

GUJARAT TECHNOLOGICAL UNIVERSITY
M.E. SEMESTER-II
MECHATRONICS ENGINEERING

Subject Name: **Total Quality Management (Elective – II)**

Subject Code: 1724705

Sr.No.	Topic	Hours
1	Introduction : Introduction, definitions of quality, need for quality, evolution of quality, quality of design, quality of conformance, quality of performance	4
2	Quality Management: Quality management approaches, hierarchy of quality management (Inspection, quality control, quality assurance, Total Quality Management)	4
3	Cost of Quality: Introduction. Types of costs	2
4	Basic Concepts of TQM: Definition of TQM – TQM Framework - Contributions of Deming, Juran, Crosby and Ishikawa – Barriers to TQM	4
5	TQM Principles : Leadership , Customer satisfaction, Quality chain, Employee involvement, Continuous process improvement, Supplier relationship, performance measures, benchmarking	12
6	Quality Management Tools & Techniques: Pareto diagram, cause and effect diagram, Histogram, control charts, Quality circles	6
7	Quality Management Systems: Need for ISO 9000, ISO 9000 Quality System – Elements, Documentation, Quality auditing, Requirements and Benefits	4

Text Book:

1. ‘Total Quality Management’, Dale H.Besterfield, et al., Pearson Education Asia, Third Edition

Reference Books:

1. ‘ Total Quality Management’, Poornima M. Charantimath, Pearson Education Asia, Second Edition
2. ‘Total Quality Management (Text and Cases)’ Dr. Uday Kumar Halder, Dhanpat Rai & Co. First Edition