

MEDICAL BIOTECHNOLOGY

KPT/JPT(R2/545/6/0014)09/2027 | MQA/FA15505

Harness the combinative power of biology and technology

For centuries, Medical Biotechnology has been instrumental in saving human lives, from Edward Jenner's creation of vaccination for smallpox, to the use of DNA technology to identify SARS-CoV-2 and finding a viable vaccine for COVID-19. This programme delivers a comprehensive curriculum through face-to-face classes and sessions, online lectures and hands-on laboratory experiences, workshops, seminars and more, in preparation towards developing cutting edge products that improve health and preserve humanity. Come harness the knowledge that can save lives.

◆ Assessment

To monitor quality and competency, students will be assessed via class tests, practical reports, workshops, portfolios, projects, presentations, dissertations and end-of-semester examinations.

Laboratory skills and competencies, two invaluable aspects of medical biotechnologists, will be assessed and evaluated through the Objective Structured Laboratory Examination (OSLE).

◆ Career Pathways

Employment opportunities await in public and private universities, research organisations, multinational and BioNexus-status companies. The BioNexus status is awarded only to companies with the capacity to elevate beyond start-up status. Since 2005, Malaysia's own Bioeconomy Corporation has facilitated the development of over 250 BioNexus-status companies locally, all of which are in need of skilled biotechnology work force. Employment opportunities are also available abroad, including Singapore, Australasia, Europe and the US. Many IMU graduates who did postgraduate studies in Europe, Australia and Asia are now working in Biotechnology and health-related companies, some even becoming CEOs and MDs in their own start-ups.

Degree / Duration

Bachelor of Applied Science (Hons)
in Medical Biotechnology (IMU)
3 years

Degree from Partner Universities
3 – 4 years

Commencement

Jul / Sep

Partner Universities

Australia



United Kingdom

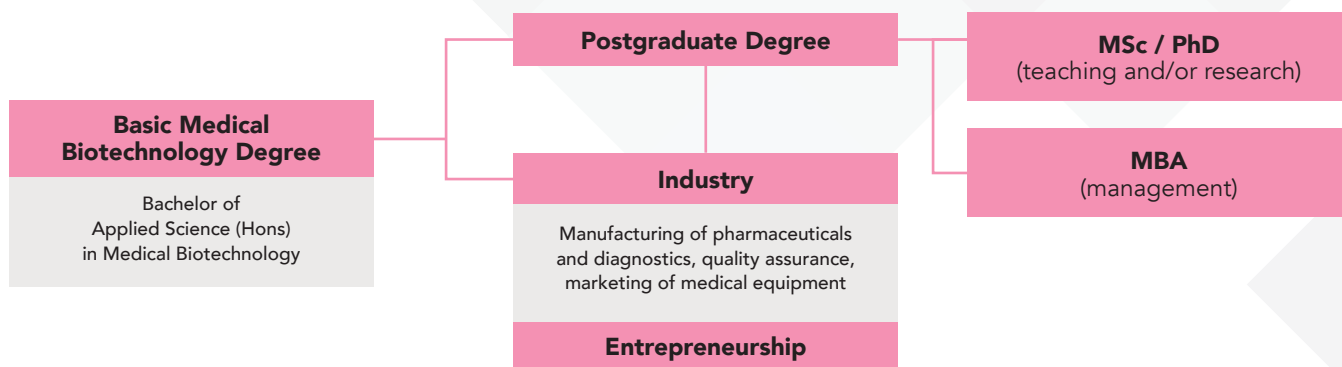


Accreditation



This programme is accredited by
Malaysia Board of Technologist (MBOT).

Career Paths



Areas and Scope of Work of Medical Biotechnologist

Key Area	Occupation	Workscope
Quality and Regulatory Affairs	<ul style="list-style-type: none"> • Quality Assurance Executive • Quality Associate • Regulatory Affairs Executive • Patent Associate 	<ul style="list-style-type: none"> • Ensure products comply to the established standards • Manage, coordinate and maintain regulatory approval for pharmaceutical, biotechnological, and biomedical products. • Assist inventors in patent application
Entrepreneurship	<ul style="list-style-type: none"> • Director • Managing Director 	<ul style="list-style-type: none"> • As entrepreneur
Research and Development	<ul style="list-style-type: none"> • Research Fellow • Research Officer • Clinical Research Associate • Medical Technologists • Laboratory Technician • Diagnostic Executive • Clinical Biotechnologists • Data Analyst 	<ul style="list-style-type: none"> • Discovery and development of innovative biotechnological products • Coordinate clinical trials • Analyse biological and clinical specimens • Perform microbiology and toxicology testing • Analyse big data
Business Development	<ul style="list-style-type: none"> • Project Manager • Regional Business Manager • Data Analyst • Account Manager • Procurement Executive • Application Specialist • Product Specialist • Production Planner • Claim Assessor 	<ul style="list-style-type: none"> • Monitor the overall business transactions and sales performance • Build and manage client relationship • Provide product demonstration, installation and technical support to clients • Analyse market trend, identify opportunity and develop profitability strategies • Assess and approve medical claims
Academia	<ul style="list-style-type: none"> • Teacher • Lecturer 	<ul style="list-style-type: none"> • As educators for schools and universities

