UTP
UNIVERSITI TEKNOLOGI PETRONAS

MSc in Applied Computing

JPT/BPP(R/0611/7/0010)01/30
JPT/BPP(N-DL/0611/7/0002)07/27

Scaling technology experimentation to full digital transformation

Breakthrough Industrial Revolution 4.0 (IR4.0) technologies such as Artificial Intelligence (AI), Internet of Things (IoT) and automation are sending shocks around the world. As a result, global industries are in desperate need of a reboot to respond to new realities accelerated by digital, super-computing and data.

Developed in collaboration with ICT tech experts from PETRONAS, IoT industry players and tech firms, UTP's MSc in Applied Computing sets out to prepare future ICT workforce to help global industries reinvent for a digital future. Significantly, the programme equips candidates to become computing specialists with data-driven computing skills to deploy technology-driven innovations in business.

In addition, the programme provides STEM graduates with non-computing backgrounds a great platform to launch a career in technology. At the same time, the programme's strategic focus on meeting IR4.0 challenges, solving real world problems and overcoming the industry's talent shortage will further boost STEM graduates' employability.

Building a talent pipeline of computing specialists! Benefit from learning objectives tied to reality-based industry scenarios and changes

Join a leading feeder university for the applied computing industry

Get in touch with the latest industry thinking.

Become data analytic expert

Grow your industry perspective with subjects grounded in day-to-day industry challenges, opportunities and outcomes

Become enterprise system specialist

Learn how to leverage real industry data and research evidence to provide solutions through cutting edge technology tools and management techniques

Empowering Professionals in IR4.0

The programme is designed to help ICT and STEM professionals, among others, unlock innovation opportunities in the Internet of Things (IoT). Significantly, students will be coached to take ambitious action by designing new solutions and services for the ICT and IoT industries. In addition, students will learn to converge multiple advanced applied computing skills such as big data analytics, enterprise resource planning and e-commerce, computer network, cyber security, software development, operating systems and server to deploy IR4.0 technologies.

4 reasons to join MSc in Applied Computing at UTP!

1

Modular-based programme jointly developed with PETRONAS' ICT experts and the industry

Reap the benefits of an industry-backed programme that supports the global mission of the industry.

2

Leverage our vast industry network!

Grow your ICT expertise and apply classroom and research knowledge to real industry projects through our university-industry collaborations.

3

Get a sneak peek at the future with maximum industry exposure

Boost your industry readiness and become a computing specialist who straddles a broad range of technology areas encompassing Emerging Technology, Big Data Analytics, Enterprise Resource Planning and E-Commerce.

4

Benefit from our innovative curriculum and programme specialisations

Gear up your competitive edge in ICT to support changing industry needs with our UTP-exclusive Big data Analytics and Enterprise Resource Planning specialisations.

APPLY NOW

The industry is our classroom

1	Programme jointly developed with PETRONAS ICT experts and the industry
2	Programme subjects delivered by senior industry experts, academics and adjunct lecturers
3	Project-based assignments: Capture real industry-derived analytical data resources

Course structure

Candidates are required to complete total of 40 credit hours. The programme's curriculum structure is as follows:

Category	Module	Credit Hour
Core	Emerging Technology	3
	Digital and Knowledge Economy	3
	IT Governance, Risk and Compliance	3
	Information System Strategic Planning	3
	Digital Innovation and Transformation	3
Core Specialisation (Choose 1 specialisation)	**Big Data Analytics**	
	Machine Learning Analytics	3
	Real Time Analytics	3
	Digital Analytics	3
	Enterprise Resource Planning	
	Business Intelligence	3
	Business Process Re-Engineering	3
	Enterprise System Architecture	3
University Requirement	IT Project Management	3
National Requirement	Research Method in IT	3
Project	MSc Project	10
TOTAL		40

As per requirement by Malaysian Qualification Agency (MQA), candidates coming from non-discipline into MSc in Applied Computing programme (such as engineering and business) have to take TWO pre-requisite courses before enrolling for the MSc programme. The two pre-requisite courses are (1) Software Engineering and (2) Object Oriented Programming

Mode of study

Conventional

ODL

Minimum **12 months**
Maximum **36 months**

Flexible arrangement for Full Time Open and Distance (ODL) Learning mode:

- 100% online with self-instructional materials (SIMS)
- 8 hours minimum of online live class session for each course per semester
- Classes after working hours/over the weekend
- Online open book final exam

Medium of Instruction

English

Intake

January/May/September

Entry requirements

Academic

1	Bachelor's Degree in relevant field from a recognised university with a minimum CGPA of 2.75 or its equivalent OR;
2	Bachelor's Degree in a relevant field from a recognised university with a minimum CGPA of 2.50 - 2.74 or its equivalent will require an internal rigorous assessment OR;
3	Bachelor's Degree in a relevant field from a recognised university with a minimum CGPA of 2.00 - 2.49 or its equivalent will require 5 years of working experience and internal rigorous assessment.
4	Bachelor's Degree from different discipline, must undergo pre-requisite courses in Computing.
5	No Bachelor's Degree? Apply with your working experience. Candidates who satisfy APEL A requirements are eligible to enrol. Scan the QR code to learn more.

APEL A

English language proficiency

International students are required to be proficient in written and spoken English with a minimum TOEFL score of 550 OR a minimum IELTS score of 6.0 or its equivalent.

Exemptions may be provided for candidates who are native English speakers or degree holders with English as the medium of instruction.

Graduation requirements

In order to graduate with MSc in Applied Computing degree, candidate is required to:

1	Obtain a minimum cumulative grade point average (CGPA) of 3.00
2	Satisfy all the requirements approved by UTP Senate
3	Fulfill the required credit hours and pass Research Methodology course

Tuition fees

Application Fee	Local	International
	RM50	RM200 / USD50

Registration as a student

Bond	None	RM3,000
Registration Fee	RM500	RM1,400
Commitment Fee	RM500	RM800
Total	RM1,000	RM5,200

Commitment throughout studies

Semester Fee	RM400		RM400	
Tuition Fee	Conventional	ODL	Conventional	ODL
	27,600	22,350	35,950	29,450

Rankings & ratings

2022 SETARA COMPETITIVE

(6 STAR) MyRA® MALAYSIA RESEARCH ASSESSMENT

THE World University Rankings 2025 WORLD TOP 250

RANKED 53 QS WORLD UNIVERSITY RANKINGS ASIA IN THE TOP 100 2025

For programme enquiry:

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For admission enquiry:

www.utp.edu.my

Admission Line :
Local candidates : +605 368 8064
International candidates : +605 368 8364
Universiti Teknologi PETRONAS, 32610 Seri Iskandar, Perak Darul Ridzuan, Malaysia

For further details on the application, visit www.utp.edu.my

UTPOfficial

** As of January 2025*