School of Postgraduate Studies
2024

INTERNATIONAL MEDICAL UNIVERSITY
MALAYSIA

HEALTH INFORMATICS & ANALYTICS

Postgraduate Certificate / Postgraduate Diploma / Master

KPT/JPT(N/720/7/0131)09/2025 | MQA/SWA13973
KPT/JPT(N/720/7/0130)09/2025 | MQA/SWA13972
KPT/JPT(N/720/7/0129)09/2025 | MQA/SWA13974

Harness the power of data and technology to optimise healthcare delivery

As one of the fastest growing economic sectors worldwide, Health Informatics is creating job opportunities twice as fast as any other sector. Optimise your proficiency in managing, analysing and interpreting healthcare data and be equipped to identify trends, patterns and improvement opportunities in healthcare systems. A multidisciplinary team of experts in computing and health-related disciplines will lead you in discovering state-of-the-art technologies and systems, related to both IT (data analytics, mobile applications, wearables, etc) and healthcare (electronic health records, remote monitoring, etc). Come upskill and future-proof your career.

Degree / Duration

Postgraduate Certificate in Health Informatics and Analytics (IMU)
6 months (Full-time)
12 months – 4 years (Part-time)

Postgraduate Diploma in Health Informatics and Analytics (IMU)
9 months (Full-time)
18 months – 5 years (Part-time)

Master in Health Informatics and Analytics (IMU)
1 year (Full-time)
2 – 6 years (Part-time)

Commencement

Sep

Partner University

United Kingdom

University of Strathclyde Glasgow

Postgraduate Direct Entry

Rutgers School of Health Professions

Programme Structure

This 40-credit programme is offered in three levels: Postgraduate Certificate, Postgraduate Diploma and Master. The programme has the provision to allow multiple entrance and exit points at various levels. Classes, both online and face-to-face, will be conducted on weekends as much as possible to cater for working adults.

Assessments

Students will be assessed via:
- Practical assignments
- Essays
- Reports
- Presentations

Students in the Master programme are also required to conduct a 21-week research project, write a project report and make a final presentation in Semester 2.

Contact Us start@imu.edu.my www.imu.edu.my +603 2727 7515

Modules

Category	Semester 1	
Postgraduate Certificate (20 credit hours)	**Health Systems & Informatics**	Emerging trends and governance in Global Health, basic functions and building blocks of Health Systems and Health Informatics.
	Health Data Collection & Preparation	Introduction to data science, data storage and management, data transformation and cleaning.
	Health Data Analytics	Basic concepts of machine learning algorithms, such as supervised learning, unsupervised learning, deep learning and reinforced learning.
	Health Data Management	Relational database systems, Big Data management, data management solutions for Data Analytics
	Elective	

Category	Semester 1	
Postgraduate Diploma (30 credit hours)	**Health Systems & Informatics**	Emerging trends and governance in Global Health, basic functions and building blocks of Health Systems and Health Informatics.
	Health Data Collection & Preparation	Introduction to data science, data storage and management, data transformation and cleaning.
	Health Data Analytics	Basic concepts of machine learning algorithms, such as supervised learning, unsupervised learning, deep learning and reinforced learning.
	Health Data Management	Relational database systems, Big Data management, data management solutions for Data Analytics
	Elective	
	Semester 2	
	Advanced Health Informatics	Novel Informatics and AI technologies that are being used for Digital Health applications
	Health Data Visualisation	How to create meaningful presentations of quantitative or qualitative data to facilitate a specific decision-making process.
	Elective	

Category	Semester 1	
Master (40 credit hours)	**Health Systems & Informatics**	Emerging trends and governance in Global Health, basic functions and building blocks of Health Systems and Health Informatics.
	Health Data Collection & Preparation	Introduction to data science, data storage and management, data transformation and cleaning.
	Health Data Analytics	Basic concepts of machine learning algorithms, such as supervised learning, unsupervised learning, deep learning and reinforced learning.
	Health Data Management	Relational database systems, Big Data management, data management solutions for Data Analytics
	Research Methodology & Scientific Writing	Introduction to healthcare research, design approaches and methodologies used in healthcare research projects.
	Elective	
	Semester 2	
	Advanced Health Informatics	Novel healthcare applications that make use of advanced informatics technologies.
	Health Data Visualisation	How to create meaningful presentations of quantitative or qualitative data to facilitate a specific decision-making process.
	Healthcare Analytics Research Project	Apply the techniques and theory gained from the teaching and learning of the Master in Health Informatics and Analytics into a medium-scale data science project.

