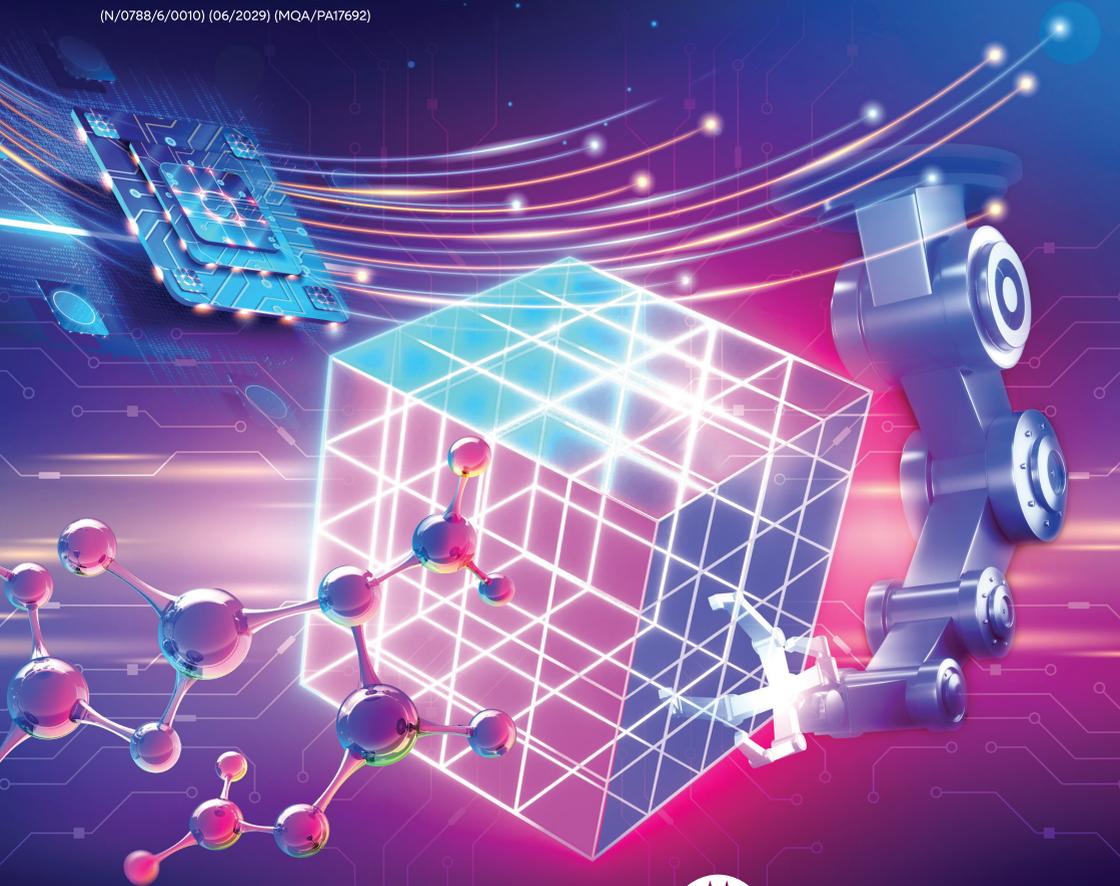


# INTEGRATED ENGINEER OF THE FUTURE

Bachelor of Integrated Engineering with Honours

(N/0788/6/0010) (06/2029) (MQA/PA17692)



**UTP**  
UNIVERSITI TEKNOLOGI PETRONAS

# MEET THE FUTURE OF ENGINEERING

Universiti Teknologi PETRONAS is the first university in Malaysia offering an Integrated Engineering programme where students learning is enriched through local and international experiences with industry partners.

Bachelor of Integrated Engineering with Honours offers a curriculum that seamlessly integrates non-engineering skills, providing a holistic educational experience that empowers students for success in the dynamic world of engineering.



# What is Integrated Engineering?

Students will experience the integration of three engineering disciplines - Mechanical Engineering, Chemical Engineering and Electrical Engineering, with industry-led, action based learning from Year 1 to prepare them for the future of work as a professional engineer.



