

Advanced Offshore Operations

Basic Course Specification					
Course Title	Course Code	Program on which the course is given			
Advanced Offshore Operations	OS 416	Bachelor			
Academic Year	Specialization (units of study)	Pre-Requisites			
2020-2021	Theoretical 1 hr./week Application 3hrs./week Credit 2 Cr	OS 410			
Overall Course Objectives					
<p>On completion of this course, students should be gaining the knowledge for special types of operations that carried out in the oil and gas services industry which carried out by supply vessels and offshore units and installations such as cable laying, pipe laying, seismic survey dynamic positioning, diving operation and ROV survey which serve the industry before and during drilling and production.</p> <p>At the end of this course, the student will be able to understand the operations carried out by supply vessels as:</p> <ul style="list-style-type: none"> • Seismic survey. • Cable layering operation. • Pipe laying operations. • Operations to be carried out by ROV unit. • Dynamic Positioning. 					
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. Identify Dynamic Positioning principles	E	√		√	√
2. Apply the theory of DP	J	√		√	√
3. Assess pipe and cable laying procedure	J		√	√	√
4. Apply the skills of Cable and pipe operations	J		√	√	√
5. Operate DP system efficiently, diving equipment and ROV components.	G		√		√
Course Content					
Lec./ Week #	Topic	Hrs. #	Theoretical	Application	
1	Introduction to DP & abbreviations	4	1	3	
2	Examples of DP operations	4	1	3	
3	DP principles	4	1	3	

4	Positioning reference systems	4	1	3
5	Cont. Positioning reference systems	4	1	3
6	DP operations	4	1	3
7	7th Week Exam	4	1	3
8	Cont. DP operations	4	1	3
9	DP planning	4	1	3
10	Key of DP personnel	4	1	3
11	Seismic marine operations	4	1	3
12	12th Week Exam	4	1	3
13	Diving & ROV operations	4	1	3
14	Cable laying operation	4	1	3
15	Pipe laying operation	4	1	3
16	Final Assessment			
Total Hours		60	15	45
Teaching & Learning Methods		Facilities Required for Teaching & Learning Methods		
Explaining and demonstrating the lesson contents – Delivery of experience - discussing 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				
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	<ul style="list-style-type: none"> • DP operator's handbook • Guidelines for Lifting Operations IMCA SEL 019, IMCA M 187 – October 2007
Recommended Books	Periodicals and Publications
DP operator's handbook	
Others (websites, e-books...etc)	
None	

Accreditation Bodies
<ul style="list-style-type: none"> *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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