List of Elective Modules

Special Electives
Statistics Thinking for Health Analytics [1]
Introduction to Computer Science & Programming [2]

Management Electives
Operations Management / Digital Leadership / Entrepreneurial Leadership / Strategic Management

Health Science Electives
Bioinformatics / Systems Biology / Molecular Medicine / Public Health Practice

[1] Compulsory for those without statistical background*
[2] Compulsory for those without computing background*

Career Option and Opportunities

This programme opens doors to health data informatics and analytics in private sectors as well as ministries and departments in the public sector. It also leads to opportunities for further studies (PhD).

Health Informatics and Analytics is designed to equip students to design, perform and enhance analyses with the appropriate methods and technologies to address practical medical and clinical questions. It upskills professionals with a degree or equivalent and/or experience in science, engineering, computing, mathematics, business, nursing or public health. Upon graduation, the students will be able to:

- Serve as subject experts in Healthcare Informatics and Analytics
- Develop structured processes to ensure data availability, usability, integrity and security
- Utilise methods and technologies for decision making
- Utilise innovation and systems thinking to move organisations forward

Entry Requirements

- A Bachelor's Degree in the field or related fields with a minimum CGPA of 2.50 or equivalent, as accepted by the HEP Senate; or
  A Bachelor's Degree in the field or related fields or equivalent with a minimum CGPA of 2.00 and not meeting a CGPA of 2.50, can be accepted subject to rigorous internal assessment

Addtional Criteria:

- Students without statistical background must take "Statistics Thinking for Health Analytics - 2 credits" (Semester 1)
- Students without computing background must take "Introduction to Computer Science and Programming - 2 credits" (Semester 1)

English Language Requirements

For International Students (only one required)

1. IELTS : Band score 5.0; or
2. TOEFL (iBT) : Overall score of 42; or
3. Cambridge English : Advanced (CAE) : Overall score of 154; or
4. Cambridge English : Proficiency (CPE) : Overall score of 154; or
5. Cambridge Linguaskill : Overall score of 160; or
6. Pearson Test of English (PTE) : Overall score of 47;

The following categories of students are exempted from the above requirements:
1. International students from countries in which English is the first language.
2. International students who graduated from any Malaysian or other institutions where the curriculum is delivered in English.

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	1,100	3,400
Refundable Caution Deposit	2,000	2,000
Student Association Fee per Semester	40	40

• All IMU Alumni who are self-funding their postgraduate studies and meet the eligibility criteria will be eligible for a bursary of 15%. • Application fee is payable upon submission of application. • Registration fee and refundable caution deposit is payable upon acceptance of the offer letter issued by the IMU Admissions Office. • Student must adhere to the "Policy on Payment of Fees". • For information on Student Visa Application fee, please refer to Visa and Immigration on the IMU website, www.imu.edu.my • Fee payable per semester are subject to the number of credits registered.

Tuition Fees

	Study Mode	No. of Credit Hour	Malaysian Student (RM)		International Student (RM)	
			Fee Per Credit Hour	Total Fee	Fee Per Credit Hour	Total Fee
Postgraduate Certificate	Conventional	20	1,100	22,000	1,250	25,000
Postgraduate Diploma	Conventional	10	1,100	11,000	1,250	12,500
Master	Conventional	10	1,100	11,000	1,250	12,500
	Total Credit Hours	40	**Total Fee**	**44,000**	**Total Fee**	**50,000**
Credit recognition by University of Strathclyde that leads to the award of an additional degree	Additional tuition fees of approximately GBP16,000*					
Doctor of Health Informatics (DHI) programme at Rutgers University, New Jersey, USA	Additional tuition fees of approximately USD48,000					

*Subject to terms and conditions

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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.

Want to learn more? Connect with us today!

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