**To meet the challenges of the future,  
the Integrated Engineering offers a world class  
education, with 5 key promises:**



An employment  
promise with  
industry partners



Deep industry  
exposure as early as  
Year 1



Innovative  
Inter-multidisciplinary  
curriculum with future  
work focus



Enrichment via industry  
exposure, attachments  
and exchanges



A vibrant, empowering,  
digitally enabled  
student life

# THE LEARNING ENVIRONMENT

Design and delivery of the Integrated Engineering curriculum

YEAR 1	SEM 1	SEM 2	SEM 3
<p><b>"Apprentice"</b> Foundations and introduction to new ways of teaching and learning</p>	<p>Introduction to Integrated Engineering Quantitative Engineering Analysis I Solid Mechanics <span>ME</span> ★ Reimagine Engineer</p>	<p>Quantitative Engineering Analysis II Fluid Synergy <span>CE</span> <span>ME</span> ★ GLEAN Challenge <span>CE</span> <span>ME</span> <span>EE</span></p>	<p>Thermodynamics @ Industry <span>CE</span> <span>ME</span> Ethics &amp; Language Anti-corruption Co-curricular I</p>
YEAR 2	SEM 4	SEM 5	SEM 6
<p><b>"Competent"</b> Build knowledge and gain international exposure</p>	<p>Data-driven Intelligence Integrated Electronics <span>ME</span> <span>EE</span> ★ Build the World <span>CE</span> <span>ME</span> <span>EE</span></p>	<p>Project Management Entrepreneurship Foreign Language <i>Semester abroad</i></p>	<p>Electro-mech Systems <span>ME</span> <span>EE</span> ★ Be Enterprising Current issues Co-curricular II</p>
YEAR 3	SEM 7	SEM 8	SEM 9
<p><b>"Proficient"</b> Apply knowledge through practical attachments</p>	<p>Integrated Processes <span>CE</span> Instrumentation and Control <span>CE</span> <span>ME</span> <span>EE</span> Volunteering</p>	<p>Electromagnetic Communication <span>ME</span> <span>EE</span> Engineers in Society <span>CE</span> <span>ME</span> <span>EE</span> ★ Design to Deliver <span>CE</span> <span>ME</span> <span>EE</span></p>	<p>Student Internship Training</p>
YEAR 4	SEM 10	SEM 11	SEM 12
<p><b>"Practitioner"</b> Put everything together into culminating projects and pursue specialisations</p>	<p>Student Internship Project</p>	<p>★ Project Zenith I <span>CE</span> <span>ME</span> <span>EE</span> ★ Project Innovate I <span>CE</span> <span>ME</span> <span>EE</span> ♾ Specialisation I ♾ Specialisation II</p>	<p>★ Project Zenith II <span>CE</span> <span>ME</span> <span>EE</span> ★ Project Innovate II <span>CE</span> <span>ME</span> <span>EE</span> ♾ Specialisation III</p>

## Learning Experience

Learning Pedagogy

Overseas Exposure

Industry Exposure

## Living Experience

Student Life and Culture

Key Student Touchpoints

Facilities and Infrastructure

### Legends

- ★ Project-Based Learning
- CE Chemical Engineering
- ME Mechanical Engineering
- EE Electrical Engineering
- ♾ Specialisation : Sustainable Energy or Smart Systems



# CAREER OPPORTUNITIES FOR FUTURE GRADUATES



**Engineering & Technology**



**ESG**



**Business**

## Integrated Engineering

Software + IT Engineer  
Product Owner  
Product Manager  
Project Developer  
Technical Marketing  
Technical Sales  
Sales

Process Engineer  
Application Engineer  
Project and System Engineer  
Delivery Manager  
Workshop / Line Maintenance  
Plant Operations

Corporate ESG  
Continuous Improvement Specialist

Aircraft Health System  
Automation in Telco  
Interface Management  
Supply Chain  
Enterprise Business Solution Developer  
Business Enablement  
Business Development  
Business & Corporate Banking

# SHAPE THE FUTURE OF ENGINEERING WITH US!

Are you ready to embark on a groundbreaking journey through our Bachelor of Integrated Engineering with Honours Programme? Join us and become a pioneer in redefining the prospects of engineering!



[www.utp.edu.my](http://www.utp.edu.my)

**Don't miss this chance to shape your future and make a mark in the world of engineering. Apply now and be part of something extraordinary!**





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