

REFINING PROCESSES AND PETROLEUM PRODUCTS



PCE206
Process and
Chemical
Engineering

COURSE TITLE

REFINING PROCESSES AND PETROLEUM PRODUCTS

COURSE DATE/ VENUE

25 - 29 October 2021

London, UK

COURSE REFERENCE

PCE206

COURSE DURATION

05 Days

DISCIPLINE

Process and Chemical Engineering

COURSE INTRODUCTION

This course provides broad technical information on refining processes and petroleum products, enabling a rapid immersion in the refining industry.

COURSE OBJECTIVE

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

- ✓ Describe the composition, main characteristics and new trends of petroleum products
- ✓ Explain the role of various processing units in a refinery
- ✓ Describe the main manufacturing schemes encountered in oil refining
- ✓ Assess the economic environment of this industry

COURSE AUDIENCE

This program is designed for those who have refinery-operating experience or who are involved in supporting operations. New refinery engineers, product sales personnel, fuel buyers, oil-traders, those involved in economic assessment of refining operations or financial analysis of sales / refining. In addition personnel concerned with the sale of equipment, chemicals, supplies, or services to the refining industry should benefit from this course.

Experienced operating personnel and engineering staff should find a great deal of beneficial information, particularly if they have worked in only one area of the refinery and have the need to gain an overview of refining operations.

COURSE CONTENT

DAY 1

Introduction

The Origins of Petroleum

Crude oil Assay and its properties

Crude oil products

Effect on refinery operations

Refinery Terminology

Overview of the petroleum industry

DAY 2

Description of petroleum refining processes and related health and safety considerations

Simple and complex refineries

Refinery flow sheet signs and symbols

Crude oil processing

Desalting

Atmospheric distillation

Vacuum distillation

- Distillation - pressure, steam
- Hydro treating Hydrodesulphurization

DAY 3

Catalytic cracking

Platforming

Visbraking

Hydrocracking

Alkylation

Bitumen blowing Gas Treating

DAY 4

Product Slate – Now and Future:

Products and specifications

Gasoline

Kerosene/Jet Fuel

Fuel Oil/Diesel Fuels

Petrochemical Feedstocks

Alternative Fuels

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Effects of Environmental concerns on oil product specifications

Gasoline & Lead phase out

Reformulated Gasoline

Blending of products

DAY 5

Tanks and Storage

Product Transfer

Utilities

COURSE CERTIFICATE

TRAINIT ACADEMY will award an internationally recognized certificate(s) for each delegate on completion of training.

COURSE FEES

\$6,150 per Delegate. This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

COURSE METHODOLOGY

The training course will be highly participatory and the course leader will present, guide and facilitate learning, using a range of methods including formal presentation, discussions, sector-specific case studies and exercises. Above all, the course leader will make extensive use of real-life case examples in which he has been personally involved. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course.

- 30% Lectures
- 30% Workshops and work presentation
- 20% Case studies & Practical Exercises
- 10% Role Play
- 10% Videos, Software or Simulators (as applicable) & General Discussions