027 Participate in environmental field work
- » MSS024028 Process and present environmental data
- » MSS025030 Assist with assessing site environmental indicators
- » MSS025031 Assess the environmental risk and impact of a project activity or process
- » MSS025032 Report environmental data
- » MSS025033 Provide environmental information to customers

North Metropolitan TAFE East Perth campus

Tuition fee \$12,804 | **Resource fee** \$550 | **Materials fee** \$300
Duration two semesters (12 months)

Electives

- » AHCECR502 Conduct biological surveys
- » AHCPM510 Collect and classify plants
- » MSS024029 Collect spatial and discrete environmental data

- » MSS024032 Document simple geological information for a site
- » MSS025024 Produce site maps
- » MSS025029 Perform sampling and testing for site contamination
- » MSS025034 Collect and evaluate groundwater data
- » MSS025035 Perform sampling and testing of soils
- » MSS025036 Plan and conduct environmental project work

Learning resources, facilities and equipment

Learning resources may include access to a specifically designed environmental bulletin that contains updated global, federal and state standards and guidelines for sampling and assessments, plus links and several electronic books, apps and links to websites.

Facilities and equipment may include access to computer laboratories, specialised equipment such as basic chemical glassware and instrumentation, ecology sampling tools including GPS receivers, radios and monitoring instrumentation, soil sampling and monitoring equipment, access to mapping software, and sampling equipment for bore water, air and dust.

Central Regional TAFE Geraldton campus

Tuition fee \$12,804 | **Resource fee** \$270 | **Materials fee** \$50
Duration two semesters (12 months)

Electives

- » MSL974019 Perform chemical tests and procedures
- » MSL974021 Perform biological procedures
- » MSL975042 Design and supervise complex environmental field surveys
- » MSS024025 Work and communicate effectively as an environmental technician
- » MSS024029 Collect spatial and discrete environmental data
- » MSS025024 Produce site maps
- » MSS025028 Assist with assessing and monitoring wetlands
- » MSS025034 Collect and evaluate groundwater data
- » MSS025036 Plan and conduct environmental project work

Learning resources, facilities and equipment

Learning resources may include access to a fully equipped wet and analytical laboratory, computers, staff driven vehicles, handouts, PowerPoint presentations, learning games, safety meeting minutes and historical data sheets.

Facilities and equipment may include access to field and laboratory record form and coats, safety glasses, gloves, and sampling equipment.



Work placement information

There is no work placement requirement for this course.



Career opportunities

- » Environmental officer
- » Environmental technician
- » Natural resource management officer



UniPathway

Options available at tafeinternational.wa.edu.au/unipathwayfinder

LABORATORY TECHNOLOGY



All courses listed require an IELTS score (Academic) 6.0 with no band less than 5.0 or equivalent, unless otherwise stated.

UniPathways — Start your studies at TAFE then continue to university with a UniPathway.

MSL30122 Certificate III in Laboratory Skills

TAFE ID: BIX7 | CRICOS code: 112031F

Why choose this course?

Turn your love of science into a career in laboratory technology with this qualification.

Learn the essential laboratory skills required to carry out recording and measurement of results and assist in the collection and preparation of samples.

During your studies you will learn skills to maintain a laboratory, conduct routine sampling and testing, prepare cultures, perform sterile techniques, record data, and use laboratory computing programs. You will learn about occupational health and safety (OHS) and assist with field work.

College	February intake	July intake
North Metropolitan TAFE East Perth campus		
South Metropolitan TAFE Murdoch campus		

Course units

To achieve this qualification, you must demonstrate competency in 13 units comprising:

- » five core units; and
- » eight electives.

Core units

- » BSBM211 Apply communication skills
- » MSL913004 Plan and conduct laboratory/field work
- » MSL922002 Record and present data
- » MSL933009 Contribute to the achievement of quality objectives
- » MSL943004 Participate in laboratory or field workplace safety

North Metropolitan TAFE East Perth campus

Tuition fee \$6,402 | **Resource fee** \$500 | **Materials fee** \$225
Duration one semester (six months)

Electives

- » MSL914002 Prepare practical science classes and demonstrations
- » MSL953005 Receive and prepare samples for testing
- » MSL954005 Prepare mineral samples for analysis
- » MSL973022 Conduct laboratory-based acceptance tests for construction materials
- » MSL973028 Perform microscopic examination
- » MSL973025 Perform basic tests
- » MSL973026 Prepare working solutions
- » MSL973027 Perform techniques that prevent cross-contamination

Learning resources, facilities and equipment

Learning resources may include access to the Blackboard Learning Management System (LMS), training manuals, learner guides, handouts, PowerPoint presentations, simulations, quizzes and additional notes.

Facilities and equipment may include access to computer laboratories, fully equipped laboratories with specialised equipment such as analytical balances, autoclaves, auto-pipettes, biohazard cabinets, bunsen burners, microscopes, digital cameras, test kits, sampling equipment and thermometers.

