



# MEDICINAL CHEMISTRY

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

Medicinal chemistry is the rapidly advancing field of chemistry focusing on the design and development of new drugs and medicines.



CELEBRATING 20 YEARS OF DELIVERING AUSTRALIAN EDUCATION IN MALAYSIA

Medicinal chemists seek to find new active chemical compounds, particularly from natural products such as rainforest plants and microbes, and also to design novel synthetic compounds.

You will learn about the design and chemical synthesis of bio-active molecules and pharmaceuticals with the aim to discover and develop new drugs and therapeutic agents for clinical use. The importance of understanding the interaction of chemical structure in biological systems and the experience of hands-on experiments which involve recent research advances in this area will be emphasised in this major.

## 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.

- Analytical / Biomedical Chemist
- Chemist
- Biotechnologist
- Biotechnology Sales and Marketing Manager
- Drug Development Chemist
- Hospital or Medical Laboratory Technician
- Industrial Chemist
- Instrument Specialist
- Molecular Design Chemist
- Occupational Health and Safety Officer
- Occupational Hygienist
- Pharmaceutical and Product Manufacturer
- Pharmaceutical Representative
- Process Control Specialist
- Quality Controller
- Research Chemist
- Risk-Management Consultant
- Science Journalist
- Teacher
- 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

CHM2911	Inorganic and organic chemistry
CHM2922	Spectroscopy and analytical chemistry
PHY2810	Physiology of human body systems or
PHY2820	Physiology of human health
SCI2010	Scientific practice and communication
One level 2 or 3 science unit	
Three elective units	

### YEAR 3

CHM3922	Advanced organic chemistry
CHM3930	Medicinal chemistry
PHA3801	Principals of pharmacology
One level 2 or 3 science unit	
One level 3 science unit	
Three 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](http://monash.edu.my)

✉ [mum.info@monash.edu](mailto:mum.info@monash.edu)       [monashmalaysia](https://www.monashmalaysia.com)

[monash.edu.my/science](http://monash.edu.my/science)

FB: [MonashMalaysiaScience](https://www.facebook.com/MonashMalaysiaScience)

Monash University Malaysia is a joint venture