



TOTAL QUALITY MANAGEMENT - I

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Department of Management Studies
IIT Kanpur

TYPE OF COURSE : Rerun | Elective | UG / PG

COURSE DURATION : 8 weeks (18 Jan' 21 - 12 Mar' 21)

EXAM DATE : 21 Mar 2021

PRE-REQUISITES : Probability & Statistics

INTENDED AUDIENCE : Masters in Business Administration, Masters in Economics, Masters in Statistics/Mathematics, Masters in Industrial Engineering, Masters in Operations Research/Operations Management, Phd in related fields as mentioned above

INDUSTRIES APPLICABLE TO : All service, manufacturing industry, government department, any type of private industry

COURSE OUTLINE :

This is the first part of the two part course (TQM-I, TQM-II) and will cover topics ranging from TQM, Kaizen, Elementary concepts related to quality assurance, Basic Statistical Concepts and Control of Accuracy and Precision, Process Capability, SPC, Acceptance Sampling and Quality Management Systems, ISO 9000, etc.

ABOUT INSTRUCTOR :

Raghu Nandan Sengupta completed his bachelors in engineering in Mechanical Engineering from Birla Institute of Technology Mesra, Ranchi INDIA and his FPM (PhD) from Indian Institute of Management Calcutta, INDIA with specialization in Operations Management. His research interests are in Sequential Analysis, Statistical Mathematical Reliability, Optimization and its use in Financial Optimization.

COURSE PLAN :

Week 1: Total Quality Management and Quality Management Philosophies

Week 2: Customer Value Evaluation, Kaizen, Problem Solving and Quality Management

Week 3: Elementary concepts related to 7 Old and 7 New Tools for quality Assurance

Week 4: Basic Statistical Concepts and Control of Accuracy and Precision

Week 5: Process Capability

Week 6: SPC

Week 7: Acceptance Sampling

Week 8: Quality Management Systems, ISO 9000