

## M. Tech. Quality Management

### QM-Program Objectives

The key objectives of the program are to equip the student with:

- a) in-depth and relevant quality knowledge to bridge the gap between engineering and quality
- b) engage in continuous professional development in response to technological and systems challenges in quality management
- c) engage the students on contemporary issues pertaining to the management of quality in service and manufacturing industry
- d) engage in systematic concurrent engineering process to manage the product quality throughout the product lifecycle
- e) knowledge to implement quality process plans that are fully aligned with the company's strategic business plan and quality policy
- f) a systemic understanding of manufacturing and service operations to be able to design and implement quality management systems
- g) adapting the quality culture into organization for social transformation by optimizing available resources
- h) identify quality trends that could indicate changes to product design and production engineering that are needed
- i) assume a position of leadership and responsibility in the organization and effectively manage the quality systems

### QM-Outcomes

The students after completion of the program should be able to:

- a) set up quality focused manufacturing practices for company's competitive advantage
- b) apply statistical quality control techniques to identify the root cause of quality problems and maintain control over processes
- c) identify and quantify the quality from customer centric perspective and ensure that it is met
- d) engage with operations over the complete product and project life cycle to ensure quality
- e) be well versed with quality terminology for effective participation in quality audits and certifications (like ISO, TUV)
- f) to apply the necessary steps for quality function deployment and carry out failure mode and effects analysis
- g) build and sustain total quality organization through the complete supply/value chain
- h) apply reliability engineering principles for maintainability and to ensure availability and optimal utilization of resources
- i) ability to critically think for efficient decision making and implementing the quality standards