

### **Module Proforma**

**Approved, 2022.02** 

# **Summary Information**

| Module Code         | 7000MTS                      |  |  |
|---------------------|------------------------------|--|--|
| Formal Module Title | Marine Technology Management |  |  |
| Owning School       | Engineering                  |  |  |
| Career              | Postgraduate Taught          |  |  |
| Credits             | 20                           |  |  |
| Academic level      | FHEQ Level 7                 |  |  |
| Grading Schema      | 50                           |  |  |

### **Module Contacts**

#### **Module Leader**

| Contact Name  | Applies to all offerings | Offerings |
|---------------|--------------------------|-----------|
| Sean Loughney | Yes                      | N/A       |

#### **Module Team Member**

| Contact Name         | Applies to all offerings | Offerings |
|----------------------|--------------------------|-----------|
| Eduardo Blanco Davis | Yes                      | N/A       |

### **Partner Module Team**

## **Teaching Responsibility**

| LJMU Schools involved in Delivery |  |
|-----------------------------------|--|
| Engineering                       |  |

## **Learning Methods**

| Learning Method Type | Hours |
|----------------------|-------|
| Lecture              | 24    |
| Tutorial             | 12    |

## Module Offering(s)

| Offering Code | Location | Start Month                         | Duration |
|---------------|----------|-------------------------------------|----------|
| SEP-CTY       | CTY      | September                           | 12 Weeks |
| SEP_NS-CTY    | СТҮ      | September (Non-standard start date) | 12 Weeks |

### **Aims and Outcomes**

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The aim of this module is to provide knowledge about how vessel and offshore equipment and systems are managed. In particular the regulations, procedures and strategies that are in place to ensure the marine asset (vessel or offshore installation) is Fit for Service.

## **Learning Outcomes**

### After completing the module the student should be able to:

| Code | Description   |
|------|---|
| MLO1 | Explain and justify the essential role and responsibilities of the marine technical superintendent as a manager in the safe and effective operation of a vessel or offshore facility.       |
| MLO2 | Show a critical awareness of the systems and equipment which must comply with international conventions, and the process of obtaining and maintaining certificates/certification.           |
| MLO3 | Critically evaluate the full range of specialist knowledge and skills which are required to support the technical operation and maintenance of a vessel or offshore facility.               |
| MLO4 | Consider the typical personnel needed and the qualifications and certification that they require in order to work in this field.  |
| MLO5 | Analyse and critically evaluate the core management and leadership skills, which are needed for managing self and others within the context of the marine technical management environment. |

#### **Module Content**

### **Outline Syllabus**

Knowledge of safety management systems as well as internal and external auditing procedures as well as understanding the certification of compliance for vessels, and the management procedures that ensure marine structures remain in class. This includes but is not limited to study of compliance with relevant standards and adherence to regular surveys, in service, to ensure continuing compliance with the standards. Awareness of Marine risk and safety (accident analysis including human life loss, property loss, and environmental impact) and the notions of frequency, consequences, acceptability, ALARP, etc. Risk assessment including risk acceptance criteria, hazard identification, frequency estimation, consequences analysis, and risk reduction methodologies. Marine regulatory framework, comprising of rules and regulations covering design and operational issues of ships and offshore facilities. A knowledge of systems and technologies covering fundamentals of ship/offshore facility design, propulsion (ships), machinery, and operation & maintenance, including, but not limited to emission abatement equipment, ballast water treatment systems, and state-of-the-art energy efficient technologies.

| Module Overview |  |  |  |
|-----------------|--|--|--|
|                 |  |  |  |
|                 |  |  |  |

#### **Additional Information**

This module contributes to the development of specialist management skills required to operate in a management role such as that of a Marine Technical Superintendent.

#### **Assessments**

| Assignment Category | Assessment Name             | Weight | Exam/Test Length (hours) | Learning<br>Outcome<br>Mapping |
|---------------------|-----------------------------|--------|--------------------------|--------------------------------|
| Report              | Managing technical projects | 40     | 0                        | MLO2, MLO3                     |
| Centralised Exam    | Exam                        | 60     | 2                        | MLO5, MLO1,<br>MLO4            |