

## Gain high-level skills in bioinformatics, gene and protein technologies, systems biology, and in various microbiology and food science disciplines.

Theoretical elements of the program are complemented by a large component of hands-on laboratory practicals.

This program includes an option to complete one semester of work experience or a research project that will include a minor thesis.

All students will have the opportunity to analyse real-world data when they undertake a bioinformatics research project.

### Career outlook

As a graduate of this program, you will be able to move into advanced areas of the biotechnology industry. You will be equipped with skills in gene and protein technologies, bioinformatics, and in various microbiology and food science disciplines. Alternate options include careers in medical or pharmaceutical, environmental or microbiology industries depending on the courses you select.

### Industry connections

RMIT University is committed to providing you with an education that strongly links formal learning with professional or vocational practice.

High-achieving students may undertake work-integrated learning (WIL), which is incorporated through an industry-based research project and optional work experience.

Projects and work experience can be undertaken at companies including the Murdoch Children's Research Institute, CSIRO or Burnet Institute, to name a few.

All specialisations within this program are validated and advised by an industry panel comprising practising professionals who meet regularly to review the contents of each discipline.

### Learning and teaching

The program is delivered full-time, in face-to-face mode, supported by various blended learning activities (including online).

You will experience a wide range of learning environments – lectures, tutorials, online delivery and individual and group work. Of particular importance is the high proportion of time undertaking project and field work. This will provide context for your learning process, offering a chance to gain practical experience, and to develop both teamwork and time management skills.

### Professional recognition

As a graduate, you may be eligible for membership with one or more of the following professional societies, depending on which courses you've studied:

- Australian Society for Microbiology
- Australian Society for Biochemistry and Molecular Biology
- American Society for Microbiology
- British Mycological Society
- Australian Institute of Biology
- International Society for Human and Animal Mycology
- Society of Environmental Toxicology and Chemistry
- Zoological Society of London
- Australasian Society for Ecotoxicology
- Australian Society for Limnology.

### Program snapshot

Program code: MC111

### Exit points

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

### Duration

Full-time: 2 years  
Part-time: 4 years

### Location

City and Bundoora campuses

### Program Manager

Dr Nitin Mantri  
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Email: [nitin.mantri@rmit.edu.au](mailto:nitin.mantri@rmit.edu.au)

### How to apply

Direct to RMIT University:  
[rmit.edu.au/programs/apply/direct](http://rmit.edu.au/programs/apply/direct)

### Fees

To learn how to calculate your fees visit:  
[rmit.edu.au/programs/fees/postgraduate](http://rmit.edu.au/programs/fees/postgraduate)

[rmit.edu.au/programs/mc111](http://rmit.edu.au/programs/mc111)

## Program structure

The Master of Biotechnology consists of 192 credit points.

This program emphasises the practical application of new knowledge and technologies, and includes an optional semester of work experience or a research project in your second year.

The first year of the program focuses on the development of core skills and knowledge.

The second year allows you to specialise. You can choose to complete a research project or work experience practicum. You also have the option to complete a minor by selecting 3 electives from either Food Technology, Science or Clinical Microbiology.

### Food Technology elective examples

- Dairy Science and Technology
- Food Chemistry
- Food Microbiology
- Food Quality Assurance
- Food Safety Plans
- Industrial Microbiology
- Rheology and Food Biophysics
- Sensory Evaluation of Food.

### Science elective examples

- Bacterial infections
- Environmental Biotechnology
- Ecotoxicology
- Immunology
- Practical Data Science.

### Clinical Microbiology elective examples

- Applied Biochemical Methods
- Bacterial Infections
- Clinical Biochemistry 1
- Industrial Microbiology
- Medical Microbiology 1
- Medical Microbiology 2
- Molecular Genetics and Diagnostics
- Parasites
- Viruses and Infections.

<b>Year 1</b>	Bioinformatics	Systems Biology	Gene Technologies 1	Functional Genomics and Proteomics
	Protein Technologies	Microbiology	Biostatistics	Biotechnology and Business
<b>Year 2</b>	Research Methods	Minor elective	Minor elective	Minor elective
	Work Experience Practicum			

Compulsory courses
  Minor electives
  Science electives

*Please note: This is an example of the program structure. Courses may change and may not be available each semester.*

## Credit and exemptions

You may be eligible for credit for previous study in a qualification at AQF Level 8 or above, from other institutions or overseas. These include a graduate certificate, graduate diploma, or bachelor honours degree.

Students who have undertaken a bachelor degree in biotechnology may be given up to 48 credit point exemptions. Please contact the program manager for advice.

## Entry requirements

- An Australian bachelor degree with a grade point average (GPA) of at least 2.0 out of 4.0 in biological sciences, food science/technology, biotechnology, medicine, veterinary science, dentistry, agricultural science or chemical engineering, or equivalent.

This information is designed for Australian and New Zealand citizens and permanent residents of Australia.

Disclaimer: Every effort has been made to ensure the information contained in this publication is accurate and current at the date of printing. For the most up-to-date information, please refer to the RMIT University website before lodging your application. Visit [www.rmit.edu.au](http://www.rmit.edu.au). RMIT University CRICOS Provider Code: 00122A. RMIT Registered Training Organisation code: 3046. (14672 0817) Revised October 2018.