

MBPC3016 TOTAL QUALITY MANAGEMENT (3-0-0)

Course Objectives:

1. This course is designed to enable the students to organize an internal team to lead the quality improvement efforts and to create awareness about the philosophy of Total Quality Management.
2. Students would understand comprehensive and strong conceptual foundation pertaining to the management of quality in services and manufacturing industries.
3. To identify the problems relating to quality through Customer Satisfaction, Employee Involvement, Failure mode and Effect Analysis, etc.
4. Students would be designing and installing best practices for quality improvement through Benchmarking, Process Improvement and adherence to International Quality Standards.

Module-I: Concept of Total Quality Management

Definition of Quality and its important. Concept, Objective & Scope of TQM, Need and Significance of TQM, Components of TQM, Evolution of TQM, Customer Supplier Relationship in TQM System, Management, Leaders in TQM System, Practices for TQM: TQM and Human Resource Development Process of TQM. Difference in Western And Japanese Approach of TQM. Total Quality and Ethics.

Module-II: Quality Systems: Overviews

Quality Systems: Concept, Integrated Management System (IMS), Requirement and Benefits. Benchmarking: Reasons to Benchmark, Benchmarking Process, Quality Function Development, (QFD) – Cost of Quality, QFD Process, Zero Defects and Continuous Improvement, PDCA Cycle, Juran Trilogy, Crosby's 10 points and Deming's 14 Points, Toyota Production System, Poka Yoke, Kanban, Kaizen, 5-S Principles, Six Sigma, Lean Management.

Module-III: Quality Circle, Statistical Tools and Techniques

Quality Circle: Purpose, Benefits, Problem in implementation of Quality Circles, Requirements of Elective Circle. Statistical Tools and Techniques: Role of Statistics in Business, Common Statistical Tools, Flow Diagram, Check Sheets, Correlation or Scatter Diagram, Cause-and-Effect Diagrams, Quality Assurance, Quality Control and inspection, Control Chart, Histogram, Pareto Chart.

Course Outcomes:

- CO-1: Students will be able to familiarize with the basic concept and framework of Total Quality Management (TQM).
- CO-2: To understand the contribution of quality Gurus in TQM journey.
- CO-3: To grasp the nature and importance of different components, Principles, Tools & techniques that constitute TQM.
- CO-4: To describe and discuss the role of techniques used in TQM for various industry and organizations.

Suggested Text Books:

- 1) Total Quality Management by N.V.R Naidu, G. Rajendra New Age international, First Edition, Jan 2006
- 2) Quality Control & Application by B. L. Hanson & P. M. Ghare, Prentice Hall of India, 2004.
- 3) Total Quality Management by R.S Naagarazan, New Age international, 3e, 2015

Reference Books:

- 1) Total Quality Management by V.S Bagad Technical Publications, First Edition, Jan 2008
- 2) Total Quality Management by S. Rajaram Dreamtech Press, First Edition, Jan 2008.