



**DEMS**

*Beyond Engineering*

# FEA Analysis ( for Riser, Umbilical and Mooring Applications) Course



# Subsea Specialist Course 1

<b>Course</b>	Subsea Introduction and General Awareness
<b>Trainer(s)</b>	Mohsen Shavandi

<b>Topic</b>	<b>Day 1 Morning</b>	<b>Day 1 Afternoon</b>	<b>Day 2 Morning</b>	<b>Day 2 Afternoon</b>
Introduction and Overview				
Field Economics/ Architecture				
System Configuration				
Introduction to Well Design				
Introduction to Drilling				
Introduction to Completions				
Xmas Tree Concepts				
Templates and Manifolds				
Risers and Umbilical's				
Tie-Ins				
Production Control Systems				
Workover Systems				
ROV Intervention Systems				
Subsea Codes and Standards				
Subsea Valves				
FAT, PVT, SIT				

# Subsea Specialist Course 5

<b>Course</b>	FEA Analysis (for Riser, Umbilical, and Mooring Applications)
<b>Trainers</b>	Srinivas Vishnubhotla, Aravind Nair

Topic	Day 1 Morning	Day 1 Afternoon	Day 2 Morning	Day 2 Afternoon	Day 3 Morning	Day 3 Afternoon
Environmental Loads and Load Conditions	Green					
Static Finite Element Analysis	Green					
Dynamic Time Domain Analysis		Green				
Wave Modelling in Riser Analysis		Green				
Hydrodynamic Loading in Riser Analysis			Green			
Floater Motions			Green			
Riser and Umbilical Design Codes				Green		
Extreme Load Effect Assessment				Green		
Fatigue Load Effect Assessment					Green	
Vortex Induced Vibration Analysis					Green	
Riser Interference Analysis						Green
Cross Sectional Analysis						Green