

NIRMA UNIVERSITY
Institute of Management
Master of Business Administration (Full Time) Programme/
Integrated Bachelor of Business Administration-Master of Business
Administration Programme/
Master of Business Administration (Family Business & Entrepreneurship)
Programme

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Course Code	MFT5SEOQ16 MBM5SEOQ16 MFB5SEOQ14
Course Title	Total Quality Management

Course Learning Outcomes (CLO):

At the end of the course, students will be able to –

1. Identify some of the basic concepts, philosophies and practices in Total Quality Management (TQM).
2. Develop basic understanding of some of the widely used TQM tools and techniques for quality improvement.
3. Analyze and solve problems using quality management methods.

Syllabus

Teaching Hours

<p>Unit I: Introduction to Quality, Philosophies & Product and Service Quality</p> <ul style="list-style-type: none"> • Evolution of quality, Role, Importance and Concept of TQM as Fundamental Business Strategy, cost of quality. • Philosophy of Quality Gurus- Deming, Juran, and Crosby. • Product and service quality-the Kano model, Concept of Internal and External Customers. 	6
<p>Unit II: TQM model, Practices and Management Tools</p> <ul style="list-style-type: none"> • TQM model and Practices-Benchmarking, quality audits and vendor selection. • Six-Sigma, Continuous process improvement, quality awards and certifications: ISO9000, ISO14000 and others. • Management tools: five whys, affinity diagram and others. 	6
<p>Unit III: Quality Tools for Continuous Improvement</p> <ul style="list-style-type: none"> • Tools and techniques for continuous improvement. • Designing for Quality Function Deployment (QFD). 	3
<p>Unit IV: Statistical Process Control and Capability Analysis</p> <ul style="list-style-type: none"> • Probability distributions used in quality • Statistical basis of process control. • Control charts for variables-mean, range and standard deviation. • Control charts for attributes. • Process capability analysis. 	10
<p>Unit V Quality by Design</p> <ul style="list-style-type: none"> • Concept of reliability, the reliability life cycle, probability 	5

distributions in modelling reliability.	
<ul style="list-style-type: none"> • System reliability, components in series, parallel and standby • Taguchi's philosophy to quality, loss function approach, S/N ratio. 	

Suggested Readings:

1. Mitra, A., Fundamentals of Quality Control and Improvement, Wiley.
2. Gryna, F.M., Chua, R.C., Defeo, J. A., Juran's Quality Planning & Analysis for Enterprise Quality, Tata Mc-Graw Hill
3. Besterfield, D. H., Besterfield, M. C., Besterfield, G. H., Besterfield, M. S., Urdhwareshe, H., and Urdhwareshe, R., Total Quality Management, Pearson.
4. Krishnamurthy, K.S and Krishnamurthy, V. R., A First Course in Quality Engineering: Integrating Statistical and Management Methods of Quality, CRC Press.
5. Gitlow, H. S., Oppenheim, A. J., Oppenheim, R., and Levine, D. M., Quality Management, McGraw Hill.
6. Evans, J. R., and Lindsay, W. M., Managing for Quality and Performance Excellence, Cengage.
7. Sharma, S., Total Quality Management: Concepts, Strategy and Implementation for Operational Excellence, Sage.
8. Evans, J. R., and Lindsay, W. M., An Introduction to Six Sigma & Process Improvement, Cengage.

w.e.f. Academic Yar 2019-20 and onwards