

INDUSTRIAL ENVIRONMENTAL ENGINEERING

JPT/BPP(N/526/7/0146)07/24 JPT/BPP(N-DL/0717/7/0002)07/27



Take advantage of global challenges and opportunities presented by sustainability that will transform 21st century's industrial practices!

The hunt for industrial site performance gain and sustainability underscores the pressing pursuit of practical, proven and cost-effective solutions to help industry players achieve full industrial environmental compliance. Jointly developed with PETRONAS' HSE Fraternity, MSc in Industrial Environmental Engineering exposes students to some of the most important actions accelerating environmental sustainability through the diffusion of technology-enabled practices. To bring focus to the effort, candidates' development journey is founded on international, national and industrial needs that cover essential areas such as environmental management, risk management and pollution prevention.

Candidates will work with senior industry experts to study the latest trends and strategies that seek to minimise environmental impact from industrial activities. In addition, students will build advanced knowledge in industrial wastewater treatment, air emission abatement, solid and hazardous waste management as well as other forward-looking environmental management practices.

Through extensive research, students will frame industrial environmental best practices around proven technology and practical and cost-effective solutions. Ultimately, students will be equipped with a global outlook and adopt bold ambitions to contribute towards achieving global sustainability goals in line with United Nation's Sustainable Development Goals; SDG6 - Clean Water and Sanitation, SDG7 - Affordable and Clean Energy, SDG9 - Industry, Innovation and Infrastructure SDG11 - Sustainable Cities and Communities, SDG13 - Climate Action, and SDG14 - Life Below Water .

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

Join a leading feeder university in technology

Get in touch with the latest best practices

Grow your industry perspective with subjects grounded in day-to-day industry challenges, opportunities and outcomes. Leverage practical solutions through the adoption of technology and cost-effective field-development tools and techniques

I strongly recommend environmentalists and sustainability practitioners to take up this programme. Now is a good time to broaden your industry knowledge and insights as the industry needs young and aspiring talents to come forward with fresh ideas. Further, the programme has been designed to suit changing industry needs and help students leverage the full spectrum of the latest engineering practices to accelerate the United Nations' SDGs. With better alignment on industry vision and competitive advantage, students will be exposed to industrial design and operations to boost their career prospect.

- Mr Teoh Shi Sheng -Sustainability Manager Apical Group (Expert Panel)

Who is the programme for?

Lead the sector's engineering practice with our innovative industry-backed education!

The programme aims is to help environmental managers and executives implement sustainable solutions by establishing a link between engineering stewardship and global sustainability efforts. As such, candidates will be equipped with the capability to propose fit-for-purpose technological solutions and pioneer new opportunities as environmental engineers and industry consultants.

3 reasons to join MSc in Industrial Environmental Engineering at UTP!

Modular-based programme jointly developed with PETRONAS' Technical Professionals in Environmental Management

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

Leverage on our vast industry network!

Grow your technical expertise through industry-specific projects with PETRONAS and partner companies.

Get a sneak peek at the future with maximum exposure across industries that offer promising career opportunities!

Boost your industry readiness with our career-connected programme

The industry is our classroom

- Curriculum jointly developed with PETRONAS Technical Professionals (TP).
- Programme supported and endorsed by professional consultants designed to meet stringent requirements of environmental regulations.
- Project-based assignments: Capture real industry-derived analytical data resources.
- 4 Programme subjects delivered by well-established academics, senior industry experts and adjunct lecturers.

Get your hands in the industry with our vast network

Benefit from our close collaborations with the industry. Immerse yourself in the future and identify answers to the industry's most complex challenges.

In response to the rising costs of unchecked environmental pollution, the programme prepares students to become innovative Environment Officers (EO) who are well versed with changing industry requirements and upcoming environmental laws. Essentially, the introduction of the programme's wastewater treatment facility's subject is important for students to learn about the ins and outs of Industrial Effluent Treatment System (IETS) as the current legal requirements in environmental law. At the Department of Environment, all of our staff are IETS certified as they need to be on the same page with the industrial sector.

Course structure

Candidates are required to complete all credit hours as below:

Full Time 41 credit hours

Full Time (ODL) 40 credit hours

| Full Time (Conventional) | | Full Time ODL | | | |
|---|--|-----------------------|---|---|----------------------------|
| Category | Module | Credit Hour | Category | Module | Credit Hour |
| Core | Advanced Biological Wastewater Treatment Sludge Management and Disposal Advanced Physical-Chemical Treatment Technologies Renewable Energy Technology Air Pollution Prevention and Control | 3 3 3 3 3 | Core | Advanced Biological Wastewater Treatment Sludge Management and Disposal Environmental Hazardous Substances and Waste Management Advanced Physical-Chemical Treatment Technologies Renewable Energy Technology Air Pollution Prevention and | 3 3 2 3 3 3 |
| Technical Electives (Choose 1 technical elective) | Technical Elective 1: Environmental Management Climate Change and Greenhouse Gas Management Environmental Impact and Risk Management Environmental Management System for Industries Technical Elective 2: Pollution Prevention Contaminated Site Assessment and Remediation Spill Prevention and Control Integrated Solid Waste Management | 3 3 3 3 3 3 | Technical Electives (Choose 1 technical elective) | Control Technical Elective 1: Environmental Management Climate Change and Greenhouse Gas Management Environmental Impact and Risk Management Environmental Management System for Industries Technical Elective 2: Pollution Prevention Contaminated Site Assessment and Remediation Spill Prevention and Control Integrated Solid Waste Management | 3 3 3 3 3 3 |
| University Requirement | Data Analytics Project Management | 3 2 | University Requirement | Data Analytics | 2 |
| National Requirement | Research Methodology | 2 | National Requirement | Research Methodology | 2 |
| Project | Research Project I Research Project II | 3 7 | Project | Research Project | 10 |
| TOTAL | | 41 | TOTAL | | 40 |

Mode of study

Conventional

ODL

Minimum 12 months
Maximum 36 months

Medium of Instruction

English

On-demand tailored weekend programme

On-demand tailored weekend programme Busy working? Fret not. We have 2 options for you: a. On demand tailored weekend programme (Conventional mode)

b. Fully online programme (ODL mode)

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. |

- 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.
- Bachelor's Degree from different discipline, must undergo pre-requisite courses in Engineering or Engineering Technology.
- Apply with your working experience. Candidate who satisfy APEL A requirements are eligile 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 Industrial Environmental Engineering degree, candidate is required to:

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

Tuition fees

| Malaysian | International |
|-----------|---------------|

| Conventional | ODL | | Conventional | | ODL | |
|--------------|--------------|---------------------------|--------------|-------------|----------|--|
| RM29,550 | RM23 | RM23,100 | | 8,600 | RM30,000 | |
| RM400 | | Resource (every semester) | | RM400 | | |
| RM500 | Registration | | RM1,400 | | | |
| RM500 | | Commitment | | RM800 | | |
| | | Person | al bond | ond RM3,000 | | |



Rankings & ratings











RANKED 79



RANKED 63 World University Rankings 2023

SCAN ME

For programme enquiry:

Ts. Dr. Ho Yeek Chia Programme Manager Email: yeekchia.ho@utp.edu.my

For admission enquiry:



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