Bachelor of Biomedical Science

In this flexible program, you’ll develop a broad understanding of human anatomy, physiology and pathology from cellular to systems level.

Biomedical science forms the basis of our understanding of how the human body functions. This includes the responses of the body to various diseases, exercise, diet, internal disturbances and environmental influences.

This program allows you to select specialist electives in your final year in topics such as cell biology, biochemistry, molecular biology, physiology, anatomy, pathology and microbiology.

If you are interested in fields such as genetic engineering, cancer, the role of cells across body systems, neuroscience, DNA profiling or the use of stem cells, a career in biomedical science research could be perfect for you.

This program is an ideal preparation for graduate entry for study in the health sciences such as medicine, physiotherapy and dentistry, allowing you to meet all necessary prerequisites.

Industry connections
During third year you’ll gain experience in a university research laboratory or a professional organisation. With associated coursework, this runs for 120 hours. You’ll work in research and analytical laboratories in universities, hospitals and industry.

Professional recognition
Depending on courses chosen in your final year and meeting specific criteria, you will be eligible for membership to the following societies:
- Ausbiotech
- Australasian Society for Human Biology (ASHB)
- Australian and New Zealand Society for Cell and Developmental Biology (ANZSCDB)
- Australian Physiological Society (AuPS)
- Australian Society for Medical Research (ASMR)
- Australian Society of Biochemistry and Molecular Biology (ASBMB)
- Genetics Society of Australia (GSA)
- Human Genetics Society of Australasia (HGSA)
- Mutagenesis and Experimental Pathology Society of Australia (MEPSA).

International opportunities
There are opportunities within the program for study abroad or to obtain international experience.

Career outlook
RMIT’s biomedical science program produces highly skilled graduates with advanced theoretical and practical knowledge in selected areas of biochemical, biological, paramedical and related health sciences.

Graduates can work in:
- medical and pharmaceutical research
- public and private diagnostic centres
- therapeutic research laboratories
- applied health areas such as health promotion and administration.

You can also go on to postgraduate studies in biomedical science in universities and research institutes.

Pathways
Graduates of the RMIT Associate Degree in Applied Science biomedical stream who achieve a grade point average (GPA) of at least 2.0 out of 4.0 are guaranteed entry with credit of one year (equivalent to 120 credit points).

Graduates with a GPA of less than 2.0 can still apply and may be eligible for credit if successful in gaining a place.

Graduates of the following programs who achieve a GPA of at least 2.0 out of 4.0 may receive up to one year of credit:
- Diploma of Laboratory Technology (Biotechnology)
- Diploma of Laboratory Technology (Pathology Testing).
Program structure

You’ll be able to choose electives to suit your interests. All areas provide a strong foundation for progression into research and other health-related careers.

Year 1
You’ll cover chemistry, human biology, cell biology, genetics, microbiology, immunology and statistics.

Year 2
You’ll study biochemistry, human physiology, cell biology and anatomy. Depending on your area of specialisation, you may choose electives in microbiology or histology.

Year 3
You have a choice of studying molecular biology, biochemistry, cell biology, anatomy, advanced physiology, pathology or microbiology. You’ll also undertake a short research project or work experience placement.

Program elective examples
- Advanced Bioinformatics
- Biomolecules and Cellular Regulation
- Cardiovascular Biology
- Gene Technologies
- General Pathology
- Head and Visceral Anatomy
- Histopathology
- Microbiology
- Neuroscience

Entrance requirements
Successful completion of an Australian Year 12 senior secondary certificate of education or equivalent.

Prerequisites
Current Year 12 prerequisites units 3 and 4 – a study score of at least 20 in Chemistry and in one of Mathematics (any) or Physics; and a study score of at least 25 in any English (except EAL) or at least 30 in English (EAL).

Additional information
Non-Year 12 applicants may submit additional information if they would like it to be considered. For semester 1 intake, this can be completed through the VTAC Personal Statement online. For semester 2 intake, this can be completed through the personal statement in the Apply Direct application.