Certificate in International Downstream Oil & Gas Operations

Value Addition and Risk Reduction in Refining & Processing

Introduction

Without the downstream oil and gas sector, the transportation and future energy market roadmaps won't be comprehensive. This advanced course on Course N Carry Certification focuses on the elements that make downstream oil and gas operations successful.

The processes of petroleum refining and their integration with petrochemicals to greatly increase return on investments and boost process efficiencies are covered in this Course N Carry Certification training session on the Certificate in International Downstream Oil & Gas Operations. In addition, merging downstream and upstream business strategies can lower corporate risk exposure from climate control laws and fluctuations in crude oil prices. Your business would become more lucrative and competitive if you could manage this significant corporate price-risk. Decision-makers will receive from the analytics insights offered here the essential data and facts needed to future-proof their business models.

Objectives

After completing this training program for Course N Carry Certification, learners will be able to:

- Recognize every aspect of downstream oil and gas activities and procedures.
- Recognize the recent developments in the downstream industry.
- Recognize the tactics used at refineries and in the sales and marketing of refined products.
- Increase the profitability of the operations of refineries.
- Refinery and petrochemical integration to increase Net Return
- Main factors influencing downstream profitability

Training Methodology

Expert-led lectures provide foundational and advanced knowledge of downstream oil and gas operations, covering refining, marketing, and distribution processes. Ensures

participants understand core concepts, industry terminologies, and current trends in the downstream sector. Group discussions and individual assessments on global downstream projects and challenges. Offers practical experience, helping participants apply theoretical knowledge in simulated industry environments.

Organizational impacts

Market Positioning: Developing strategic approaches to global energy markets, including supply chain optimization, price management, and competitive positioning.

Risk Management: Creating robust frameworks to mitigate geopolitical, economic, and environmental risks associated with international oil and gas distribution.

Technological Innovation: Driving technological advancements in refining, transportation, and distribution processes to improve efficiency and sustainability.

Investment and Capital Flow: Facilitating substantial investments in infrastructure, technology, and human capital.

Revenue Generation: Contributing to national and regional economic growth through tax revenues and economic activities.

Supply Chain Management: Coordinating complex international networks of production, refining, and distribution.

Logistics Optimization: Developing sophisticated strategies for fuel transportation, storage, and distribution across different geographical contexts.

Performance Benchmarking: Establishing industry standards and best practices for operational excellence.

Personal Imapct

This is an important topic that focuses on how individual professionals can significantly influence operations, safety, efficiency, and overall performance in the downstream oil and gas sector.

The "Impact of the Person" typically encompasses several critical dimensions:

- Professional Competence and Skills
- In international downstream oil & gas operations, the individual's technical knowledge, expertise, and skill set are crucial. This includes:
- Technical proficiency in areas like refinery operations, petrochemical processing, logistics, and supply chain management
- Understanding of complex equipment and advanced technological systems

- Ability to adapt to different operational standards across various international contexts
- Continuous learning and professional development
- Safety Culture and Risk Management
- Individuals play a pivotal role in maintaining safety standards:
- Personal commitment to safety protocols
- Risk awareness and proactive hazard identification
- Adherence to international safety regulations
- Training and mentoring of team members in safety practices
- Cultivating a culture of safety consciousness
- Cross-Cultural Competence
- In international operations, personal interpersonal skills are critical

Who should attend?

Based on the context of a Certificate in International Downstream Oil & Gas Operations, here are the key professionals who would benefit from attending such a program:

- Petroleum Industry Professionals
- Mid-level and senior employees working in downstream oil and gas sectors
- Operations managers responsible for refining, distribution, and marketing activities
- Professionals seeking to expand their international operational knowledge
- Technical Specialists
- Refinery engineers
- Logistics and supply chain specialists
- Process engineers in petroleum product handling
- Technical managers overseeing international oil and gas infrastructure
- Business Development Personnel
- Commercial managers in oil trading
- Business development executives in international energy companies
- Strategic planning professionals in downstream petroleum sectors
- Professionals involved in international market expansion
- Regulatory and Compliance Experts
- Compliance officers in oil and gas companies
- Professionals dealing with international trade regulations
- Risk management specialists in energy sectors
- Legal professionals specializing in international petroleum operations
- Finance and Investment Professionals
- Financial analysts in energy investment

Course Outline

Day 1

Shams Business Center, Sharjah Media City, Sharjah, UAE
PO Box: 49638
Tel: +971 55 323 6764 Fax: +971 55 323 6764 E-Mail: subhashini@itrobes.com

- Overview of the Oil & Gas Industry
- Global energy landscape
- Upstream, midstream, and downstream sectors
- Role of downstream operations in the global energy supply chain
- Fundamentals of Petroleum Refining
- Crude oil composition
- Basic refining processes
- Distillation and fractionation
- Primary and secondary processing techniques
- Industry Safety and Regulatory Frameworks
- International safety standards
- Environmental regulations
- Health, Safety, and Environment (HSE) principles
- Key regulatory bodies and their roles

Day 2

Refinery Operations and Processes

- Detailed Refining Processes
- Crude distillation units
- Conversion technologies
- Catalytic cracking
- Hydrocracking
- Reforming processes
- Product Specifications
- Fuel standards
- Gasoline, diesel, and jet fuel specifications
- Quality control mechanisms
- International fuel quality regulations
- Refinery Economics and Optimization
- Cost structures
- Margin analysis
- Operational efficiency
- Key Performance Indicators (KPIs)

Day 3

Storage, Transportation, and Distribution

- Storage Infrastructure
- Tank farm design and management
- Storage technologies
- Inventory management
- Safety considerations

- Transportation Logistics
- Pipeline systems
- Marine transportation
- Road and rail transport
- International shipping regulations
- Terminal Operations
- Loading and unloading procedures
- Blending operations
- Quality management
- Inventory tracking systems

Day 4

Trading and Market Dynamics

- Global Oil & Gas Markets
- Price mechanisms
- International trading platforms
- Futures and derivatives
- Risk management strategies
- Supply Chain Management
- Procurement processes
- International trading protocols
- Contract management
- Risk assessment and mitigation
- Geopolitical Influences
- Impact of global politics on oil markets
- Regional market variations
- Sanctions and trade restrictions
- Economic factors affecting downstream operations

Day 5

Advanced Technologies and Future Trends

- Digital Transformation in Downstream Operations
- IoT and industrial automation
- Predictive maintenance technologies
- Advanced analytics
- Artificial intelligence in refinery management
- Sustainability and Energy Transition
- Alternative fuels
- Renewable energy integration
- Carbon capture and storage
- Environmental technologies
- Future of Downstream Operations

- Emerging market trends
- Technological innovations
- Climate change adaptation
- Long-term industry outlook

Shams Business Center, Sharjah Media City Free Zone, Al Messaned, Sharjah, UAE PO Box: 49638

Tel: +971 55 323 6764

Fax: +971 55 323 6764

E-Mail: subhashini@itrobes.com