MOE104
Marine Operations & Management in Offshore Fields
Course Introduction:

Today, offshore activities take place in the waters of more than half the nations on earth. Offshore operators drill wells from modern steel or concrete structures, that in many cases, movable. Further, offshore rigs have drilled in waters over 7,500 feet (over 2,200 meters) deep and as far as 200 miles (over 300 kilometers) from shore. Offshore drilling and production have progressed far beyond any earlier expectations. Offshore work today involves a wide range of technologies. These technologies are similar in many cases to those used to find, produce, and transport oil and gas on land. Offshore activities include, however, additional traditional technologies that relate to a marine environment. Unlike oil operations on land, offshore operation involve marine operations, meteorology, naval architecture, mooring and anchoring techniques, and buoyancy, stability, and trim.

Marine Operations is the blood of the Offshore Oil and Gas Industry. Proper planning, controlling and management of the marine operations lead to a smooth offshore Oil & Gas operations and contrary is correct. This course is designed to provide participants with understanding of safe and effective marine operations in the support of offshore operations. It will cover the use of vessels in the lifecycle of an offshore development, the importance and type of vessels to different operational stages in the life of the offshore field, the types of offshore installation and stages of operation, the anchor handling procedures, the supply and resupply, the differences between shallow and deep water operations, the process of chartering and brokering vessels, the market and commercial aspects, Marine legislations, Health/Safety/Environment (HSE) and its applications to the marine operations, Management of the marine operations during mobilization, operations and post-mobilizations. The course will also provide details of the relevant use of marine vessels during the life of an offshore field which includes mobilization issues, operation of the relevant vessels, and the nature of equipment used, not only operational equipment but essential vessel equipment fit. Further, the course will explain the marine support to Exploration and Survey, the Well intervention and the subsea operations, the offshore construction and pipe laying, the ROV and AUV operations, the production and maintenance of the offshore fields which include survey and diving operations.

Course Objectives:

Upon successful completion of this course, the delegates will be able to:

✓ Have a very good understanding of offshore marine operations including the history of the industry, vessel utilization, types of offshore installation and stages of operation
✓ Become familiar with exploration, well maintenance & anchor handling and gain knowledge about offshore construction
✓ Learn the production & operations in offshore and know the difference between shallow water and Deepwater operations
✓ Develop an in-depth knowledge of the market and commercial aspects of offshore marine operations by reviewing how the industry works and analyzing the current major players in the market
✓ Understand legislation, health, safety and environment as applied in offshore marine operations and become aware with the various offshore safety organizations as well as the marine warranty survey (fit for purpose)
✓ Review & improve the management of offshore operations by following the pre-operations, operations & post-operations procedures and requirements
✓ Identify the various operations and technical equipments used in offshore marine operation and be able to recognize their importance in exploration and survey
✓ Determine the different types of well intervention services used in offshore marine operations and become familiar with the equipments & requirements needed in construction

Who Should Attend?
This course has been designed to be suitable for anyone with an interest or a need to know more about the offshore marine operations, in particular for Field Managers & Superintendents, Marine Operations Managers, Marine Superintendents, Marine Supervisors & Marine Engineers, Barge Superintendents & Deck Foremen, Captains, Masters and Marine Officers, Surveyors and Positioning Chiefs, HSE Management and Staff, Safety Officers, Emergency Response Teams & Medics Derrick Crane Operators, Winch Engineers & Supervisors, AHTS Deck Leaders and Deck Crew Young engineers, managers, business development executives involved in the offshore industry and those within the sector seeking to acquire a greater awareness of this segment, or simply looking to update their knowledge.

Course Outline:

Day 1:

- Examining Typical Offshore Organizational Structure
- Process Safety Management and Offshore Operations
- Implementation in Marine Operations
**Day 2:**

- Developing Process Safety Implementation Plan in Marine Operations
- Internal Inspection (Maintenance & Audit Review)
- Identification of Issues
- Implementation Procedures & Program Outlining

**Day 3:**

- Risk Assessment for Vessels
- Identification of Critical Equipments
- Process Safety Indicators in Marine Operations
- Accident Response in Marine Operations

**Day 4:**

- Internal Inspections Program
- Management of Change Program
- Third Party Safety Management
- Risks in Delivering PSM Project (Internal & External)

**Day 5:**

- Mitigating Factors
- Offshore construction; equipment
- Fabrication; transportation; integration; installation project management
- Life-cycle considerations, including decommissioning

**Course Certificate:**

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

**Course Fees:**

To be advised as per the course location. This rate includes participant’s manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionaires
- Group Work
- Discussion
- Presentation

Course Timings:

Daily Course Timings:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00 - 08:20</td>
<td>Morning Coffee / Tea</td>
</tr>
<tr>
<td>08:20 - 10:00</td>
<td>First Session</td>
</tr>
<tr>
<td>10:00 - 10:20</td>
<td>Coffee / Tea / Snacks</td>
</tr>
<tr>
<td>10:20 - 12:20</td>
<td>Second Session</td>
</tr>
<tr>
<td>12:20 - 13:30</td>
<td>Lunch Break &amp; Prayer Break</td>
</tr>
<tr>
<td>13:30 - 15:00</td>
<td>Last Session</td>
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