

Postgraduate

Programmes



About Us

Established on 10 January 1997, UTP is ranked the number 1 university in Malaysia according to the Times Higher Education World University Rankings 2025. The campus is built on a 400 hectare (1,000 acres) site strategically located at Seri Iskandar, Perak Darul Ridzuan, Malaysia. The university is a wholly-owned subsidiary of PETRONAS, the national oil and gas company of Malaysia.

UTP offers a wide range of industry-relevant engineering, science and technology programmes at undergraduate and postgraduate levels. It aims to produce well-rounded global graduates with excellent leadership qualities and communication abilities.

UTP is deeply committed to extensive research, fostering collaboration with PETRONAS, other institutions, and industries both locally and internationally. The university's research focuses on three key niche areas: smart and sustainable living, sustainable energy, and emerging digital technologies.

Vision Mission

A Leader in Technology Education and Centre for Creativity and Innovation.

- UTP is an institute of higher learning. We provide opportunities for the pursuit of knowledge and expertise for the advancement of engineering, science and technology to enhance the nation's competitiveness.
- Our objective is to produce well-rounded graduates who are creative and innovative with the potential to become leaders of industry and the nation.
- Our aim is to nurture creativity and innovativeness and expand the frontiers of technology and education for the betterment of society.

Rankings & Ratings

Malaysia's Top Private University













Programmes Offered Coursework and Dissertation

Programme	Conventional	ODL	Code
MBA in Energy Management	✓	✓	(R2/0414/7/0391) (07/28) (MQA/FA2994) (R-DL/0414/7/0076) (09/29) (MQA/SWA 12377)
MSc in Asset Management & Maintenance	✓	✓	(R3/0714/7/0004) (08/27) (A7736) (R-DL/0714/7/0006) (02/30) (MQA/SWA13426)
MSc in Drilling Engineering	✓	✓	(R2/0724/7/0004) (08/2029) (MQA/FA4582) (N-DL/0724/7/0002) (07/27) (MQA/PSA15252)
MSc in Electronics Systems Engineering	~	✓	(R3/0713/7/0005) (10/2027) (A7735) R-DL/0713/7/0006) (04/29) (MQA/SWA 11190)
MSc in Offshore Engineering	✓	✓	(R2/0716/7/0004) (08/29) (MQA/SWA4581) (R-DL/0716/7/0005) (01/30)(MQA/SWA 13058)
MSc in Petroleum Engineering	✓	✓	(R3/0724/7/0003) (05/30) (A11414) (N-DL/0711/7/0002) (10/27) (MQA/PSA15253)
MSc in Petroleum Geoscience	~	✓	(R3/0532/7/0003) (07/26) (A7175) (R-DL/0532/7/0004) (02/30) (MQA/SWA13427)
MSc in Process Integration	~	✓	(R3/0711/7/0008) (07/29) (A4369) (R-DL/0711/7/0006) (02/30) (MQA/SWA13428)
MSc in Process Safety	~	✓	(R/0711/7/0005) (12/25) (MQA/SWA 14306) (N-DL/540/7/0004) (03/26) (MQA/SWA 14306)
MSc in Corrosion Engineering	~	✓	(R/0714/7/0005) (07/29) (MQA/SWA11858) (N-DL/0714/7/0001) (10/27) (MQA/PSA15250)
MSc in Industrial Environmental Engineering	~	✓	(R/0717/7/0003) (07/2029) (MQA/SWA11857) (N-DL/0717/7/0002) (07/27) (MQA/PSA15251)
MSc in Applied Computing	✓	✓	(R/0611/7/0010) (01/30) (MQA/SWA11855) (N-DL/0611/7/0002) (07/27) (MQA/PSA15249)
MSc in Data Science		✓	(N-DL/0613/7/0015) (10/28) (MQA/PSA 16962)
MSc in Predictive Analytics		✓	(N-DL/0588/7/0002) (02/2030) (MQA/PSA18316)

Duration

Mode	Minimum	Maximum
Full Time Conventional	12 months	36 months
Full Time ODL	12 months	36 months

^{*}MBA in Energy Management has a minimum duration of 20 months



Intake

January, May and September

Open and Distance Learning (ODL)

- 100% online with self-instructional materials (SIMS)
- Learning through ULearnX, a designated e-learning platform for postgraduates at UTP
- Minimum of 8 hours of online live class sessions for each course per semester
- Classes held after working hours or on weekends
- Open-book final exam

*Please take note that the University reserves the right to cancel or postpone offered programmes if the number of students is less than the minimum feasible number, as approved by the Admission Committee. For updated information on a particular intake or programme, please refer to UTP website.



