

## Liverpool John Moores University

Title: Offshore Engineering  
Status: Definitive  
Code: **7119ENG** (120102)  
Version Start Date: 01-08-2019

Owning School/Faculty: Maritime and Mechanical Engineering  
Teaching School/Faculty: Maritime and Mechanical Engineering

Team	Leader
Musa Bashir	Y

**Academic Level:** FHEQ7      **Credit Value:** 20      **Total Delivered Hours:** 38  
**Total Learning Hours:** 200      **Private Study:** 162

### Delivery Options

Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	24
Tutorial	12

**Grading Basis:** 50 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS2	Exam	70	2
Portfolio	AS1	Portfolio	30	

### Aims

*To provide advanced understanding of offshore installation types and knowledge of offshore installations from an operational and safety aspect.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate the application of offshore installation and offshore installation types.
- 2 Demonstrate the principles of engineering plants' application and requirements in offshore installations.
- 3 Evaluate the changes in the global oil and gas markets and understand the impact on the industry.
- 4 Understand the environmental loads experienced by an offshore structure.

### **Learning Outcomes of Assessments**

The assessment item list is assessed via the learning outcomes listed:

Exam	1	2
Portfolio	3	4

### **Outline Syllabus**

*Introduction to the offshore oil and gas industry.*

*General engineering knowledge of offshore installations and the application of Installations.*

*Engineering plant and systems required to support the activities of an offshore Installation.*

*Drilling*

*Well structure, well drive mechanisms and injection methods.*

*Oil production and processing.*

*Gas production and processing.*

*Environmental factors and environmental loading.*

### **Learning Activities**

Formal lectures, Tutorials, Videotapes.

### **Notes**

The module is designed to provide advanced understanding of various offshore installation types and the engineering plants required to operate these installations.