Refinery & Supply Economics

Consultant / Trainer:
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The **Petrogenium.** Refinery Economics course will provide insight into many aspects of operating the modern refinery as a business, including technical information on refining processes, crude oils and processing options, the place of the refinery in the value chain, refinery cost structure and management, optimization and profit margin, energy and oil loss reduction, management tools and techniques used for economic evaluations in refineries and future trends.

Participants

This **Petrogenium**. course can be tailored for awareness/inexperienced staff, for intermediate and for experienced personnel. Furthermore the course can be customized for a specific refinery, plant or unit. The option for post-course consultancy/help-desk support is also available.

Participants may include: all refinery technical personnel; operations' process engineers and process managers; technical services engineers and managers; refinery planners; newly-hired refinery personnel and current semi-technical personnel who require introductory training to acquire the broader perspective; non-refinery professionals in the Oil & Gas industry or related sectors.

(This course can also be offered as 5 half days.)

Learning Objectives

State the role of the main refining processes, refinery configurations, operating characteristics, crude choice, processing options and desired products, crude and products quality parameters, refinery economics and planning; costing & valuation; trading; petrochemicals; methodology of optimization & product improvement; apply analytical tools to refinery management; supply chain; economic drivers; explain the challenges, opportunities and future trends in the refining industry.

This course includes presentations, simulations, trading game, exercises, interactive sessions (participants can propose relevant topics upfront to discuss in class).

Programme

Day 1

Safety & Introductions

- Welcome, safety, arrangement
- Introduction of participants
- Programme & course objectives

Refinery configurations

Costing and Valuation: YES

Costing and Valuation: Marginal costing

- Valuation of Furfural Extract

Costing and Valuation: Refinery Fuels

- Valuation of Refinery Fuel

Margin optimisation: Crude valuation

- Crude valuation
- Crude processing deal

Day 2

Cost of Critical Gasoil spec (simulation)

Cost of Critical Gasoil spec (LP)

Margin optimisation: Linear Programming

- Analysis of a Refinery programme
- Trading game

Investment economics

Day 3

Chemical investment group exercise

Supply chain planning & execution

- Implementing economic drivers

Course review & close out