Research

Programme	MSc & MPhil/Code	PhD /Code
Chemical Engineering	(R3/524/7/0008) (02/29) (A7925)	(R3/524/8/0018) (12/29) (A8418)
Civil Engineering	(R3/526/7/0020) (12/29) (A8417)	(R3/526/8/0019) (12/29) (A8421)
Electrical & Electronics Engineering	(R3/523/7/0289) (02/29) (A7926)	(R3/523/8/0036) (12/29) (A8420)
Information Systems	(R2/545/7/0016) (03/30) (MQA/SWA9116)	(R/0611/8/0015) (03/28) (MQA/SWA9117)
Information Technology	(R3/482/7/0171) (10/29) (A8533)	(R3/482/8/0174) (02/30) (A8422)
Mechanical Engineering	(R3/521/7/0022) (03/27) (A8048)	(R3/521/8/0040) (12/29) (A8419)
Petroleum Engineering	(R3/524/7/0019) (12/29) (A8316)	(R3/524/8/0017) (12/29) (A8317)
Petroleum Geoscience	(R3/524/7/0021) (12/29) (A8318)	(R3/524/8/0020) (12/27) (A8319)
Science	(R2/545/7/0016) (07/29) (MQA/FA2064)	(R2/545/8/0015) (07/29) (MQA/FA2065)
Programme	Masters/Code	PhD /Code
Management	(R2/345/7/0242) (08/27) (MQA/FA2159)	(R2/345/8/0243) (09/29) (MQA/FA2161)
Philosophy	(R2/220/7/0009) (08/27) (MQA/SWA2158)	(R2/345/8/0243) (03/28) (MQA/SWA2160)

Duration

	Maste	ers	Ph	D
Mode	Minimum	Maximum	Minimum	Maximum
Full Time	2 Years	4 Years	3 Years	8 Years
Part Time	3 Years	6 Years	4 Years	10 Years

Intake

January, May and September

Full Time

- Students are required to be physically present at UTP
 - Opportunities to apply for financial aid through Graduate Assistance (GA) and Graduate Research Assistance (GRA)
- *terms and conditions apply

Part Time

Students are required to be physically present at UTP whenever required

Thematic Research

Mission Oriented Research

Primarily focused on serving the oil and gas industry, UTP's Research Institutes conduct specific research programmes to support PETRONAS's core business and the nation's development. There are three Research Institutes covering niche disciplines for the benefit of the industry and the nation as a whole.

Research Insititutes

- Institute of Sustainable Energy & Resources (ISER)
 Focuses on Digital Frontier and Intelligent Analytics
- Institute of Emerging Digital Technologies (EDiT)
 Focuses on Renewable Energy & Decarbonisation and Subsurface Resources
- Institute of Smart & Sustainable Living (ISSL)
 Focuses on Infrastructure Excellence and Sustainable Living

Our expertise includes:

Chemical Engineering

- Ionic Liquid
- Bio-Fuel
- Environment
- Separation
- Material Development
- Advanced Process Control
- Process System Engineering
- Process Safety
- Catalysis
- Reactor Technology

Electrical and Electronics Engineering

- Smart Grid Technologies
- Renewable Energy Systems
- Power Electronics and Drives
- Smart Battery Management Systems
- IoT Technology and Embedded Systems
- AI/ML in Electrical Systems
- Robotics and Industrial Automation
- Sensor Technology
- Intelligent Imaging
- System Level Integration

Civil Engineering

- Structural Engineering
- Off-shore Structures
- Highway & Transportation Design
- Environmental Engineering & Management
- Geotechnical Engineering
- Water Resources Engineering
- Geographical Information System (GIS)
- Construction & Project Management

Mechanical Engineering

- Mechanical Systems Design
- Vehicle Design
- Advanced Engine Development
- Advanced Materials & Processing
- Manufacturing System Optimisation
- Energy Systems
- Corrosion & Reliability

Petroleum Engineering

- Enhanced Oil Recovery
- Oil Field Chemical
- Flow Assurance
- Drilling Optimisation
- Drilling Fluid & Completion
- Cementing Technology
- Deep Reservoir
- High Pressure High Temperature
- Unconventional Hydrocarbon
- Reservoir Modelling and Simulation
- Petroleum Production Enhancement
- Carbon Capture and Storage (CCS)

Computer and Information Sciences

- Software Engineering
- Network and Communication Technologies (e.g IT infra, cloud computing, IoT etc)
- Artificial Intelligence (AI, ML, DL, Gen AI, Optimisation, Reinforcement Learning, NLP)
- Advanced Database Systems
- Cybersecurity
- Digital Innovations and Transformation (e.g emerging technologies, digital strategy, blockchain etc)
- Enterprise Systems (e.g ERP, E-commerce etc)
- Immersive Technologies (VR, AR, HCI, UI/UX etc)
- Data Analytics and Business Intelligence (e.g data mining, predictive analytics etc)
- Image Processing
- Computer Vision
- Human Computer Interaction