South Metropolitan TAFE Murdoch campus

Tuition fee \$6,402 | **Resource fee** \$625 | **Materials fee** \$0

Duration one semester (six months)

Electives

- » ICTICT214 Operate application software packages
- » MSL952003 Collect routine site samples
- » MSL953005 Receive and prepare samples for testing
- » MSL973015 Prepare culture media
- » MSL973025 Perform basic tests
- » MSL973027 Perform techniques that prevent cross-contamination
- » MSL973028 Perform microscopic examination
- » TAEDEL311 Provide work skill instruction

Learning resources, facilities and equipment

Learning resources may include access to the Blackboard Learning Management System (LMS), workbooks, handouts and PowerPoint presentations.

Facilities and equipment may include access to simulated laboratories, tool, equipment, instrumentation suitable for industry practices, computer laboratories, personal protective equipment (PPE) and other safety equipment, cleaning agents and all instruments and equipment required for performing basic tests, microscopic and aseptic techniques.



Work placement information

There is no work placement requirement for this course, however this course is mostly delivered in a simulated laboratory setting with organised field trips to sampling sites and workplaces.



Career opportunities

- » Laboratory technician
- » Instrument operator
- » Sampler and tester
- » Laboratory assistant
- » Field assistant

MSL40122 Certificate IV in Laboratory Techniques

TAFE ID: BIX6 | CRICOS code: 112037M



Why choose this course?

Broaden your laboratory skills with this qualification. This course will provide you with the skills and knowledge you need to work as a technical assistant, technician or instrument operator. You will learn about quality control, performance of instrumental and non-instrumental tests, standardisation and the use of solutions.

This course will teach you how to carry out experiments, take measurements, use scientific equipment, record results and present them for critical analysis. You will also learn about occupational health and safety (OHS) and safe laboratory practices both in the field and in the laboratory.

College	February intake	July intake
North Metropolitan TAFE East Perth campus	■	■
South Metropolitan TAFE Murdoch campus	■	■



Course units

To achieve this qualification, students must demonstrate competency in 16 units comprising:

- » four core units; and
- » 12 electives.



Core units

- » 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

North Metropolitan TAFE East Perth campus

Tuition fee two semesters (12 months) \$12,804 | one semester (six months) \$6,402 | **Resource fee** \$750 | **Materials fee** \$226

Duration

Option A — one semester (six months) *Completion of the MSL30122 Certificate III in Laboratory Skills is required.

Option B — two semesters (12 months) *Minimum of Year 11 school completion is required.

Electives

- » MSL913004 Plan and conduct laboratory/field work
- » MSL953005 Receive and prepare samples for testing
- » MSL954005 Prepare mineral samples for analysis
- » 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
- » MSL974031 Prepare, standardise and use solutions
- » MSL974032 Perform chemical tests and procedures
- » MSL974034 Perform biological procedures

Learning resources, facilities and equipment

Learning resources may include access to the Blackboard Learning Management System (LMS), access to training manuals and learner guides, quizzes and PowerPoint presentations, handouts, simulations, and additional notes.

Facilities and equipment may include access to computer laboratories, specialised equipment such as analytical balances, autoclaves, auto-pipettes, biohazard cabinets, bunsen burners, microscopes, digital cameras, test kits, sampling equipment and thermometers.

South Metropolitan TAFE Murdoch campus

Tuition fee \$12,804 | **Resource fee** \$1,250 | **Materials fee** \$0
Duration two semesters (12 months)

Electives

- » MSL904003 Perform standard calibrations
- » MSL914002 Prepare practical science classes and demonstrations
- » MSL924006 Use laboratory application software
- » MSL954007 Obtain representative samples in accordance with sampling plan
- » MSL973026 Prepare working solutions
- » MSL973027 Perform techniques that prevent cross-contamination
- » MSL973028 Perform microscopic examination
- » MSL974031 Prepare, standardise and use solutions
- » MSL974032 Perform chemical tests and procedures
- » MSL974033 Perform food tests
- » MSL974036 Process body fluid specimens using a point of care testing device
- » MSMENV472 Implement and monitor environmentally sustainable work practices

Learning resources, facilities and equipment

Learning resources may include access to the Blackboard Learning Management System (LMS), workbooks, handouts and PowerPoint presentations.

Facilities and equipment may include access to simulated laboratories, tool, equipment, instrumentation suitable for industry practices, computer laboratories, personal protective equipment (PPE) and other safety equipment, cleaning agents and all instruments and equipment required for performing basic tests, microscopic and aseptic techniques.



Work placement information

There is no work placement requirement for this course, however this course is mostly delivered in a simulated laboratory setting with organised field trips to sampling sites and workplaces.



Career opportunities

- » Laboratory technician
- » Instrument operator
- » Sampler and tester
- » Laboratory assistant
- » Field assistant

MSL50122 Diploma of Laboratory Technology

TAFE ID: BIX5 | CRICOS code: 112042C



Why choose this course?

