

<b>Course title:</b> Quality Management				
<b>Course code:</b> BSI 184	<b>No. of credits:</b> 2	<b>L-T-P distribution:</b> 23-5-0	<b>Learning hours:</b> 28	
<b>Pre-requisite course code and title (if any):</b>				
<b>Department:</b> Department of Business Sustainability				
<b>Course coordinator (s):</b> Dr. Vinay Bhusari			<b>Course instructor (s):</b> Dr. Vinay Bhusari	
<b>Contact details:</b> bhusari.vinay@gmail.com				
<b>Course type</b>	<b>Core</b>	<b>Course offered in:</b> Semester 2		
<b>Course description</b>				
This course is designed to provide a comprehensive coverage of quality management concepts with special reference to infrastructure projects. Emphasis will be placed on both theory and implementation of quality management. Upon successful completion of the course, students should be able to develop an appreciation of quality management theory, principles, and practices, identify and meet the needs of internal/external customers, use quality improvement tools and practices as applied to infrastructure projects for continuous improvement and develop strategies for organizational change and transformation. The students would also be acquainted with ISO quality standard series and its implementation at the firm level.				
<b>Course objectives</b>				
To understand the Total Quality Management concept and principles and the various tools available to achieve Total Quality Management.				
To understand the statistical approach for Quality Control.				
To create an awareness about ISO certification process and need for the industries.				
<b>Course content</b>				
<b>Module</b>	<b>Topic</b>	<b>L</b>	<b>T</b>	<b>P</b>
1.	<b>Introduction</b> Definition of Quality Dimensions of Quality Evolution of Quality concept, theory, philosophies and frameworks Quality Planning Quality costs - Analysis Techniques for Quality Costs Basic concepts of Total Quality Management, Principles of TQM Leadership - Concepts Role of Senior Management Quality Council Quality Statements Strategic Planning Deming Philosophy Barriers to TQM Implementation	4	0	0
2.	<b>TQM Principles</b> Customer satisfaction - Customer Perception of Quality, Customer Complaints Service Quality Customer Retention Employee Involvement Continuous Process Improvement – Juran, PDSA Cycle, 5S, Kaizen, Supplier Partnership - Partnering, Sourcing, Supplier Selection, Supplier Rating, Relationship Development, Performance Measures - Basic Concepts, Strategy Quality Function Deployment (QFD), Business process reengineering,	4	2	0

	Process improvement, Benchmarking			
3.	<b>Supplier Regulations</b> Principles of Supplier Relations /Supplier Relationship Development Togetherness Types of Suppliers Outsourcing, Outsourcing strategy Partnering, Goals of partnership Building successful partnerships Supplier Selection and Rating Establishing Process Criteria for supplier selection Supplier rating Supplier certification	4	1	0
4.	<b>Statistical Quality Control</b> Defining Statistical Quality Control, Understanding the Process Variations and Causes of Variations Sampling methods Probability based sampling Non-probability based sampling Acceptance sampling plans Control Charts Process Capability Process Capability Index Six Sigma	4	0	0
5.	<b>Quality Management Systems</b> Quality Management Principles Quality Standards ISO 9001 Structure Quality Audits ISO Registration, Requirements Benefits of ISO registration Examples of ISO Standard Application	4	2	0
6.	Benchmarking Definition of Benchmarking Reasons for Benchmarking Types of Benchmarking Benchmarking Process Advantages of Benchmarking Limitations of Benchmarking Strategy assessment using benchmarking	3	0	0
	<b>Total</b>	<b>23</b>	<b>5</b>	<b>0</b>
<b>Evaluation criteria</b>				
<ul style="list-style-type: none"> <li>▪ Assignment/Presentation                      30%</li> <li>▪ Mid-Term    30%</li> <li>▪ End-term    40%</li> </ul>				
<b>Learning outcomes</b>				
Develop an understanding of: <ul style="list-style-type: none"> <li>• Total Quality Management: concept, principles and tools</li> <li>• statistical quality control</li> </ul>				

- ISO certifications

**Pedagogical approach**

The course will be delivered through lectures and discussion of case studies, research papers and articles.

**Suggested Readings:**

1. James R.E. and William M.L., The Management and Control of Quality, South-Western (Thomson Learning), 2002 (ISBN 0-324-06680-5).
2. Feigenbaum. A.V., Total Quality Management, McGraw Hill, 1991.
3. Narayana V. and Sreenivasan, N.S., Quality Management - Concepts and Tasks, New Age International, 1996.
4. Besterfield, DH, et.al, Total Quality Management, Prentice Hall, 2003.
5. Evans, J.R. and Lindsay, W.M., The Management and Control of Quality, South-Western College Publishing, Cincinnati, OH, 1999.
6. Goetsch, DL & Davis, B, Quality Management: Introduction to Total Quality Management for Production, Processing and Services, Pearson, 2006
7. Gryna FM, Quality Planning & Analysis, Jr., McGraw-Hill, 2001.

**Additional information (if any)****Student responsibilities****Course Reviewers:**

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