

Offshore Operations

Basic Course Specification		
Course Title	Course Code	Program on which the course is given
Offshore Operations	OS 410	Bachelor
Academic Year	Specialization (units of study)	Pre-Requisites
2020-2021	Theoretical 1 hrs./week Application 3 hrs./week Credit 2 Cr	None

Overall Course Objectives

On completion of this course, students should be gaining the knowledge for the relationship between the vessel and the offshore base, Master & base manager responsibilities. As well as anchor handling operations, the equipment used and the procedures in shallow waters and +300 m depths in addition to wire rope socketing, maintenance and to give participants knowledge and ability to inspect wire ropes according to IMCA's recommendations. Also, the objective of this course is to give the participant the necessary knowledge of towing operations, Types of Personnel transfer and methods of mooring used with the offshore operations. Causes of Wire Rope Deterioration and Guidance on Discard.

Course Learning Outcomes By successful completion of the course each student will be able to:

Topic	Linking to PLOs	Midterm Assessment	12 th Week Assessment	Class Activities	Final Exam
1. Apply operations Roles and Responsibilities	g	√	√		√
2. Recognize how to deal with various types of anchor handling and mooring equipment	i	√		√	√
3. Describe anchor handling and towing operations plane.	f	√			√
4. Apply the safety precautions during the various operations.	c		√		√
5. Apply Operational Risk Management	e	√	√		

Course Content

Lec./ Week #	Topic	Hrs. #	Theoretical	Application
1	Responsibilities. Anchor handling Operations.	4	1	3
2	Anchor handling Operations. Anchor handling equipment cont.	4	1	3
3	Operational Procedures (PCP Operations). Cont. Operational Procedures (PCP Operations)	4	1	3

Course Content				
Lec./ Week #	Topic	Hrs. #	Theoretical	Application
4	Anchor handling operations in deeper water. Cont. Anchor handling operations in deeper water.	4	1	3
5	Towing Operations. Cont. Towing Operations.	4	1	3
6	Cont. Towing Operations. Cont. Towing Operations.	4	1	3
7	7 th Week Exam	4	1	3
8	Personnel transfer operation. Pre-lift Planning.	4	1	3
9	Mooring operations. Buoys	4	1	3
10	SPM Location and Water Depth SPM – advantages	4	1	3
11	Causes of Wire Rope Deterioration and Guidance on Discard. Fatigue, Broken Wires.	4	1	3
12	12 th Week Exam	4	1	3
13	Cont. Causes of Wire Rope Deterioration and Guidance on Discard. Abrasion, Crushing and Crossover Damage	4	1	3
14	Basket/Lantern/Birdcage Deformation. Un-Laying, Diameter Reduction as a Result of Core Deterioration	4	1	3
15	Diameter Reduction as a Result of Core Deterioration, Local Increase in Wire Rope Diameter. Corrosion.	4	1	3
16	Final Assessment			
Total Hours		60	15	45
Teaching & Learning Methods		Facilities Required for Teaching & Learning Methods		
<ul style="list-style-type: none">Explaining and demonstrating the lesson contentsDelivery of experienceDiscussing and asking questions to interact with students- Solving examples		White Board& Data Show		
Students Assessment Methods				
Assessment Schedule				
Assessment#1		Week 7		
Assessment#2		Week 12		
Assessment#3		Week 16		
Grading Method				

Course Content					
Lec./ Week #	Topic		Hrs. #	Theoretical	Application
Midterm Assessment		Written exam		30%	
12 th week Assessment		Written exam		20%	
Class Activities		Participation - Quiz		10%	
Final Exam		Written exam		40%	
Total			100 %		
Assessment criteria shall meet the standards of the STCW 78 convention "as amended"; and in the light of the related IMO model courses.					
Staff Requirements					
Master FG/Ph.D.					
List of References					
Course Notes			Essential Books		
Lecturer notes			Offshore support vessels		
Recommended Books			Periodicals and Publications		
<ul style="list-style-type: none">Offshore Service vessels ,Tugs and Special shipsGuidelines for Offshore Marine Operationsa practical guide to the mooring and anchoring of small boats. Maersk training course.					
Others (websites, e-books...etc)					
None					

Accreditation Bodies
*Egyptian Authority for Maritime Safety (EAMS) *European Commission (EC) *ISO (9001 – 2015) DNV-GL* *Central Evaluation and Accreditation Agency Hanover, Germany (ZEVA) *Ministry of Education (KSA) Ministry of Higher Education (Greece)* *Ministry of Higher Education (Oman) *Commission for Academic Accreditation (CAA), Ministry of higher Education (UAE) *University of Plymouth, United Kingdom (dual degree)

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