London TDM

Quality and Productivity Improvement Training Courses

Course Venue: United Kingdom - London

Course Date: From 08 March 2026 To 12 March 2026

Course Place: London Paddington

Course Fees: 6,000 USD

Introduction

Statistical Process Control (SPC) is a method of quality control which employs statistical methods to monitor and control a process. This professional course is designed to equip participants with the skills and knowledge required to effectively implement SPC techniques in their respective operations, leading to improved quality and efficiency.

Objectives

- Understand the fundamental concepts of SPC and its importance in quality management.
- Learn how to construct and interpret control charts.
- Identify and analyze process variations and their causes.
- Implement SPC tools to monitor and improve processes.
- Develop the ability to use statistical software for SPC application.

Course Outlines

Day 1: Introduction to Statistical Process Control

- Overview of Quality Management and the role of SPC
- History and evolution of SPC methods
- Basic statistical concepts essential for SPC
- The DMAIC process in SPC
- Case studies of successful SPC implementation

Day 2: Control Charts and Process Variability

- Types of control charts and their applications
- Constructing control charts for variables and attributes
- Analysis of control charts for process variations
- Special causes vs. common causes of variations
- Hands-on practice with control charting tools

Day 3: Advanced SPC Techniques

- Cumulative Sum (CUSUM) and Exponentially Weighted Moving Average (EWMA) charts
- Multivariate SPC methods
- Process capability analysis and metrics
- Introduction to design of experiments in SPC
- SPC in non-manufacturing processes

Day 4: Implementing SPC in Real-world Scenarios

- Identifying processes eligible for SPC applications
- Developing an effective SPC implementation plan
- Overcoming challenges in SPC implementation
- Integration of SPC with other quality management systems
- Team dynamics and roles in SPC deployment

Day 5: Software Applications and Future Trends in SPC

- Introduction to statistical software for SPC
- Data collection and analysis using SPC software
- Exploring automation in SPC data monitoring
- Future trends in SPC and quality management
- Course review and assessment