

PROCESS IMPROVEMENT AND QUALITY IN THE DIGITAL AGE

Introduction

A business that can delight customers and dominate competitors is by improving and controlling the quality of its manufactured products and/or service processes. Quality is a competitive advantage and has become an important business strategy. This training program is divided into two parts: quality management & product development and process design & improvement. Skills developed include identification of the statistical methods and problem-solving techniques to improve quality. Analysis of data using software provides an extra advantage to solve a complex problem.

Objectives of the Program

1. Understanding the quality of a product or service and management aspects of quality improvement
2. Measuring process performance in terms of capability index, defect per million opportunities
3. Provide an overview of six-sigma methodology and DMAIC problem-solving approach
4. Understanding the design-of-experiment and its application in product design and process improvement
5. Robust parameter design using Taguchi approach
6. Determining optimum operating conditions of a process

Pedagogy of the Program

The participants will acquire knowledge and develop the ability to apply the concepts, techniques, and tools to resolve real-life quality management issues. The participants will be groomed via interactive lecture sessions, illustrative examples/cases, and spreadsheet-based calculations. Statistical software will be used to create graphical and numerical output for the analysis.

Indicative Content of the Program

1. Fundamentals of Quality Management: Introduction to quality management, Understanding value chain, process thinking and process analysis, Process control and capability analysis
2. Six-sigma Methodology: Six-sigma philosophy and fundamental concepts, DMAIC problem-solving approach, Sigma level performance measurement, and yield calculation, Hands-on-session – process sigma rating computation, Case discussion
3. Design of experiment and robust parameter design: Design of experiments and its applications to process quality, ANOVA, Blocking, and factorial experiments, Steps in conducting design of experiment, Case study on a factorial experiment, Taguchi's method for robust product and process design, Case study on robust design
4. Manufacturing process optimization: Response surface methodology, Multiple responses optimization, Case study on multiple responses optimization

Program Director: Prof. Sasadhar Bera

Fees (Per Candidate):Rs 35400+GST (Non Residential-In Campus),Rs 27000+GST (Online)

Proposed Dates:February 20-21,27-28, 2022