Course: PLC & SCADA Systems and Leadership Skills

Code	City	Hotel	Start	End	Price	Language - Hours
542	Rome (Italy)	Hotel Meeting Room	2025-08-04	2025-08-15	8950 €	En - 50

Introduction

We believe that leaders are more "made" than "born." Current leadership research indicates that there are few genetic characteristics that influence one's ability to become a leader. Our role in the program is not to teach one how to become a leader, but to help one learn how to become a more effective leader. From our perspective, leadership is a life-long journey. This course can help you acquire the knowledge, skills, feedback, and opportunities necessary for personal growth.

The program focuses on individual development and is based on the belief that individuals can expand their leadership capacities; they can learn, grow, and change.

The format for the program includes discussion, readings, group activities, and pairing with a mentor. This program is intended to provide advanced engineering aspects of Programmable Logic Controllers (PLC). Emphasis shall be laid on topics relevant to Programmable Logic Controllers programming and troubleshooting.

Operation, characteristics and selection of Programmable Logic Controllers will be studied. Also, features and applications of SCADA systems will be explored. SCADA systems architecture, their interface to the process hardware will be demonstrated. Extensive practical examples will be examined using PLC system.

Objectives

- Inspire and motivate participants to further develop their leadership skills.
- Encourage to take the initiative to use their passion to take action.
- Encourage participants to approach the different styles of leadership with thought

and action.
- Identifying the sources of stresses, its signs, causes and effects and handles it.
- Discussing the different ways for motivating employees.
- Learning how to respond to pressure in the workplace.
- Learning how to manage stress.
- Features of various types of Programmable Logic Controllers
- Programmable Logic Controllers selection for varies applications
- Programmable Logic Controllers programming
- Programmable Logic Controllers interface
- Programmable Logic Controllers troubleshooting
- Testing and operating problems
- Features and applications of SCADA systems
- SCADA systems architecture and interface

Who should attend

This program is targeted to Senior Technicians and Engineers (mechanical and electrical) working in Operation, programming and Maintenance of Programmable Logic Controllers and SCADA systems Effective Leadership, Motivating People and Stress Management for Excellent Business Operation Program is for all leaders, managers and employees who have potentials to get promoted in all careers in both private or governmental organizations, or local or multinational enterprises

Daily Outlines

Day 1:

- Background and leadership theories.
- Leaders vs. Managers.
- Leadership styles.
- Leadership competency model.

- Exercises.

Day 2:

- Developing leadership effectiveness.
- Lesson from leaders.
- Your Leadership Style & Strengths
- Using power and influence to get things done
- Leadership communication strategies
- Exercises

Day 3:

What is motivation?

- Theories of motivation.
- Motivation from concept to application.
- How to motivate supportinate.
- Exercises

Day 4:

What is Stress?

- The Effect of Stress on Physical Health and Well-being
- How much Stress is too much Stress?
- Where does Stress Come from?
- What are the Common Signs of Stress?
- What Type of People are more Prone to Stress?
- What can Management do to Minimize Stress at Work?
- Myths Associated with Stress

- How Stress Kills

How Can we Manage Stress Better?

- Become aware of your stressors, and your emotional and physical reactions to them
- Recognize what you can change
- Reduce your emotional reactions to stress
- Learn to moderate your physical reactions to stress
- Build your physical reserves
- Develop healthy eating habits- Reduce Stress-Promoting Foods : Increase Foods that Improve Wellness
- Maintain your emotional reserves

Day 5:

- Other Strategies for Managing Stress
- Time Management
- Communicating Effectively
- Relaxation
- Breathing Exercises
- Guided relaxation and visualization techniques
- Progressive muscle relaxation
- Immediate stress reduction
- Meditation
- Relaxation therapy
- Problem solving- Types of problems
- Getting Inner Balance
- Modify your behavior
- Handle your anger
- Learn to say "No"

Day 6:

- Introduction to Programmable Logic Controllers.
- Programmable Logic Controllers Design,
- Programmable Logic Controllers structure
- Programmable Logic Controllers Operation
- Programmable Logic Controllers Selection

Day 7:

- Programmable Logic Controllers Interfacing
- Interfacing Digital Devices.
- Interfacing Analog Devices.
- Programmable Logic Controllers Programming
- Ladder programming

Day 8:

- Application examples
- Start/Stop Motor.
- Motor Speed Control.
- ON/OFF Temperature Control.
- Programmable Logic Controllers Industry application
- Programmable Logic Controllers Simulation Program
- Programmable Logic Controllers systems maintenance
- Programmable Logic Controllers troubleshooting

Day 9:

- SCADA System Project Planning
- SCADA Definitions
- Communication Systems

- Communication System Components
- Protocols
- Modems
- Synchronous and Asynchronous
- Consumer Information Service (CIS)
- Geographical Information System (GIS)
- System Openness – Use of Industrial Standards
- Applicable Processes
- Elements of a SCADA System
- Remote Control
- Safety Instrumented Systems
- Regulatory Requirements

Day 10:

- Radio
- Simplex and Duplex Systems
- Radio Frequencies
- Path Studies and Seasonal Variations
- Solar Variations
- Reliability and Maintenance
- Satellite Communications
- Operator Interface
- Security Considerations
- Alarming
- Control Change Screens
- Status Screens
- Graphics and Trending
- Reports
- Parallel Operator Interface

The Scandinavian Academy for Training and Development 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 and Development.

Program Timings:

- 9:00 AM to 2:00 PM in Arab cities.
- 10:00 AM to 3:00 PM in European and Asian cities.

The program includes:

- A daily buffet provided during the sessions to ensure participants comfort.