Cheminformatic Institute of Science Studies Lucknow

PG Diploma Program in Quality Control (PGPQC)

Program Curriculum

Module1 : Basics of Quality

1.Quality Improvement In The Modern Business
2. The DMAIC Process
3.Modeling Process Quality
4.Inferences About Process Quality
5.Methods And Philosophy Of Statistical Process Control

Module 2: Statistical Quality Control

1.Introduction to Statistical Quality Control
2.Introduction to Control Charts
3.Essential Elements in a Quality Control Program
4.Process of Capability Studies
5.Designed Experiments
6.Specification
7.Distribution
8.Correlation
9.Control Chart Patterns
10.Process Control Charts

Module 3: Fundamentals of Quality Control and Improvement

1.Introduction
2.Statistics and Measurement
3.Process Monitoring
4.the first Appendix

Module 4: Quality management in mechanical

1.Quality Management
2.Artificial Intelligence Tools
3.Improving 'Improvement' by Refocusing Learning
4.Project Costs and Risks Estimation
5.What Quality Management Allied to Information
6.Reducing Mirror Slippage of Nightstand
7.Redesigning the Service Process for Total Quality in Government Hospitals
8.Some Applicable Methods to Analyze and Optimize System Processes in Quality Management
9.Competence Education and Training for Quality

Module 5: Quality Management Systems

1. Introduction
2.Economic Impact and Eff ect of Quality and Standards
3.The Jurisdiction Issue: Roles of the Private and Public Sectors
4. Evaluating Compliance with Standards: The Conformity Assessment Framework
5. Evaluating Compliance with Standards: The Conformity Assessment Framework
6.The ISO 9000 Quality Management Standards
7.Standardization in Latin America
8.Accreditation in Latin America

Module 6: Contemporary Quality Concepts

1.INTRODUCTION
2.QUALITY FACTORS
3.Process Areas in Capability Maturity Model (CMM)
4.PROCESS AND PRODUCT QUALITY ASSURANCE (PPQA) PROCESS AREA IN CMMI
5.PROCESS CLASSIFICATION
6.SQA PLANNING AND STANDARDS
7.Verification & Validation
8.Software Testing Fundamentals
9.Levels of Testing
10.Different types of Testing
11.Static & Dynamic Testing
12.Black Box & White Box Testing

Module 7 : Total Quality Management
1.Understanding quality
2.Models and frameworks for total quality management
3.Leadership and commitment
4.Policy, strategy and goal deployment
5.Partnerships and resources
6.Design for quality
7.Performance measurement frameworks
8.Self-assessment, audits and reviews
9.Process management
1.Process redesign/engineering
11.Quality management system
12.Continuous improvement

Module 8: Risk assessment and management
1.From Social and Natural Science Comes a Historical Overview on the Concepts of Uncertainty and Risk
2.Governance and Risk Management.
3.Risk Management Perspectives.
4.The Need for an Enterprise-Wide Approach to Risk Management
5. Risk Identi?cation
6.Risk Treatment: Approaches, Techniques and Good Practices
7.Operational Risk and Supply Chain Risk Management