

NCQM

Professional Education



*Quality, the only Strategy*

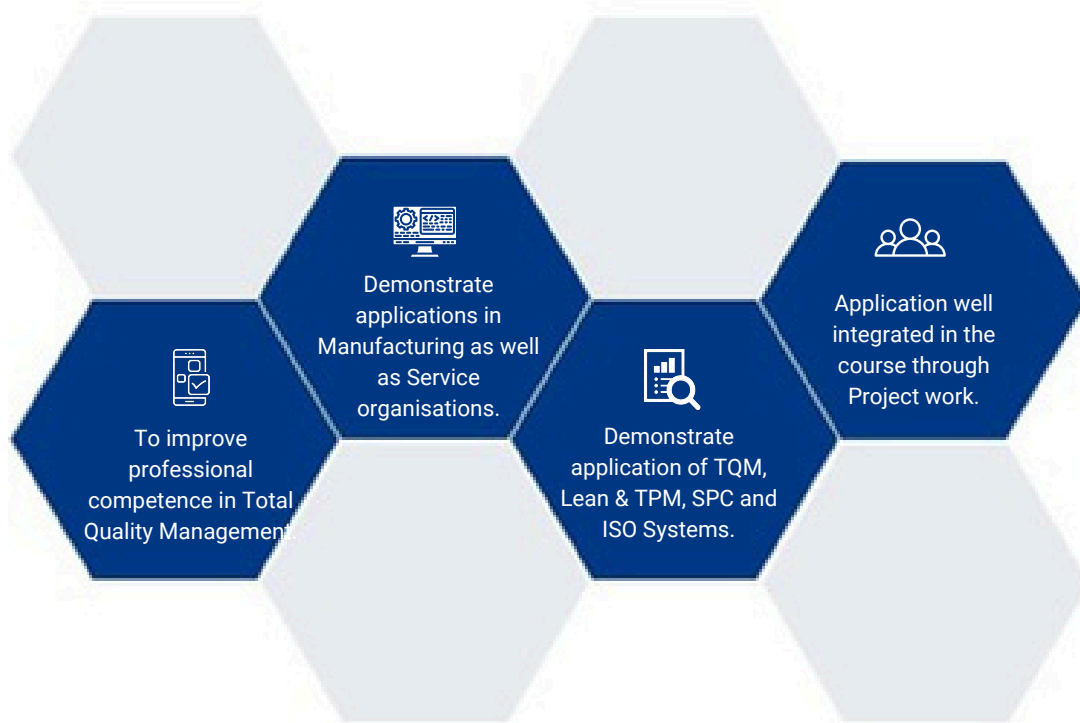


# PG Diploma in TQM Diploma in TQM

**NEW BATCH STARTS: 1ST July 2024**  
**ONE YEAR GUIDED COURSE**

Self Study with online guidance sessions | Project Work | Online Exam | Flexible Duration 1 to 3 Years | Program well recognized by industry | 30 plus continuous years: Started in 1990

# Course Objectives



## Program Benefits

### Individuals

- Acquire additional qualifications and thereby improve employability
- Get opportunities for career advancement through self-development
- Develop an integrated approach to Quality Management
- Get exposed to modern practices & prevent technological obsolescence
- Contribute to the company`s development and growth by being in the forefront of Quality Movement

### Corporates

- Get trained personnel without affecting work system of company
- Gain by initiating Quality Improvement Program through trained professionals
- Create pool of champions to improve Quality, Productivity and Competitiveness
- Improve Return on Investment (ROI) by eliminating all forms of wastages

