

Maritime and Offshore Safety Analysis

Module Information

2022.01, Approved

Summary Information

Module Code	7009MSC
Formal Module Title	Maritime and Offshore Safety Analysis
Owning School	Engineering
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

Teaching Responsibility

LJMU Schools involved in Delivery
Engineering

Learning Methods

Learning Method Type	Hours
Lecture	22
Tutorial	11

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	To enable students to understand and implement the requirements of formal safety design, assessment and review in marine, offshore and port areas.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Demonstrate the analyses required for safety evaluation from both design and operational aspects within the marine and offshore engineering environment.
MLO2	2	Balance the requirements of design for safety and management of safety in the marine environment.
MLO3	3	Specify how safety may be controlled within the marine and offshore engineering environment.
MLO4	4	Develop a formal safety assessment on both a qualitative and quantitative basis that can be applied within the context of marine and offshore engineering.

Module Content

Outline Syllabus	Introduction to safety and risk.Risk and safety regulations in marine engineering.Hazard identification techniques.Consequence analysis.Safety and risk evaluation.Human factors and safety management.Risk reduction and criteria.Novel risk modelling and decision making techniques.Marine and offshore case studies.
Module Overview	
Additional Information	The module is designed to provide the underpinning knowledge and understanding to implement formal maritime safety assessment procedures.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Centralised Exam	Examination	70	2	MLO1, MLO2, MLO3, MLO4
Essay	Safety Analysis Report	30	0	MLO1, MLO2, MLO3, MLO4

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Jin Wang	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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