Bachelor of Medical Laboratory Science

Medical laboratory scientists perform tests on human and veterinary specimens including blood, bodily fluids, stool, urine, tissue biopsies and more. They are skilled in interpreting and analysing these specimens to identify blood diseases, viruses and parasites, immunity disorders, evidence of toxins and poisons, genetic mutations, plus much more. The results of these tests are then used by health professionals to diagnose 100 per cent of cancers as well as contribute to 70 per cent of all clinical decisions including choice of treatment.

Why choose this course?
This degree was the first of its kind in Queensland and is taught by registered industry professionals with established careers working in pathology laboratories.

Our graduates are successful in securing positions nationally and overseas. Your studies will incorporate all areas of clinical pathology including haematology, transfusion science, cytology, biochemistry, microbiology, histology, molecular pathology and immunology, providing you with increased career opportunities.

Real-world learning
During this course, you will complete a 12-week professional placement where you will work alongside practising medical scientists and clinical researchers in accredited pathology labs and research facilities. You will be encouraged to identify graduate opportunities and choose an elective in an area that complements your career aspirations—in pharmacology, business studies, Indigenous and public health, or research techniques and methods, for example.

Hands-on experiences in the Q Block laboratories at Gardens Point begin during first semester of first year, and are embedded throughout the course. We are recognised for delivering graduates who are confident with advanced techniques and able to conduct experiments to a professional standard.

Subject prerequisites
- Chemistry
- Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in

Sara Oliver
Internationally recognised degrees

‘I’m employed as a urinalysis product specialist working in the UK, Ireland and Norway. It’s fantastic that my QUT degree was recognised globally and the range of subjects prepared me extremely well for laboratory-based work.’
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recognised post-secondary studies.

Minimum English requirements
Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)

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Course structure

Your course

Year 1
The course commences by developing a sound knowledge and understanding of fundamental concepts that underpin medical laboratory science: cellular and molecular bioscience, anatomy, physiology, mathematics, statistics, biophysics and chemistry. You will also be introduced to the local, national and global profession of medical laboratory science, and the Australian Health Care System in the first of your professionally orientated units in the course.

Year 2
In your second year, you will explore more specialised concepts in pathology, biochemistry, microbiology, immunology, cytogenetic and molecular pathology, histopathological techniques, quantitative medical science, and quality assurance systems. In your practical classes, you will learn some of the latest techniques used in the clinical diagnostic pathology industry, giving you the opportunity to develop your skills to professional standards.

Year 3
The third year of the program allows you to further develop and refine your knowledge, understanding and practical skills to a more advanced level, and learn how they are applied in the clinical disciplines of molecular diagnostics, microbiology, chemical pathology, diagnostic endocrinology, histopathology, cytopathology, haematology and transfusion and transplantation science.

Year 4
In your first semester, you will undertake a semester-long work integrated learning internship in a recognised laboratory. During that time you will also complete studies in health informatics and learn how this relates to day-to-day laboratory operations. In your final semester, you will complete an elective of your choice designed to complement your learning, e.g. pharmacology, marketing, management or research techniques. You will also prepare professional plans and identify graduate opportunities, as well as further your clinical discipline specific learning in the context of intercultural health and contemporary issues in medical science.

Course progressions are subject to University approval.

Careers and outcomes
Medical laboratory scientists work in the pathology industry, generally in hospitals or in public or private laboratories. Graduates are also employed in allied health (e.g. assisted fertility clinics) and public health laboratories. Graduates of this course may choose a role in a multidisciplinary setting or can specialise in an area of particular interest, or complete postgraduate studies for a career in research.

Professional recognition
This course is accredited by the Australian Institute of Medical Scientists and graduates will have completed the academic and work placement requirements for admission as a full member.

Depending on your employment, you will be eligible to apply for membership of various professional organisations including the Australasian Association of Clinical Biochemists, Australian Society of Microbiology, Australian Society of Cytology, Human Genetics Society of Australasia, Haematology Society of Australia and New Zealand, Australian and New Zealand Society of Blood Transfusion, and Australian Society of Thrombosis and Haemostasis.

Additional fees

Additional Costs
There are requirements that you will need to meet as a student in this course. Some of these requirements have associated costs. Information is available from the Additional course requirements and costs website.

Scholarships
You can apply for scholarships to help you with study and living costs.

- QUT Excellence Scholarship
- Equity scholarships scheme
- QUT Sport Scholarship (Elite Athlete)