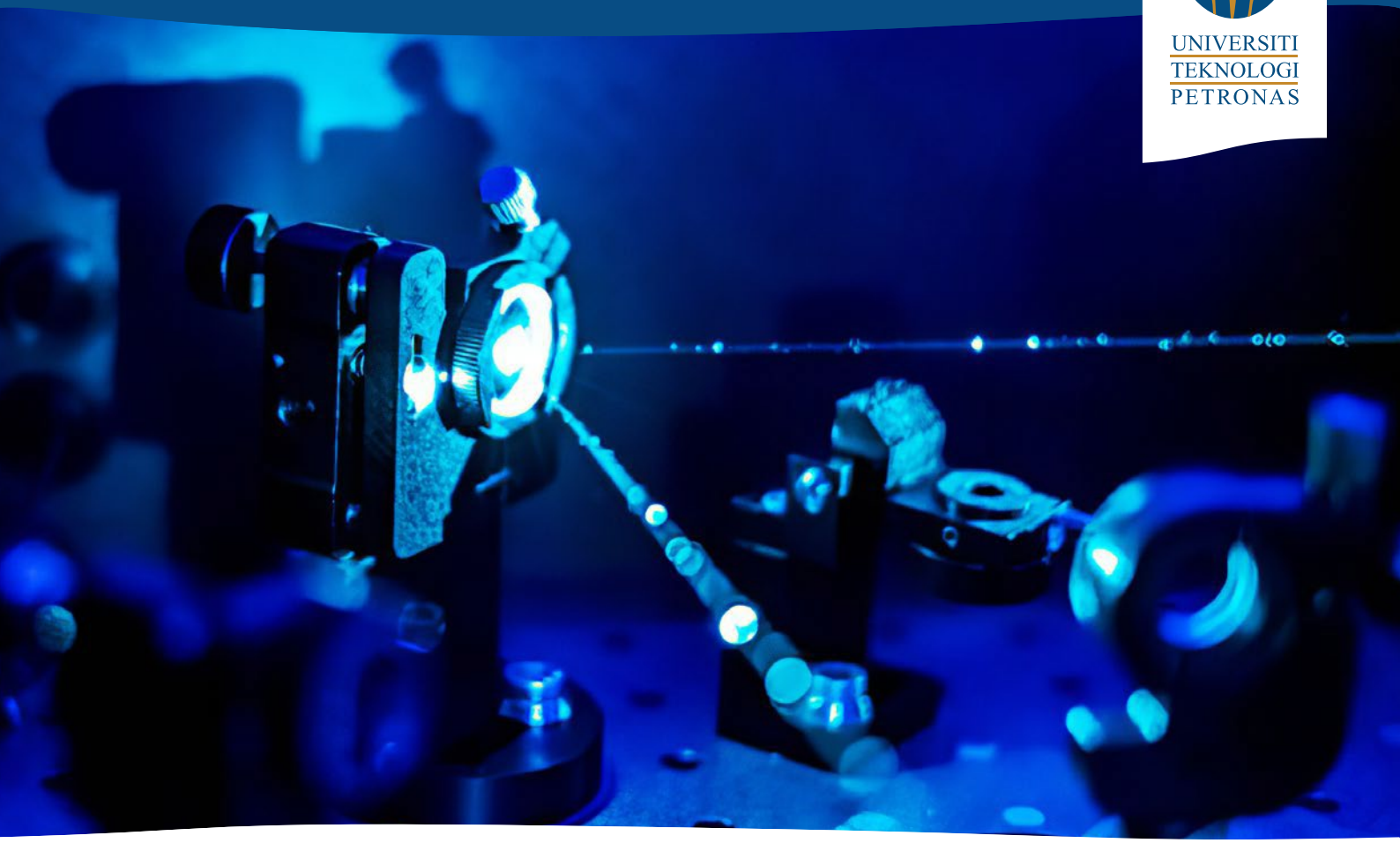
UNDERGRADUATE PROGRAMME

APPLIED PHYSICS

JPT/BPP(R/441/6/0005)9/26

UNIVERSITI TEKNOLOGI PETRONAS



What is Applied Physics?

Applied physics is essentially the applications of the principles of physics to resolve industrial problems while maintaining sustainable development. This include the improvement of energy efficiency in renewable energy, the development of new products via nanotechnology, and the enhancement of oil recovery and exploration.

What does an Applied Physicist do?

Applied physicists utilise scientific knowledge and principles to maximise the efficiency of the production of renewable energy such as solar, wind, hydropower and geothermal. They also design and create more efficient materials for the improvement of electronic devices, solar cells and the enhancement of oil and gas exploration and recovery.

A peek into an Applied Physicist's day

Why study Applied Physics at UTP?

1. Comprehensively designed programme with strong inputs from industry experts
2. Students can choose specialisations that are in demand by the industry during their final year of study
3. World-class teaching and learning, research capabilities as well as state-of-the-art labs and facilities
4. Strong partnership with major industry players such as PETRONAS, Schlumberger, OSRAM, Intel, Murata and various government agencies
5. UTP graduates are highly sought after by oil and gas industry employers, with 90% being employed within 6 months after graduation
6. More than 70% of UTP alumni are currently working in oil and gas industry
7. The academic staff are highly qualified and experienced. Thus, undergraduate students can benefit greatly from their knowledge and expertise

What am I going to learn?

National / University

- Management, Social Sciences and Humanities
- Introduction to Oil and Gas
- Scientific Inquiry
- Co-Curriculum

Common Core

- Ordinary Differential Equations
- Health, Safety and Environment

Core Discipline by Programme

- Measurement and Instrumentation
- Semiconductor and Devices
- Electromagnetics
- Quantum Mechanics
- Solid State Physics
- Vibration and Waves

Specialisation

- Oil and Gas Exploration
- Renewable Energy
- Nanotechnology

Project Based

- Science Team Project
- 7 months Structured Industrial Internship Programme
- Community Engagement Project
- Final Year Research Project

Minor (Optional)

- Management

How much does it cost?

Category	Malaysian	International
Duration	3.5 years	
Registration (new students only)	RM1,000	RM11,000
Estimated Tuition Fees	RM63,000	RM78,000
Accommodation	RM6,600	RM6,600
Total	**RM70,600**	**RM95,600**

Contact

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