# Who should join these courses?

The cutting-edge courses are best suited for professionals who are looking to



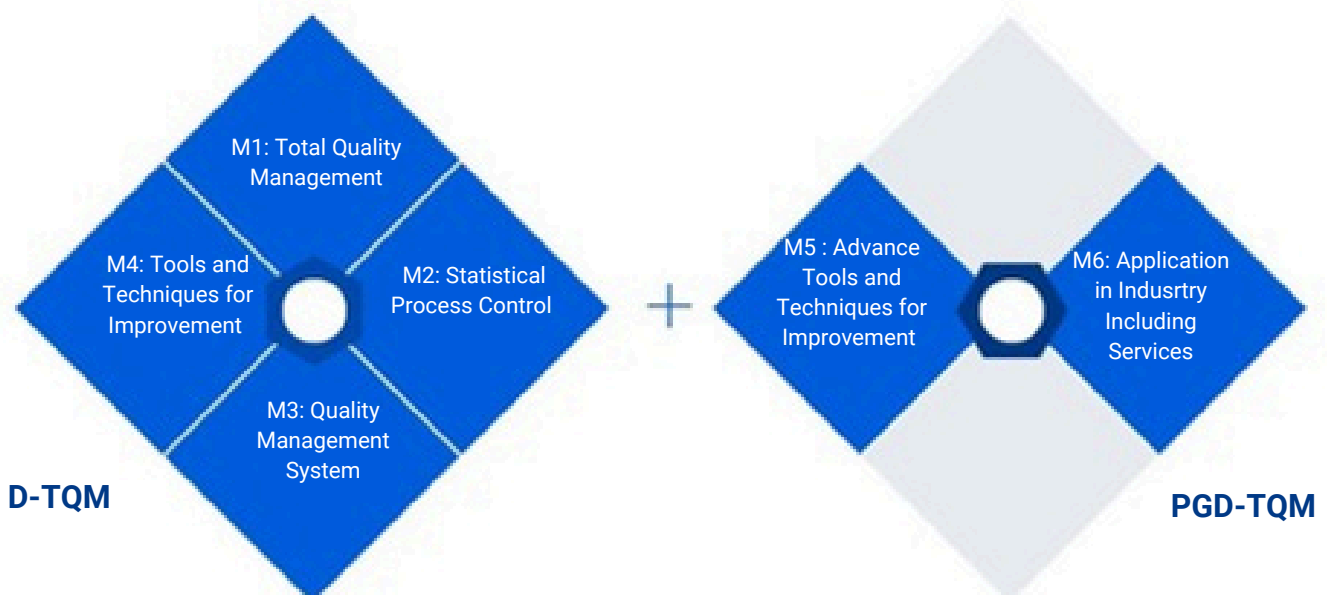
## Methodology

- Students are provided course material (Course Books)
- Students are required to plan self-study of the course material
- Online Contact Sessions to provide in depth understanding and to address student queries
- Compulsory Project work for each module to reinforce understanding by application
- Students are given flexibility to complete the course in one to three year period.

# Program Highlights



## Option to choose from: Basic and Advance



# Program Faculty

## Mr. B. Banerjee

Mr. B. Banerjee is an Applied Statistician. He is a Post Graduate in Mathematics from Kolkata University and has undergone two years full time training at Indian Statistical Institute (ISI).

He is a registered Lead Auditor with IRCA (UK) on ISO 9001:2015, Lead Auditor on ISO 14001: 2015 and ISO 45001.

Mr. Banerjee is a Certified Examiner for Ramkrishna Bajaj National Quality Award (RBNQA) which is Indian equivalent of Malcolm Baldrige National Quality Award (MBNQA) of the USA.

He received training on Kaizen and TPM in Japan under Prof. Masaki Imai, Founder Director of Kaizen Institute in Japan.

He was Senior Vice President – QA at Associated Capsules Group (ACG) reporting directly to the group Managing Director for 14 years (1992- 2005). Prior to joining ACG, he was head of Quality Measurement & Industrial Engineering for 19 years at Metal Box India Ltd (1972-1991) and Senior Technical Officer at SQC & OR Units of ISI for 9 years.

He was visiting Faculty for over 20 years at various Management Institutes in Mumbai on Quantitative Methods in their Post Graduate programs.