Management & Humanities

- Human Resource Management & Organisational Behaviour
- Accounting & Finance
- Marketing & International Business
- Entrepreneurship
- Strategic Management, Ethics & Corporate Governance
- Sociological, Cultural & Political Studies
- Language & Linguistics
- Journalism, Communication & Media Studies

Petroleum Geoscience

- Rock Physics
- Advanced Seismic Technology
- Non-Seismic Methods
- Integrated Basin Analysis
- Reservoir Characterisation, Modelling & Simulation
- Carbonate Reservoir
- Characterisation
- Carbonate Sedimentology
- Diagenesis & Sequence
- Stratigraphy
- Subsurface Storage
- Subsurface Resources and Energy
- Digital Geoscience

Fundamental & Applied Sciences

- Ionic Liquid
- Biofuel
- Environment
- Separation
- Material Development
- Catalysis
- Statistics
- Operation Research
- Applied Maths
- Theoretical Maths
- Hydrogen
- Renewable Energy
- Energy Storage

Entry Requirements

Master by Coursework/Research Programmes

All Master Programmes in Engineering / Master of Science / Master of Philosophy / MSc in Petroleum Geoscience / MSc in Predictive Analytics

- Bachelor's Degree in relevant field from a recognised university with a minimum CGPA of 2.50 or its
 equivalent OR;
- Bachelor's Degree in relevant field from a recognised university with a CGPA of 2.00 2.49 or its equivalent will require 5 years of working experience and internal rigorous assessment OR;
- Bachelor's Degree qualification from different discipline, must undergo pre-requisite courses

MPhil in Management

- Bachelor's Degree in relevant field from a recognised university with a minimum CGPA of 2.75 or its
 equivalent OR:
- Bachelor's Degree in relevant field from a recognised university with a CGPA of 2.50 2.74 or its
 equivalent will require internal rigorous assessment OR;
- Bachelor's Degree in relevant field from a recognised university with a CGPA of 2.00 2.49 or its
 equivalent will require 5 years of working experience and internal rigorous assessment OR;
- Bachelor's Degree qualification from different discipline, must undergo pre-requisite courses

MBA in Energy Management

- Bachelor's Degree in relevant field from a recognised university with a CGPA of 2.50 or its equivalent OR;
- Bachelor's Degree in relevant field from a recognised university with a CGPA of 2.00 2.49 or its
 equivalent will require internal rigorous assessment OR;
- Bachelor's Degree qualification from different discipline, must undergo pre-requisite courses

MSc in Information Technology / Information Systems

- Bachelor's Degree in relevant field from a recognised university with a minimum CGPA of 3.00 or its
 equivalent OR;
- Bachelor's Degree in relevant field from a recognised university with a CGPA of 2.50 2.99 or its
 equivalent will require internal rigorous assessment OR;
- Bachelor's Degree in relevant field from a recognised university with a CGPA of 2.00 2.49 or its equivalent will require 5 years of working experience and internal rigorous assessment OR;
- Bachelor's Degree qualification from different discipline, must undergo pre-requisite courses

MSc in Applied Computing / MSc in Data Science

- Bachelor's Degree in relevant field from a recognised university with a CGPA of 2.75 or its equivalent OR;
- Bachelor's Degree in relevant field from a recognised university with a CGPA of 2.50 2.74 or its
 equivalent will require internal rigorous assessment OR;
- Bachelor's Degree in relevant field from a recognised university with a CGPA of 2.00 2.49 or its equivalent will require 5 years of working experience and internal rigorous assessment OR;
- · Bachelor's Degree qualification from different discipline, must undergo pre-requisite courses

PhD Programme

All Programmes

- Master's Degree in relevant field OR equivalent from a recognised university
- Master's Degree qualification from different discipline, must undergo pre-requisite courses

Accreditation of Prior Experiential Learning or APEL

- · Apply with your working experience
- Candidates who satisfy Apel A requirements are eligible to enrol for Master by Coursework Programmes. Please visit https://www.utp.edu.my/Pages/UTP-USM-APEL.aspx or scan the QR code to learn more



English Requirements

Pass English requirement with a minimum score of:

- Engineering Programmes IELTS 5.0, TOEFL 500
- Science/PhD. in Management/PhD. in Social Science & Humanities Programmes IELTS 6.0, TOEFL - 550
- Information Technology / Information Systems Programmes IELTS 6.0, TOEFL 550

