



# BIOTECHNOLOGY

KPT/JPT (R/421/6/0027) 10/20 - MQA/SWA0129

**Biotechnology is technology that utilises biological systems and/or living organisms to develop or create different products or processes of value to society.**



CELEBRATING 20 YEARS OF DELIVERING AUSTRALIAN EDUCATION IN MALAYSIA

You will be a multi-skilled graduate rather than a specialist in one particular aspect of biotechnology. Biotechnology at Monash Malaysia emphasises a core understanding of the basic sciences and frames this knowledge around fundamental laboratory skills such as modern instrumentation, experimental design and data analysis, biochemical and microbiological techniques, and recombinant DNA technology.

Monash Malaysia ensures that you are trained in areas of genetics, genomics, plant biotechnology, environmental biotechnology, as well as ethics and regulation, relevant to the rapidly emerging biotechnology industries worldwide. You will be exposed to a variety of scientific communication skills including scientific reports and oral presentations. The practical classes are particularly effective as they use pilot scale equipment to provide students with hands-on laboratory skills in biotechnology.

The rapid development of the biotechnology industry worldwide has created exciting and rewarding career opportunities in health care, drug discovery, agriculture, environmental sciences, manufacturing and services, as well as in research and development.

## Why study at Monash University?

- Cutting-edge curriculum and excellent teaching led by renowned scientists active in research
- Monash is in the top one per cent of universities worldwide
- Our degree includes opportunities to do an internship and participate in international exchange study programs.

## CAREER OPPORTUNITIES

You will offer an employer excellent technical skills, a capacity for critical thinking, attention to detail, and interest in scientific theory and issues as they relate to society.

- **Biotechnology Product Developer**
- **Biotechnology Sales and Marketing Manager**
- **Geneticist**
- **Hospital or Medical Laboratory Technician**
- **Instrument Specialist**
- **Intellectual Property Officer**
- **Medical Researcher**
- **Occupational Health and Safety Officer**
- **Patent Officer**
- **Pharmaceutical and Product Manufacturer**
- **Policy Office**
- **Project Manager**
- **Process Control Specialist**
- **Quality Controller**
- **Research Scientist**
- **Risk-Management Consultant**
- **Science Journalist**
- **Science Teacher**
- **Soil Scientist**
- **University Lecturer**

## COURSE STRUCTURE

### YEAR 1

CHM1051	Chemistry 1 advanced
CHM1052	Chemistry 2 advanced
BIO1011	Biology 1
BIO1022	Biology 2
SCI1020	Introduction to statistical reasoning or
STA1010	Statistical methods for science
One level 1 science unit	
Two elective units	

### YEAR 2

GEN2041	Fundamentals of genetics
BTH2732	Recombinant DNA technology
SCI2010	Scientific practice and communication
One level 2 or 3 science unit	
Four elective units	

### YEAR 3

GEN3051	Medical and forensic genetics
SCI3716	Laboratory workplace management
Two units from:	
BTH3752	Molecular biology and biotechnology
BTH3820	Plant biotechnology
GEN3040	Genomics and its applications
SCI3990	Science in action research project
Two level 2 or 3 science units	
Two elective units	

Disclaimer: Please note that not all degrees, courses, majors and/or units ("Courses") offered at the Malaysia campus are offered at any of the other Monash University campuses. You should always check with the relevant School advisers when planning Courses and making study plans. The inclusion in a publication of details of a Course and the acceptance into a course in no way creates an obligation on the other part of the University to teach it in any given year, or to teach it in a manner described. The University reserves the right to cancel, discontinue or vary Courses at any time without notice. An intercampus exchange or transfer may result in a longer time for degree completion due to variations of Course offering and the semester of the Course offering at each campus. Exchange and transfer arrangements to other Monash University campuses are subject to eligibility criteria, approval and may be subject to quotas. Nov 2017.

## FURTHER INFORMATION

Monash University Malaysia DULN002(B)

📍 Jalan Lagoon Selatan, 47500 Bandar Sunway, Selangor, Malaysia

☎ +603 5514 6000 🌐 monash.edu.my

✉ mum.info@monash.edu 📱 monashmalaysia

monash.edu.my/science  
FB: MonashMalaysiaScience

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