MODULE DESCRIPTOR

Module Title

Facilities

Reference	ENM202	Version	13
Created	March 2023	SCQF Level	SCQF 11
Approved	April 2006	SCQF Points	15
Amended	July 2023	ECTS Points	7.5

Aims of Module

This module aims to develop an ability to critically appraise the process and requirements for various components of surface and subsea production facilities for sustainable offshore oil and gas field development.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1	Critically appraise appropriate design methods for the selection and sizing of components for oil and gas production facilities.
2	Evaluate emission reduction strategies for oil and gas production operations.
3	Analyse in detail appropriate principles for hydrocarbon measurement and allocation in oil and gas field development.
4	Critically appraise subsea field development options.
5	Evaluate decommissioning options and techniques taking into consideration relevant decommissioning legislation and technologies.

Indicative Module Content

Fluid Processing; Emission Reduction Strategies; Machinery; Hydrocarbon Measurement and Allocation; Field Development; Decommissioning.

Module Delivery

Blended Delivery - Lectures, Guest Lectures, Group Presentations, and Guided Self-Study.

Module Ref:	ENM202 v13

Indicative Student Workload	Full Time	Part Time
Contact Hours	35	35
Non-Contact Hours	115	115
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	150
Actual Placement hours for professional, statutory or regulatory body		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4, 5
Description:	Individual Report				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The module assessment is a 100% coursework, an overall D grade is required to pass the module.

Module Grade	Minimum Requirements to achieve Module Grade:
A	A
B	B
C	C
D	D
E	E
F	F
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	Normally a UK honours degree, or equivalent, in Engineering or related discipline at class 2.2 or above and proficiency in English language for academic purposes (IELTS minimum score of 6.5 or equivalent)
Corequisites for module	None
Precluded Modules	This module is not suitable for students following an MSc in Professional Studies programme unless they meet the entry qualifications stipulated in the University Regulations on admission and the prerequisites above.

ADDITIONAL NOTES

Part Time refers to Online Learning Part Time (OLPT).

INDICATIVE BIBLIOGRAPHY

1. Laik, Sukumar. (2018). Offshore Petroleum Drilling and Production. CRC Press. Chapters 3,6-8,10
2. Lyons, William C. Plisga, Gary J. Lorenz, Michael D.. (2016). Standard Handbook of Petroleum and Natural Gas Engineering (3rd Edition). Elsevier. Chapters 6-7
3. Arnold, Ken Stewart, Maurice. (2008). Surface Production Operations - Design of Oil Handling Systems and Facilities, Volume 1 (3rd Edition). Elsevier.
4. Coker, A. Kayode. (2021). Petroleum Refining Design and Applications Handbook, Volume 2 - Rules of Thumb, Process Planning, Scheduling and Flowsheet Design, Process Piping Design, Pumps, Compressors, and Process Safety Incidents. John Wiley & Sons. Chapter 16
5. Bai, Yong Bai, Qiang. (2019). Subsea Engineering Handbook (2nd Edition). Elsevier. Chapter 2
6. Journal articles, conference proceedings, and appropriate websites. Example OnePetro, Knovel, ASME