However, this requirement is waived if the candidate;

- Has obtained Bachelor / Master or other relevant degree from Malaysian recognised institution whereby all courses are fully conducted in English or;
- Is a native of an English-speaking country or;
- Graduated from English-speaking countries institutions

Fees

Master by Coursework

Programme	Conventional		ODL	
Coursework & Dissertation	Malaysian (RM)	International (RM)	Malaysian (RM)	International (RM)
MSc in Asset Management & Maintenance	30,550	43,800	24,700	36,000
MSc in Corrosion Engineering	30,550	43,800	24,100	35,200
MSc in Drilling Engineering	71,000	105,200	70,800	104,900
MSc in Offshore Engineering	30,550	43,800	24,700	36,000
MSc in Petroleum Engineering	30,350	43,500	24,100	35,200
MSc in Petroleum Geoscience	30,550	43,800	24,700	36,000
MSc in Process Integration	30,550	43,800	24,700	36,000
MSc in Process Safety	30,550	43,800	24,700	36,000
MSc in Industrial Environmental Engineering	30,550	43,800	24,100	35,200
MBA in Energy Management	34,850	49,100	28,100	40,100
MSc in Electronics Systems Engineering	30,550	43,800	24,700	36,000
MSc in Applied Computing	29,800	42,350	24,550	35,850
MSc in Data Science		-	24,550	35,850
MSc in Predictive Analytics		-	23,900	34,900

Remarks:

- Fees include registration fee, semester fee (based on minimum duration of programme), tuition fee
 and personal bond (for international students only). This applies to intakes from 2025 onwards.
- 2. This fee structure does not include visa fees for international students.
- 3. An additional semester fee of RM400 will be charged for each additional semester.
- 4. The University reserves the right to revise the fees at its discretion.

Master by Research

	Annual			
	Mala	Malaysian		ational
Programme	Full Time (RM)	Part Time (RM)	Full Time (RM)	Part Time (RM)
Chemical Engineering Civil Engineering Electrical & Electronics Engineering Mechanical Engineering Petroleum Engineering Petroleum Geoscience Information Systems Information Technology Master of Science	10,002	3,222	13,002	4,191
Management Master of Philosophy	7,620	3,222	9,900	4,191

	One Time		
Registration Fee & Personal Bond (applicable for international students only)	1,000	5,200	
Research Methodology Fee	1,500		
Viva Voce Fee	1,800		

Remarks:

- Annual fees include tuition fee/research progression fee and semester fee (RM 800 per semester) for 3 semesters per year. This applies to intakes from 2025 onwards.
- 2. This fee structure does not include visa fees for international students.
- 3. Registration Fee & Personal Bond: Payment for registration as a UTP student. Personal bond is applicable for International student only.
- 4. Research Methodology Fee: The payment is included in the first semester's fees, as registration for the Research Methodology class is compulsory.
- 5. Viva Voce Fee: The payment is incorporated into the semester's fees upon student registration for the Viva Voce examination.
- 6. The University reserves the right to revise fees at its discretion.

PhD

	Annual			
	Lo	Local		ational
Programme	Full Time (RM)	Part Time (RM)	Full Time (RM)	Part Time (RM)
Chemical Engineering Civil Engineering Electrical & Electronics Engineering Mechanical Engineering Petroleum Engineering Petroleum Geoscience Information Systems Information Technology Master of Science	14,601	3,600	19,002	4,800
Management Doctor of Philosophy	11,001	3,600	14,400	4,800

	One Time		
Registration Fee & Personal Bond (applicable for international students only)	1,000	5,200	
Research Methodology Fee	1,500		
Viva Voce Fee	3,000		

Remarks:

- Annual fees include tuition fee/research progression fee and semester fee (RM 800 per semester) for 3 semesters per year. This applies to intakes from 2025 onwards.
- 2. This fee structure does not include visa fees for international students.
- 3. Registration Fee & Personal Bond: Payment for registration as a UTP student. Personal bond is applicable for International student only.
- 4. Research Methodology Fee: The payment is included in the first semester's fees, as registration for the Research Methodology class is compulsory.
- 5. Viva Voce Fee: The payment is incorporated into the semester's fees upon student registration for the Viva Voce examination.
- 6. The University reserves the right to revise fees at its discretion.

Contact Details

Universiti Teknologi PETRONAS, 32610 Seri Iskandar, Perak Darul Ridzuan, Malaysia

For further details visit www.utp.edu.my











UTPOfficial

University Registration No. : DU003(A) | Company No. : 352875-U

*As of Jan 2025

Tel: 1-300-22-8887 Enquiries: UCS Portal

