Training Course on Offshore Wind Integration and Decommissioning for Oil and Gas Firms

Professional Development Training Course Outline

Category	Oil and Gas	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

As the global energy landscape shifts towards sustainability, oil and gas (O&G) firms face growing pressure to adapt. Offshore wind energy presents a powerful opportunity for O&G companies to diversify operations, reduce carbon footprints, and future-proof assets. Training Course on Offshore Wind Integration & Decommissioning for Oil & Gas (O&G) Firms equips professionals with cutting-edge tools, regulatory insights, and engineering strategies to successfully transition or co-develop offshore wind projects alongside traditional energy infrastructures.

With increasing demand for green energy solutions, the integration of offshore wind technologies into existing O&G frameworks is more than a trend—it's a strategic imperative. This course empowers engineers, project managers, and decision-makers to bridge the knowledge gap, master end-of-life asset management, and explore how to monetize decommissioned fields through renewable repurposing. Participants will gain industry-aligned skills and analyze global case studies to uncover best practices in wind farm deployment, grid interconnection, hybrid energy systems, and sustainable decommissioning.

Programme Curriculum

Training Course on Offshore Wind Integration & Decommissioning for Oil & Gas (O&G) Firms

Introduction

As the global energy landscape shifts towards sustainability, oil and gas (O&G) firms face growing pressure to adapt. Offshore wind energy presents a powerful opportunity for O&G companies to diversify operations, reduce carbon footprints, and future-proof assets. Training Course on Offshore

Wind Integration & Decommissioning for Oil & Gas (O&G) Firms equips professionals with cutting-edge tools, regulatory insights, and engineering strategies to successfully transition or co-develop offshore wind projects alongside traditional energy infrastructures.

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Course Objectives

1. Understand the fundamentals of offshore wind integration in traditional O&G environments.
2. Identify environmental, technical, and regulatory challenges in offshore wind development.
3. Master strategies for hybridization of oil rigs with offshore wind systems.
4. Learn advanced project planning for integrated renewable infrastructure.
5. Analyze energy transition frameworks using real-world offshore case studies.
6. Evaluate cost-effective methods for platform repurposing and asset reutilization.
7. Gain insights into floating wind turbine technology for deepwater operations.
8. Understand cross-sector supply chain collaboration for clean energy projects.
9. Explore grid connection strategies for offshore renewable systems.
10. Assess risk mitigation and safety protocols during decommissioning.
11. Learn about AI and digital twin applications in offshore wind operations.
12. Interpret compliance requirements for sustainable offshore wind projects.
13. Design long-term ROI plans for wind-powered asset transformation.

Target Audiences:

1. Offshore Oil & Gas Engineers
2. Project Managers in Energy Transition
3. Environmental Compliance Officers
4. Marine & Structural Engineers
5. Renewable Energy Analysts
6. HSE Professionals in Offshore Operations
7. Government & Regulatory Stakeholders
8. Asset Decommissioning Consultants

Course Duration: 5 days

Course Modules

Module 1: Offshore Wind Fundamentals for O&G Firms

- Overview of wind energy technologies

- Comparison: Fixed-bottom vs floating turbines
- Basics of wind farm layout and siting
- Key metrics for wind project viability
- Offshore wind supply chain overview
- **Case Study**: Equinor’s floating wind pilot with North Sea oil platforms

Module 2: Integration Strategies with Existing O&G Infrastructure

- Assessing rig compatibility for hybrid systems
- Design retrofits for wind-electric conversion
- Shared grid infrastructure models
- Offshore wind-hydrogen production synergy
- Tech stack for monitoring hybrid systems
- **Case Study**: Shell and Eneco’s CrossWind project in the Netherlands

Module 3: Decommissioning Process & Regulatory Landscape

- Lifecycle of offshore assets
- Environmental impact assessment methods
- Permitting and stakeholder engagement
- Regulatory frameworks in major markets (US, EU, APAC)
- Circular economy in decommissioning
- **Case Study**: UK North Sea Brent Field decommissioning program

Module 4: Floating Wind Technology for Deepwater Fields

- Engineering principles of floating turbines
- Mooring and anchoring systems
- Dynamic cable routing challenges
- Subsea integration with gas pipelines
- Load and fatigue management
- **Case Study**: Hywind Tampen floating wind project by Equinor

Module 5: Digitalization in Offshore Wind Projects

- Role of AI in predictive maintenance
- Digital twin technology applications
- IoT for remote asset tracking
- SCADA systems for wind operations
- Automation in turbine diagnostics
- **Case Study**: Siemens Gamesa’s digital wind diagnostics in the North Sea

Module 6: Offshore Grid Connection & Energy Storage

- Subsea cable technology overview
- HVDC vs HVAC transmission
- Grid synchronization challenges

- Offshore battery and energy storage solutions
- Integration with national energy grids
- **Case Study**: Dogger Bank Wind Farm connection to UK National Grid

Module 7: Risk Management & Safety Protocols

- Hazard identification in offshore wind
- Emergency response planning
- Decommissioning health and safety protocols
- Risk assessment tools for mixed-use platforms
- Legal liabilities and insurance
- **Case Study**: Safety audit during hybrid decommissioning in Gulf of Mexico

Module 8: Economic Models & Investment Planning

- CAPEX and OPEX breakdowns
- Government incentives and carbon credits
- Energy ROI projections
- Joint venture financing models
- Revenue from repurposed assets
- **Case Study**: Reuse of Danish oil platforms for wind-to-hydrogen production

Training Methodology

- Expert-led interactive workshops
- Case-based group exercises and discussions
- Hands-on planning simulations and scenario modeling
- Visual demonstrations using CAD & digital twin software
- Assessments and feedback to track learner progression

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

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