

## Department of Civil & Environmental Engineering Department of Mechanical Engineering Faculty of Engineering

# Master of Science (Offshore Technology)

# Specialisation in

# Petroleum Engineering

Comprehensive coverage of topics in Petroleum Engineering that are of great relevance to the offshore oil and gas industry which span the design of facilities in shallow waters to challenges that are faced by engineers in developments in deep waters and in arctic conditions, and technologies related to drilling, downhole measurements and characterization in the exploration and production of petroleum reservoirs.



#### General Entry Requirement:

Bachelor's Degree in Civil Engineering or Mechanical Engineering with 2nd Class Honours, or equivalent. Candidates with relevant working experience will be considered favourably.

#### Award of Degree

Successfully complete at least 40 Modular Credits (MCs) & meet grade requirements.

### Application for August 2020 Intake:

Opens: End-Jan 2020 Ends: End-Feb 2020

Release of outcome: Mid-May 2020 Semester start date: Early-Aug 2020 MSc Programme Fee, AY2019/2020:

SGD 18,500 per semester

Candidature Period:
1 year full-time or 2 years part-time

## **Modules for Specialisation in Petroleum Engineering**

- Geoscience for Petroleum Exploration
- Seismic Acquisition and Processing
- Petrophysics and Downhole Measurements
- Reservoir Characterization and Rock Physics
- Enhanced Oil Recovery
- Petroleum Production Engineering
- Project Module (8 MCs)

- Petroleum Geomechanics
- Unconventional and Renewable Energy Resources
- Drilling and Completion Engineering
- Topics in Petroleum Engineering: Petroleum Reservoir
- Topics in Petroleum Engineering: Practical Inversion Methods for Geophysical Imaging

All modules are 4 MCs each, unless otherwise indicated.