





Course: Storm Water Drainage Study and Design

| Code | City | Hotel | Start | End | Price | Language - Hours |
|------|-------------------------|--------------------|------------|------------|--------|------------------|
| 573 | Casablanca (Morocco) | Hotel Meeting Room | 2025-03-30 | 2025-04-03 | 3450 € | En - 25 |

Objectives

- Understand storm water drainage importance in society
- Determine storm water Drainage systems requirements for a given community
- Understand procedures for analysis and design of storm water drainage systems

Daily Outline

Day One: Introduction, General information and Hydrology

Fundamental Hydrology for Sewer Design

- Factors affecting Floods
- Design frequency criteria
- Drainage Basins
- Storm water flow

Runoff computation methods (Rational Formula, Hydrograph Methods and others...)

Day Two: Storm Drainage Systems

• Storm Water Drainage Systems Components



- Pavement Drainage
- Gutter Flow
- Storm Water Inlets
- Storm Drains

Day Three: Hydraulics of Sewers

- Fundamental Hydraulic for Sewer Design
- Manning's Formula
- Solution of Manning's equation for circular pipes
- Design of Sewer Systems
- Preliminary Design
- Detailed Design
- iii. Principles of Design
- Providing Quality and
- Professional Training Since 1984

Day Four: Design Procedures and Preliminary Design

- Storm Water Drainage Sewers
- Culverts
- Ponds
- Drainage Well

Day Five: Practical problems

Open Discussions



The Scandinavian Academy for Training and Development employs modern methods in training and skills development, enhancing the efficiency of human resource development. We follow these practices:

• Theoretical Lectures:

We deliver knowledge through advanced presentations such as PowerPoint and visual materials,
including videos and short films.

• Scientific Assessment:

• We evaluate trainees skills before and after the course to ensure their progress.

• Brainstorming and Interaction:

 We encourage active participation through brainstorming sessions and applying concepts through role play.

• Practical Cases:

• We provide practical cases that align with the scientific content and the participants specific needs.

• Examinations:

• Tests are conducted at the end of the program to assess knowledge retention.

• Educational Materials:

• We provide both printed and digital scientific and practical materials to participants.

• Attendance and Final Result Reports:

• We prepare detailed attendance reports for participants and offer a comprehensive program evaluation.

• Professionals and Experts:

• The programs scientific content is prepared by the best professors and trainers in various fields.

• Professional Completion Certificate:

Participants receive a professional completion certificate issued by the Scandinavian Academy for
Training and Development in the Kingdom of Sweden, with the option for international authentication.

• Program Timings:

 Training programs are held from 10:00 AM to 2:00 PM and include coffee break sessions during lectures.