Programme Structure

MPU Short Semester	Semester 1	Semester 2	Semester 3
<hr/> MPU U1 Penghayatan Etika & Peradaban * <hr/> <hr/> MPU U1 Philosophy & Current Issues <hr/> <hr/> MPU U1 Malay Language Communication 2** <hr/> <hr/> MPU U3 Integrity & Anti-Corruption <hr/> <hr/> * Malaysian students ** International students	<hr/> Basic Mathematics & Statistics <hr/> <hr/> Science Communication <hr/> <hr/> Chemistry for Biotechnologists <hr/> <hr/> Biodiversity & Conservation for Biotechnology <hr/> <hr/> Instrumentation, Biosafety & Quality Management <hr/> <hr/> Molecular Biology & Immunology <hr/> <hr/> MPU U2 English for Health Sciences / Bahasa Kebangsaan A <hr/>	<hr/> General Pharmacology <hr/> <hr/> Medical Microbiology & Parasitology <hr/> <hr/> Ethics & Biotechnology <hr/> <hr/> Applied Biochemistry <hr/> <hr/> Cell & Tissue Culture Techniques <hr/> <hr/> Fundamentals of Bioinformatics <hr/>	<hr/> Analytical Chemistry for Biotechnologists 1 <hr/> <hr/> Introduction to Healthcare Data Analytics <hr/> <hr/> Forensic Science <hr/> <hr/> Fundamentals of Structural Biology <hr/> <hr/> Molecular Medicine <hr/> <hr/> Management & Experimentation on Animals <hr/> <hr/> Elective: Algorithms & Data Structure / Medical Epidemiology & Public Health* <hr/> <hr/> * Choose 1 elective module
Semester 4	Short Semester	Semester 5	Semester 6
<hr/> Toxicology & Toxinology <hr/> <hr/> Omics Technology <hr/> <hr/> Bioprocess Technology <hr/> <hr/> Fundamentals of Entrepreneurship <hr/> <hr/> Applied Biotechniques in Biotechnology & Community Health <hr/> <hr/> Advanced Data Analytics <hr/> <hr/> MPU U4 Social Responsibility <hr/>	<hr/> Pathology for Biotechnologists <hr/> <hr/> Research Methodology <hr/> <hr/> Current Trends in Medical Biotechnology <hr/> <hr/> Free Elective: Introduction to Traditional Chinese Medicine / Radiobiology* <hr/> <hr/> * Choose 1 free elective module	<hr/> Medical Biotechnology Research Projects <hr/> <hr/> Elective: Biotechnology Research Commercialisation / Fundamentals of Business Management / Fundamentals of Cosmeceuticals / BioPharming: Harvesting Therapeutics / Functional Foods, Nutraceuticals & Supplements* <hr/> <hr/> *Choose any 3 elective modules	<hr/> Biotechnology Internship <hr/>

Curriculum is reviewed periodically and subject to change.

MPU modules are compulsory, imposed by the Ministry of Higher Education under the Private Higher Educational Institutions Act 1996 (Act 555). Every student must pass all modules as a prerequisite for the awarding of the degree.

Our Alumni

Our alumni have embarked on diverse and promising career paths across various industries. Our graduates are a true testament to the versatility of their education, as they continue to excel in a wide range of professional healthcare fields. Scan the QR code to see where our graduates are today.

Scan here



Programme Fees

Fees Overview

All fees quoted are in Ringgit Malaysia unless stated otherwise.

Fee	Amount (RM)	
	Malaysian Student	International Student
Application Fee	150	500
Registration Fee	850	2,000
Refundable Caution Deposit	1,000	1,000

Application fee is payable upon submission of application • Registration fee and refundable caution deposit are payable upon acceptance of the offer letter issued by the IMU Admissions Office • As stipulated by the Malaysian Ministry of Education, international students are required to pay Student Visa Application fee of RM2,500 AND personal bond (depending on nationality) upon registration • International students will also be required to pay Student Visa Renewal fee every year • Students must adhere to the "Policy on Payment of Fees" • All students are required to pay Student Association Fees of RM40 per semester • All tuition and ancillary fees are subject to annual increases, currency exchange rates, and exclusive of levy and bridging fees (if any) • Application fee and Registration fee is non refundable • All students who are applying for the National Higher Education Fund (NHEF) loans are required to pay their semester fees in FULL by the due date stated in the invoice.

Tuition Fees

	Total Duration (years)	At International Medical University (IMU)						At Partner University (PU)		
		Years	Total Semesters	Tuition Fee				Estimated Tuition Fees at Partner University		
				Malaysian Student		International Student		Years	Total Semesters	Tuition Fee Per Year
				Per Semester	Per Year	Per Semester	Per Year			
Bachelor of Applied Science (Hons) in Medical Biotechnology (IMU)	3	3	6	21,000	42,000	22,000	44,000	-	-	-
Credit Transfer to University of Newcastle Bachelor in Biotechnology	3.5	1.5	3	21,000	42,000	22,000	44,000	2	4	AUD 43,320
Credit Transfer to University of Strathclyde* MSc Industrial Biotechnology	4	3	6	21,000	42,000	22,000	44,000	1	2	GBP 27,500
Credit Transfer to University of Strathclyde* MSc Forensic Science	4	3	6	21,000	42,000	22,000	44,000	1	2	GBP 28,950

*All IMU students transferring to University of Strathclyde and meet the eligibility criteria will be eligible for a 15% bursary. Applicable upon transfer to University of Strathclyde.

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The IMU has been certified with ISO21001:2018 and ISO 45001:2018 for the provision of Pre-University, Undergraduate and Postgraduate Programmes for the Medical and Healthcare Professions.



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