Module code	SG-5305			
Module Title	Petroleum Geology of southeast Asia			
Degree/Diploma	Master of Science in Petroleum Geosciences by Coursework			
Type of Module	Option			
Modular Credits	4	Total student Workload	8	hours/week
		Contact hours	4	hours/week
Prerequisite	None			
Anti-requisite	None			

## Aims

To provide overall understanding of the petroleum systems in southeast Asia and history of finding oil and gas in this region. To get the first-hand knowledge of hydrocarbon occurrence, origin, distribution, exploration and development of oil and gas resources of southeast Asia.

## **Learning Outcomes**

On successful completion of this module, a student will be able to:

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Lower order:	30%	- assess the petroleum system elements and its processes
		- recall the different sedimentary basins in southeast Asia
Middle order:	50%	<ul> <li>explain the source rock potential and hydrocarbon potentiality in southeast Asia</li> </ul>
		- characterise the reservoir rocks
		- explain the different seal, cap and traps in Southeast Asia
		- identify the factors affecting the rock fluid interaction in the reservoir
Higher order:	20%	- appraising petroleum systems and judge hydrocarbon potentiality
		- interpret data for reserve estimation

## **Module Contents**

- History of Petroleum system and evolution in southeast Asia
- Petroleum exploration methods and tools
- Source rocks in southeast Asia
- Processes of catagenesis and maturation of source rocks
- Generation and migration of hydrocarbons
- Rock-fluid interaction and reservoir properties
- Oil traps (definition, types, classification)
- Seal and cap rocks and importance in accumulation

Assessment	Formative	Weekly discussion, practical tests and feedback
	assessment	
		Examination: 50%

Summative	Coursework: 50%
assessment	- 5 individual written assignments (30%)
	- 2 class tests (20%)