



**Scandinavian  
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Training Center

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# Course: Production Planning & Scheduling Petroleum Refineries

| Code | City  | hotel         | Start      | End        | price    | Language - Hours |
|------|-------|---------------|------------|------------|----------|------------------|
| 575  | Alula | Hotel Meeting | 2026-03-15 | 2026-03-19 | 12450 SR | En - 25          |

## Introduction

This programme is specifically designed to identify and resolve issues of production planning and scheduling in petroleum refineries that are most commonly encountered by refinery personnel working in this area. Issues of operations scheduling for petroleum refining are discussed in depth. It will also be enhanced with planning and scheduling examples and will provide relevant background information of the subject.

## Seminar Objectives

- Gain an appreciation of modern planning and scheduling tools that will be useful for planning of crude and product deliveries in their facilities
- Assist in improved operations, optimization, upgrading and modification of existing facilities
- Will result in improved profitability and help in continuous modernization of facilities
- Develop the skills necessary to apply risk assessment techniques

## Training Methodology

Throughout the programme active participation is encouraged and includes open discussions, questionnaires and team exercises of actual examples.



## Who Should Attend?

Process engineers and technologists engaged in planning and scheduling activities who have a minimum of experience and who are required to understand and discuss issues related to their industry

## Programme Outline

### Day 1 - Application of Planning and Scheduling

- Overview of planning and scheduling in oil refineries
- Refinery Configuration:
- Hydro skimming Refinery
- Refineries with Secondary Conversion Process
- Integrated Refineries
- Existing & New Refineries
- Choice of Crude
- Crude oil scheduling
- Choice of Processes
- Capacity utilization of Crudes
- Severity of Process Operations
- Cut-points Optimization
- Facing Upset Situations
- Tankage Requirement

### Day 2 - Improving Product Movements and Releasing Tankages

- Basic Information Required
- Crude Assay
- Intermediate Feed Characteristics
- Yields and Properties



- Different Process Units
- Utilities

### **Day 3 - Product Blending Rules**

- Product Specifications
- New Trends in fuel production
- Environmental Issues
- Crude Cost
- Product Netback

### **Day 4 - Formulation of Problem**

- Refinery Flow-sheets
- Simplified Material Balance
- General Formulation
- Demand Equations
- Product Inventory Control
- Product Quality Control
- Fixed Composition Blend
- Capacity Control/ Constraints
- Availability of Feedstock/ Control

### **Day 5 - Application to a Refinery Worksheet**

- Petroleum Product Movement and Product Exchange
- Marginal Depot Supply and movements
- Commonly Used Methods & Recent Developments
- Mathematical Approach to Solution
- Linear Programming
- Graphic Method
- Vendors Software
- Discussion and Summary



The Scandinavian Academy for Training Center adopts the latest scientific and professional methodologies in training and human resource development, aiming to enhance the efficiency of individuals and organizations. Training programs are delivered through a comprehensive approach that includes:

- Theoretical lectures supported by PowerPoint presentations and visual materials (videos and short films).
- Scientific evaluation of participants before and after the program to measure progress and knowledge acquisition.
- Brainstorming sessions and practical role-playing to simulate real-life scenarios.
- Case studies tailored to align with the training content and participants work nature.
- Assessment tests conducted at the end of the program to evaluate the achievement of training objectives.

Each participant receives the training material (both theoretical and practical) in printed form and saved on a CD or flash drive. Detailed reports, including attendance records, final results, and overall program evaluations, are also provided.

Training materials are prepared professionally by a team of experts and specialists in various fields. At the end of the program, participants are awarded a professional attendance certificate, signed and accredited by the Scandinavian Academy for Training Center.

### **Program Timings:**

- 9:00 AM to 2:00 PM

### **The program includes:**

- A daily buffet provided during the sessions to ensure participants comfort.
- A closing ceremony on the final day to distribute certificates and celebrate participants achievements.