

# ISM 201: Quality Management

*Credits: 3*

*Lecture Hours: 48*

## **Course Objective**

This course aims to acquaint students to the concept and practice of management and focuses on the quality of managing, operating, and integrating customer service, marketing, production and delivery, throughout an organization's value chain.

## **Course Description**

This course contains introduction, managing for quality products and services, Quality Planning, Control and TQM, Quality Improvement and Results.

## **Course Details**

### **Unit 1: Introduction**

**LH 8**

Concept of quality, dimensions of quality, Importance of quality in business and commerce, service quality vs. product quality, determinants of service quality, process and quality, quality and strategic planning, cost of quality, total quality management.

### **Unit 2: Managing for Quality Products and Services**

**LH 15**

Concept, strategies and quality, quality assurance, process capability, measures of variation and process capability, process variation; quality infrastructure, total organizational involvement, supply chain management-logistic management, inventory management, materials requirement planning, manufacturing resource planning, just-in time; quality management systems-ISO9000:2000 Quality Management System, ISO 14000:1996 Environmental Management System.

### **Unit 3: Quality Planning, Control and TQM**

**LH 20**

Concept, quality planning and control process, different quality tools- check sheets, stratification, Pereto chart, cause and effect diagram, control chart, histograms; the quality planning process; concept of TQM, emergence of TQM, implementing TQM, TQM models, benefits of TQM, quality Gurus- Juran, Crosby's 14-Point program, TQM practices-value analysis and value engineering, brainstorming, Delphi and Nominal group technique, quality function deployment, ergonomics, single minute exchange of dies and total productive maintenance, benchmarking-process, code of conduct, types, benchmarking customer service, internal benchmarking, advantages and limitations, steps; business process reengineering- BPR methodology, difference between TQM and BPR, approaches to integrate TQM and BPR, Advantages and limitations of BPR, result of TQM, quality performance excellence awards- Deming application prize, European Quality Award and Malcolm Baldrige National Quality Award; Six Sigma- design for Six Sigma, Six Sigma DMAIC process, key analytical tools for implementing Six Sigma, advantages of Six Sigma, Zero defect concept.

**Unit 4: Quality Improvement and Results****LH 5**

Concepts, benefits of quality improvement, inhibitors of quality improvement projects, quality improvement projects, the remedial journey, dealing with resistance to change, customer satisfaction, empowered employees, maximization of return on investment,

**Text and Reference Books:**

Janakiraman, B. and Gopal, R.K, Total Quality Management, Prentice-Hall of India

Oakland, J.S. , Total Quality Management: Text and Cases, Butterworth Heinemann

Bagad, V.S., Total Quality Management, Technical Publication Pune

Mukherjee, P.N. Total Quality Management, Prentice-Hall of India

Summers, D.C. Quality Management, Pearson

Dale, B.G., and McQuater, Managing Business Improvement and Quality, Black-Well.

Dale, B.G. , Wide, T.V., Iwaardeen , J.V., Managing Quality, Wiley-Blackwell

Burrill, c and Ledolter, J., Achieving Quality through Continual Improvement, Wiley-blackwell