

MSC IN DRILLING ENGINEERING

JPT/BPP(R2/0724/7/0004)08/29
JPT/BPP(N-DL/0724/7/0002)07/27





Uncover capability drivers from technology and thematic data insights!

Developed in collaboration with PETRONAS SKG25, an engineering focus group under PETRONAS' capability development wing, UTP's MSc in Drilling Engineering is designed to help students reap the full benefits of the industry's structural shift. To stay in touch with the new realities evolving the oil and gas industry, students will be mentored by senior industry experts and experienced lecturers to align on cutting-edge, safe and effective technical practices and knowledge. Also, the programme gears up students to create a step change in industry performance with better processes and engineering know-how. Ultimately, the highly niche programme prepares young graduates and working professionals to become tenacious drilling engineers.

Programme highlights

Extra savings for employers:

Save half the cost of upskilling your engineers from similar training courses! Accelerate your talent development plan with our fast-track programme: 1-year minimum completion requirement plus 6-month industrial attachment programme with a reputable industry partner.

Perks for fresh graduates:

Connect with our deep-tech industry ties to enhance your career outlook.

Building a talent pipeline of drilling engineering specialists! Benefit from learning objectives tied to the contours of reality-based industry situations and changes!

Join a leading feeder university for the drilling industry!

Get in touch with the latest industry thinking.

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

Learn how to leverage real industry data and research evidence to provide solutions through cutting edge field-development tools and techniques.

Empowering Tomorrow's Drilling Leaders

This program is tailored for aspiring and experienced professionals eager to navigate the challenges and opportunities of the global energy transition. By equipping resourceful drilling engineers with advanced skills, it prepares them to meet the demands of both local and international oil and gas markets. Designed to empower fresh graduates and working professionals, the program fosters leadership in driving the industry's evolution and long-term success.

6 reasons to join MSc in Drilling Engineering at UTP

1

Industry-Endorsed Excellence

Benefit from a program that was co-developed with PETRONAS SKG25 and custodian engineers, aligned with the global energy sector's evolving needs.

2

A World-Class, Exclusive Program

Join the only university in Asia — and one of just two globally — to offer this unique, specialized drilling engineering program.

3

Globally Recognized Certification

Obtain the International Well Control Forum (IWCF) Level 4 certification, ensuring career-readiness with credentials valid for two years.

4

Immersive Land Rig Training

Gain hands-on experience through a comprehensive training program covering:

- Rig equipment and technical limits
- On-site risk management and HSE protocols
- Drilling hazards and safety measures

5

Real-Time Industry Exposure

Stay ahead by monitoring live well-drilling activities across various global locations, bridging classroom theory with field practices.

6

Extensive Industry Networking Opportunities

Expand your professional connections and expertise by engaging in industry attachment programs with top-tier drilling partners.



Where Industry Meets Education

1

Learn from Industry Leaders

Program subjects are co-developed by senior industry experts and adjunct lecturers with extensive field experience.

2

Real-World, Project-Based Learning

Engage in assignments that utilize real industry-derived analytical data to solve practical challenges.

Expand Your Network and Expertise

Leverage our strong ties with industry giants. In collaboration with PETRONAS, UTP partners with top drilling companies to shape curriculum development, offer hands-on training, and provide industrial attachment placements.

Industry Partners and Teaching Collaborators

- PETRONAS
- INSTEP
- Halliburton
- Velesto Energy Berhad
- Sapura Energy Berhad
- Schlumberger

Course structure

Candidates are required to complete all credit hours as below:

Full Time 41 credit hours

Full Time (ODL) 44 credit hours

Full Time (Conventional)		
Category	Module	Credit Hour
Core	Geomechanics	3
	Well Engineering	4
	Drilling Fluids & Cementing	3
	Well Completion	3
	Project Management & Economics	3
	Well Intervention and Abandonment	3
	Advanced Well Design and Operation	3
	Well Construction	4
University Requirement	Data Analytics	3
National Requirement	Research Methodology	2
Project	Individual Research Project 1	3
	Individual Research Project 2	7
TOTAL		41

Full Time ODL		
Category	Module	Credit Hour
Core	Geomechanics	3
	Casing Design & Tubular	3
	Drilling Fluids & Cementing	3
	Hydraulics & Drill String Design	3
	Project Management & Economics	3
	Well Completion	3
	Well Engineering 1	3
	Well Construction	3
	Well Intervention & Workover	3
	Well Engineering 2	3
University Requirement	Data Analytics	2
National Requirement	Research Methodology	2
Project	Individual Project	10
TOTAL		44

As per requirement by Malaysian Qualification Agency (MQA), candidate coming from non-discipline into MSc in Drilling Engineering programme (such as sciences) has to take **TWO** pre-requisite courses before enrolling for the MSc programme. The two pre-requisite courses are (1) Reservoir Engineering I and (2) Fundamental of Petroleum Exploration Engineering

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 a relevant field from a recognised university with a minimum CGPA of 2.50 or its equivalent OR;
2	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.
3	Bachelor's Degree from different discipline, must undergo pre-requisite courses in Engineering or Engineering Technology.
4	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.



English language proficiency

International students are required to be proficient in written and spoken English with a minimum TOEFL score of 500 OR a minimum IELTS score of 5.0 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 Drilling Engineering 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
	68,800	68,600	98,800	98,500

Rankings & ratings



**World
University
Rankings 2025**
WORLD TOP 250

RANKED 53



For programme enquiry:

Programme Manager

Dr Dzeti Farhah Mohshim

Email: dzetifarhah.mohshim@utp.edu.my

Direct Line: +6053687372

Centre for Graduate Studies

Ms Nurul Asmira Sulaiman

Email: asmira.sulaiman@utp.edu.my

Direct Line: +6053688192

For admission enquiry:

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



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* As of January 2025