He has authored 4 books titled “OR Techniques for Management”, “Statistical Techniques for ISO 9000 Certification”, “Interface between SPC and ISO” and “Statistical Process Control with Applications”.

Mr. Banerjee is associated with National Centre for Quality Management for the last 3 decades and was President of NCQM from 2013 to 2019. Currently, he is a Trustee of the National Centre for Quality Management and Chairman of its Education Committee.

## Mr. Santosh Khadagade

Mr. Santosh Khadagade is a Graduate Mechanical Engineer from NIT Bhopal and Post Graduate in Management from JBIMS Mumbai. He also has a Post Graduate Certificate in SQC & OR from Indian Statistical Institute Madras.

During his three decades of experience, Santosh has worked with BHEL, Indian Navy, NCQM, KPMG, Tata Teleservices and Reliance Securities Ltd.

He has earned the following certifications in Quality

Lean Six Sigma Master Black Belt

Lead Auditor for ISO 9001, ISO 14001 & ISO 45001

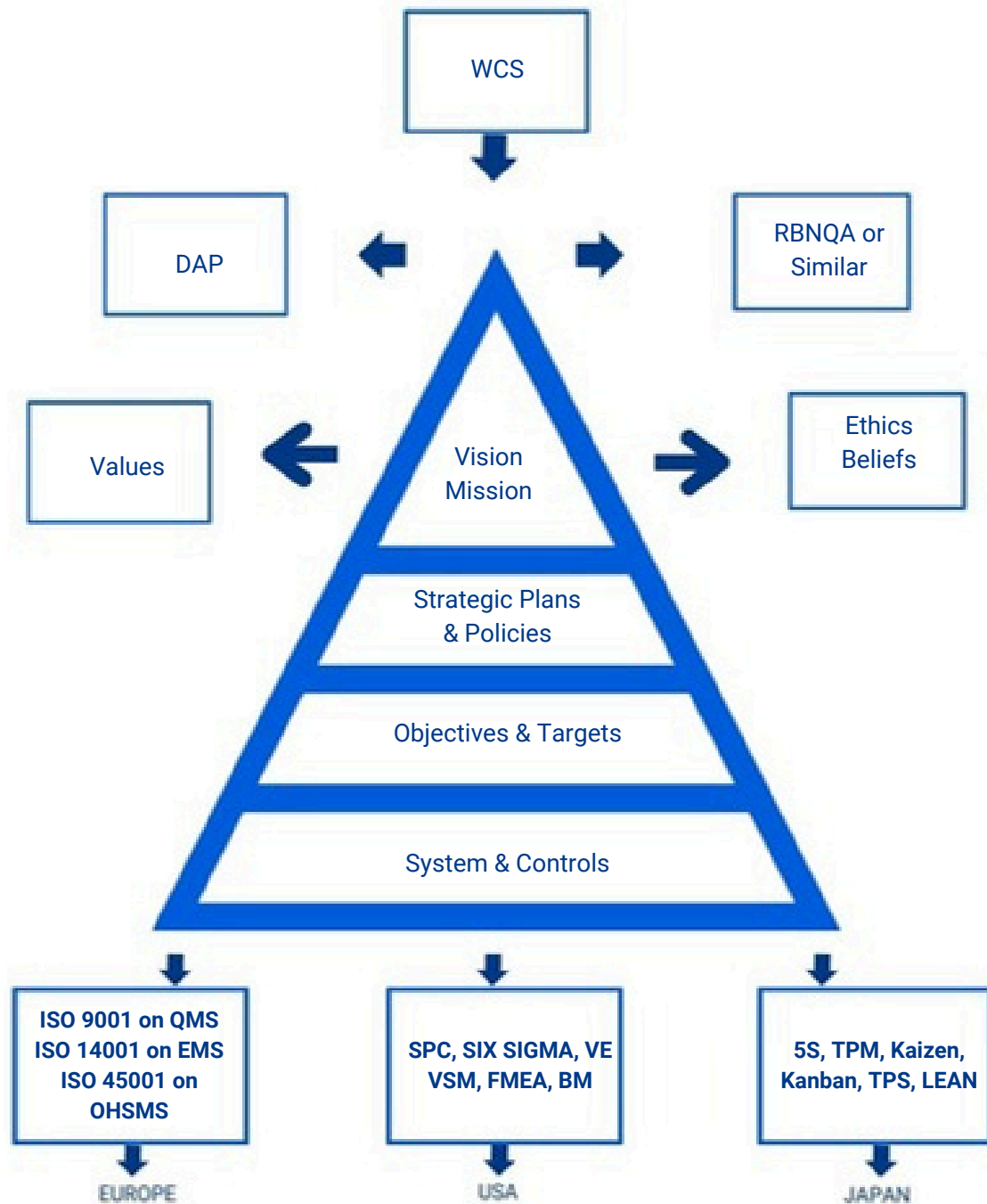
Certified Examiner for RBNQA and Tata Business Excellence Model(TBEM)