Take your science skills to the next level with this qualification. If you want to work in laboratories in a range of exciting fields, this course provides you with the practical skills and knowledge you need to use laboratory application software, plan and conduct laboratory/field work, and communicate findings and provide information to customers.

This course teaches how to analyse, process and interpret data, report results and apply quality system and continuous improvement processes. You will be able to transfer your skills across a diverse range of industries such as chemical, medical and pathological, mining, biological and environmental fields.

College	February intake	July intake
North Metropolitan TAFE East Perth campus	■	■
South Metropolitan TAFE Murdoch campus	■	■



Course units

To achieve this qualification, you must demonstrate competency in 18 units comprising:

- » five core units; and
- » 13 electives.



Core units

- » MSL924005 Process and interpret data
- » MSL924006 Use laboratory application software
- » MSL934008 Maintain instruments and equipment
- » MSL934009 Apply quality system and continuous improvement processes
- » MSL935008 Monitor the quality of test results and data

North Metropolitan TAFE East Perth campus

Tuition fee \$12,804 | **Resource fee** \$1,100 | **Materials fee** \$200
Duration two semesters (12 months)

Electives

- » MSL944002 Maintain laboratory or field workplace safety
- » MSL954005 Prepare mineral samples for analysis
- » MSL973027 Perform techniques that prevent cross-contamination
- » MSL973028 Perform microscopic examination
- » MSL974016 Perform physical and mechanical tests
- » MSL974031 Prepare, standardise and use solutions
- » MSL974032 Perform chemical tests and procedures
- » MSL974034 Perform biological procedures
- » MSL975062 Perform microbiological tests
- » MSL975063 Perform haematological tests
- » MSL975066 Apply routine chromatographic techniques
- » MSL975067 Perform complex tests to measure chemical properties of materials
- » MSL975069 Apply routine spectrometric techniques

Learning resources, facilities and equipment

Learning resources may include access to the Blackboard Learning Management System (LMS), training manuals, PowerPoint presentations, quizzes, handouts, simulations, and additional notes.

Facilities and equipment may include access to computer laboratories, specialised software, fully equipped and instrumentation and specialised equipment such as analytical balances, autoclaves, auto-pipettes, biohazard cabinets, bunsen burners, microscopes, digital cameras, test kits, sampling equipment and thermometers.

South Metropolitan TAFE Murdoch campus

Tuition fee \$12,804 | **Resource fee** \$1,300 | **Materials fee** \$0
Duration two semesters (12 months)

Electives

- » MSL925006 Analyse data and report results
- » MSL973027 Perform techniques that prevent cross-contamination
- » MSL973028 Perform microscopic examination
- » MSL974032 Perform chemical tests and procedures
- » MSL974033 Perform food tests
- » MSL974034 Perform biological procedures
- » MSL975032 Provide input to production trials
- » MSL975062 Perform microbiological tests
- » MSL975063 Perform haematological tests
- » MSL975066 Apply routine chromatographic techniques
- » MSL975069 Apply routine spectrometric techniques
- » MSL975071 Perform food analyses
- » MSL975073 Perform laboratory-based ecological techniques

Learning resources, facilities and equipment

Learning resources may include access to the Blackboard Learning Management System (LMS), workbooks, handouts and PowerPoint presentations.

Facilities and equipment may include access to simulated laboratories, tools, equipment, instrumentation suitable for industry practices, computer laboratories, personal protective equipment (PPE) and other safety equipment, cleaning agents and all instruments and equipment required for performing basic tests, microscopic and aseptic techniques.



Work placement information

There is no work placement requirement for this course, however this course is mostly delivered in a simulated laboratory setting with organised field trips to sampling sites and workplaces.



Career opportunities

- » Laboratory assistant
- » Laboratory supervisor
- » Laboratory technician
- » Instrument operator




UniPathway

Options available at tafeinternational.wa.edu.au/unipathwayfinder

Fee information

There are three types of fees required.

- » **Tuition** – International student tuition fees are set on a commercial basis and are paid as a whole of course fee.
- » **Resource** – These are mandatory fees paid to your TAFE college each semester. These fees are a fixed payment determined by each unit of enrolment. Resources fees are charged for items you will use during your course, for example if you are studying a hospitality course it will be the food that you use; or an art and design course may include paint.
- » **Materials** – These fees are for materials you will keep for use during and after your studies, for example personal protective equipment, text books, uniforms etc.

Tuition fees are current at the time of printing and reviewed annually. Resource and materials fees may apply and these vary between campus locations. For more information about fees please visit tafeinternational.wa.edu.au/fees 

Work placement hours

Work placement hours are subject to change and may vary between campus locations.

TAFE International Western Australia (TIWA) is the registered training organisation (RTO) and Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS) provider for the delivery of training to international students enrolled in TAFE courses in Western Australia. These nationally recognised courses are delivered by Western Australian TAFE colleges on TIWA's behalf. TIWA retains responsibility for the quality of the training and assessment delivered by the TAFE colleges and for the issue of certification documentation to students.

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