Master of Laboratory Medicine

Qualify for a career in diagnostic pathology and medical research. This program suits graduates from general science or biomedical science degrees with a biological science focus.

It will allow you to specialise in two clinical pathology discipline streams from the following options:

- Clinical biochemistry
- Haematology
- Histopathology
- Medical microbiology
- Transfusion and transplantation science.

On completion, you’ll have high-level skills in analysis and knowledge integration relevant to your area of specialisation.

Learning and teaching

RMIT offers a variety of learning and teaching approaches including lectures.

Ongoing assessment throughout the program includes examinations, essays, laboratory reports, oral classes, presentations, group projects, research projects, laboratory projects and practical assignments.

Industry connections

During the final semester of study, eligible students may undertake one semester of supervised practice in either a medical research laboratory or a diagnostic pathology laboratory.

Career outlook

Graduates are employed as medical scientists in the field of diagnostic pathology, academia or in medical research.

Medical scientists work in hospital laboratories, private pathology laboratories, state health laboratories and universities. In larger hospitals and private laboratories, medical scientists usually specialise in one of the professional disciplines.

The ageing of the Australian population is expected to drive strong demand for pathology services and medical scientists. It’s projected that between 2013 and 2018, employment of medical scientists will increase 13.7% above the projected increase across all occupations (7.2%). There is also a shortage of medical scientists in a number of countries worldwide.

Professional recognition

The Master of Laboratory Medicine is accredited by the Institute of Biomedical Science, UK (IBMS) and graduates are entitled to membership of IBMS. Graduates may also be eligible for professional membership of the Australian Institute of Medical Scientists (AIMS) if they meet AIMS accreditation requirements. These professional bodies represent biomedical pathology scientists in Australia and in the UK.

The School of Health and Biomedical Sciences has extensive links with industry through program advisory committees (PACs) and through research projects and consulting.

Employers and industry professionals are members of these program advisory committees, and have contributed to both the initial development and ongoing improvement of this program. Their involvement ensures that the program remains relevant to your needs as a graduate and to the needs of employers.

Many of the teaching staff within the program are (or have been) practising industry professionals with extensive industry experience and contact networks. This experience, when integrated into learning and teaching practice, enriches your learning environment.

Program structure

The Master of Laboratory Medicine consists of 192 credit points.

After completing 96 credit points of study approved by the program manager, you may exit with a graduate diploma.

The main intake for this program is Semester 2 (July).

Semester 2 commencement

Applicants without an undergraduate degree in laboratory medicine are advised to apply for Semester 2 (July).

If you study the program full-time, in your first semester you’ll complete four core courses. During second semester you’ll choose any two 24-credit point advanced courses. (Please note, only students with a strong medical microbiology background can select microbiology.)

In third semester you’ll complete the Advanced Laboratory Medicine course, which includes a laboratory-based project and a core course in biostatistics, plus an additional 12-credit point foundation course.
Program structure (continued)

For your final semester, you can choose between undertaking a professional practice placement or a research project (depending on availability).

**Semester 1 commencement**

Students with an undergraduate degree in laboratory medicine may apply to commence in Semester 1 (February/March).

Students with an undergraduate degree in science or biomedical science who have a strong background with third-year specialisation in biochemistry or microbiology may apply to commence in Semester 1.

If you study the program full-time and have a strong biochemistry background, in your first semester you’ll complete courses in advanced clinical biochemistry, histology and immunology.

During second semester you’ll undertake the Advanced Laboratory Medicine course, which includes a laboratory-based project and studies in haematology and transfusion science and diagnostic microbiology.

In your third semester, depending on availability, you can choose between studies in advanced haematology or advanced transfusion and transplantation science or microbiology. You’ll also complete a course in biostatistics and a course in molecular genetics and diagnostics.

For your final semester, you can choose between undertaking a professional practice placement or a research project.

**Courses**

All courses listed may not be available each semester.

**Year 1**

Complete one course from:

- Advanced Clinical Biochemistry
- Advanced Cytopathology
- Advanced Haematology
- Advanced Histopathology
- Advanced Transfusion and Transplantation Science
- Bacterial Infections

Or complete the following two courses:

- Parasites
- Viruses and Infections

And complete four courses from:

- Histology
- Microbiology
- Clinical Biochemistry 1
- Diagnostic Microbiology
- Clinical Immunology
- Histopathology and Cytopathology 1
- Haematology and Transfusion Science 1
- Point of Care Patient Testing
- Advanced Medical Informatics and Laboratory Management
- Molecular Genetics and Diagnostics
- Gene Technologies 1
- Integrative Pathology
- Medical Laboratory Quality Systems and Accreditation
- Medical Microbiology 1

And complete the following course:

- Advanced Laboratory Medicine

**Year 2**

Complete one course (not previously completed) from:

- Advanced Clinical Biochemistry
- Advanced Cytopathology
- Advanced Haematology
- Advanced Histopathology
- Advanced Transfusion and Transplantation Science
- Bacterial Infections

Or complete the following two courses:

- Parasites
- Viruses and Infections

And complete one course (not previously completed) from:

- Histology
- Microbiology
- Clinical Biochemistry 1
- Diagnostic Microbiology
- Clinical Immunology
- Histopathology and Cytopathology 1
- Haematology and Transfusion Science 1
- Point of Care Patient Testing
- Advanced Medical Informatics and Laboratory Management
- Molecular Genetics and Diagnostics
- Gene Technologies 1
- Systemic Pathology
- Medical Laboratory Quality Systems and Accreditation
- Medical Microbiology 1

And complete the following course:

- Biostatistics

And one of the following courses:

- Research Project
- Professional Practice in Laboratory Medicine

**How to apply**

Direct to RMIT University: rmit.edu.au/programs/apply/direct

**Application dates Semester 1, 2017**

- Applications open 14 August 2016
- Timely applications close 10 November 2016

**Application dates Semester 2, 2017**

- Applications open 1 May 2017
- Applications close 31 May 2017

Late applications will continue to be accepted after this date if places are still available.

**Entry requirements**

An Australian bachelor’s degree in a cognate discipline (laboratory medicine, biomedical or biological sciences or medicine) with a minimum Grade Point Average of 2.0 out of 4.0

OR

An Australian bachelor’s degree in a cognate discipline with at least five years of relevant work experience in diagnostic pathology.

**Fees**

**2017 indicative fees**

Commonwealth supported places (CSP) range from AU$6,349 to AU$10,596.

Full-fee: AU$28,800 per annum

How much you’ll pay will depend on whether you’re offered a Commonwealth supported place or a full-fee place.

Entry for this program is primarily through Commonwealth supported places. Government financial assistance is available to eligible students regardless of the type of place you enrol in.

Fees shown above apply to 2017 only and are based on an annual full-time study load of 96 credit points unless otherwise noted.

A proportionate fee applies for more or less than the full-time study load. Tuition fees are adjusted on an annual basis and these fees should only be used as a guide.

For more information and to learn how to calculate your exact tuition fees see: rmit.edu.au/programs/fees/postgraduate