Training Course on Petroleum Products: Specifications, Properties and Market Demand

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

In today's dynamic energy landscape, understanding the **specifications, properties, and market demand** of petroleum products is crucial for industry professionals and decision-makers. With global energy transition trends, **refinery optimization**, and **clean fuel technologies** becoming increasingly significant, this course equips participants with a thorough understanding of the **chemical composition**, **physical characteristics**, and **quality standards** of various petroleum products. Learn how these properties influence **fuel performance**, **market segmentation**, and **pricing structures** across global supply chains.

This comprehensive training will also cover emerging industry trends such as **low-sulfur fuels**, **bio-blending regulations**, and **market forecasting** tools. Whether you are involved in **crude oil trading**, **product marketing**, **refinery operations**, or **quality assurance**, this course bridges the gap between technical knowledge and commercial acumen. Gain practical insights into the latest developments and prepare to thrive in a market driven by **sustainability**, **digitalization**, and **geopolitical energy shifts**.

Programme Curriculum

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Course Objectives

1. Understand the **chemical and physical properties** of key petroleum products.
2. Identify and interpret **international fuel specifications** and **ASTM standards**.
3. Analyze the **refining processes** and their impact on product quality.
4. Evaluate the role of **sulfur content** in product classification and regulation.
5. Learn about **octane/cetane ratings** and their importance in performance.
6. Assess **diesel fuel quality parameters** and cold weather performance.
7. Examine **market demand drivers** in various regions and applications.
8. Apply **product blending techniques** to meet compliance and performance goals.
9. Utilize **market trend analysis tools** and data interpretation.
10. Explore **global pricing mechanisms** and their influence on trading strategies.
11. Understand **logistics, storage, and distribution** of petroleum products.
12. Gain insights into **sustainability initiatives** and **low-carbon fuels**.
13. Understand the impact of **digital transformation** on downstream markets.

Organizational Benefits

- Enhance your team’s **technical competency** in petroleum product specifications and performance.
- Improve **regulatory compliance** with international fuel standards and sustainability goals.
- Boost **market responsiveness** by understanding demand trends and forecasting techniques.
- Support informed **procurement and trading** decisions with technical-commercial knowledge.
- Facilitate **interdepartmental collaboration** between technical, commercial, and operations teams.

Target Participants

1. Refinery engineers
2. Quality assurance managers
3. Fuel traders and marketers
4. Supply chain analysts
5. Environmental compliance officers
6. Petrochemical sales professionals
7. Technical service engineers
8. Energy policy advisors

Course Outline

Module 1: Introduction to Petroleum Products

- Overview of key petroleum product categories
- Crude oil composition and refining overview
- Common product applications and usage
- Economic significance in the global market
- Industry classification and standards

Module 2: Fuel Specifications and Standards

- API gravity, viscosity, flash point, pour point
- International and regional fuel standards (ASTM, EN, ISO)
- Testing methods and certification
- Quality control procedures
- Regulatory bodies and enforcement

Module 3: Refining Processes and Product Output

- Atmospheric and vacuum distillation
- Catalytic cracking and hydrocracking
- Isomerization and alkylation
- Desulfurization and hydrotreating
- Refining margins and product yield optimization

Module 4: Fuel Properties and Performance

- Octane/cetane numbers and performance metrics
- Additives and their role in fuel quality
- Engine compatibility and emissions impact
- Cold flow properties and volatility
- Fuel degradation and storage concerns

Module 5: Market Demand and Forecasting

- Global demand trends and regional analysis
- Seasonal variations and consumption patterns
- Price volatility and supply-demand balance
- Market intelligence tools
- Impact of energy transition and EVs

Module 6: Blending Techniques and Optimization

- Blending economics and fuel customization
- Blending components and ratios
- Compatibility and stability issues
- Octane and cetane improvement strategies
- Case studies on effective blending

Module 7: Environmental and Regulatory Aspects

- Emission regulations and compliance
- Sulfur content limits and clean fuel programs
- Renewable fuel mandates
- Carbon footprint and sustainability metrics

- ESG reporting in downstream operations

Module 8: Logistics, Storage, and Distribution

- Fuel storage systems and safety
- Transportation modes (pipeline, tanker, truck)
- Terminal operations and inventory control
- Distribution economics
- Challenges in global fuel supply chains

Training Methodology

- **Expert-led live sessions** with case-based discussions
- **Interactive workshops** and hands-on exercises
- **Real-world case studies** and industry simulations
- **Knowledge assessments** and feedback loops
- Access to **online learning platform** and resources

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:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com