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UNIVERSITI  
TEKNOLOGI  
PETRONAS

## COURSE PRESENTATION

# Introduction to Oil & Gas Industry and Sustainable Development

### PDB1012/PEB1012

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# Impacts of Oil and Gas Activities on The Marine Environment



In this course, students are introduced to various aspects of oil & gas industry and sustainability. The topics covered are oil and gas search and discovery, production, processing. For downstream, oil and gas refining into petroleum and petrochemical products and feedstocks are introduced. Focus is also given on principles of sustainable development and the aspects of renewable energy for sustainability. Finally, the topic on marine pollution control and management is presented to expose students to the environmental impact of oil & gas activities to the marine ecosystem.



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# Impacts of Oil and Gas Activities on The Marine Environment



By the end of the course, successful students will be able to:

1. Describe the various steps of the petroleum industry life cycle and understand which disciplines are involved at each step.
2. Explain how oil and gas are discovered and produced.
3. Explain how oil and gas are processed and transported.
4. Describe how oil and gas are refined into various petrol and petrochemical products and exported.
5. List principles of sustainable development and describe various types of footprint with the role of engineers in industry.
6. Identify various types of renewable energy and the relation with sustainable development.
7. List the impacts of oil and gas activities on the marine environment, explain on the awareness on the effects of hydrocarbon exploration, and list the rules and regulations in marine pollution management.

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