Functional Areas: Inspection and Quality Control, Logistics, Training and Consulting in Quality, Quality Audits, Implementation of ISO 9001 in Tata Teleservices, Reliance Securities Ltd.

Mr. Khadagade is Director of Zencore Management Services LLP engaged in training and consultancy services in Quality.

He is currently President of National Centre for Quality Management and Chairman of its Program Committee.

# Course Coverage



TQM

*Long-term commitment to new learning and new philosophy is required of any management that seeks transformation.*

.....Dr. Edward Deming

# Module 1

## I : Total Quality Management (TQM)- 100 Marks

- \* Evolution of TQM, TQM as envisaged by Deming
- \* Quality Management principles of ISO 9000 series
- \* Kano model – A different perspective in assessment of customer satisfaction
- \* Cost of quality (COQ) and Cost of poor quality (COPQ)
- \* Quality function deployment – A case example
- \* Bench marking – Issues, various types, case examples and challenges
- \* Sustainability through use of MP/CP, DWM, coupled with PDCA cycles and structured reviews
- \* Overview on National and International Business Excellence Models

# Module 2

## II : Statistical Process Control (SPC) Techniques with Applications- 100 Marks

- Data collection, Analysis, Measures of Location & Dispersion and presentation of results
- \* Seven basic QC tools: Stratification, Check sheet, Pareto analysis, Cause and effect analysis, Histogram, Basic Process Control charts, Scatter diagram and their applications
- \* Set theory and theory of probability
- \* Binomial, Poisson, Hypergeometric, Normal, Negative Exponential distributions and their applications
- \* Advanced Control charts including gauge R & R
- \* Process capability analysis – Short term capability indices (Cp & Cpk) and long term performance indices (Pp & Ppk)
- \* Acceptance sampling plans by Attributes
- \* Simple Correction and Regression analysis



# Module 3

## III : Quality and other Management Systems - 100 Marks

- \* Evolution of Quality Management Systems (ISO 9000 Series of Standards from 1987 to 2015)
- \* ISO 14001:2015 Standard on EMS
- \* ISO 45001:2018 Standard on OH&SMS
- \* Integration of QMS, EMS and OH&SMS as IMS
- \* ISO 19011:2018 Guidelines for auditing Management System
- \* SA 8000:2014 & ISO 26000:2010 Standards on Social Accountability
- \* Overview on other Industry Specific Management System Standards



# Module 4

## IV : Additional Quality Improvement Tools & Techniques for Organizational Excellence- 100 Marks

- \* Overview of Quality Improvement methodology
- \* Basic Root Cause Analysis Techniques
- \* Total Productive Maintenance (TPM) and its Eight Pillars
- \* 5S, Visual Management\* Ten Elements of GMP (Good Manufacturing Practices)
- \* Safety, Health and Environment (SHE)
- \* Jishu Hozen (Autonomous Maintenance)- Concept, Computation and Interpretation of OEE
- \* Ten Themes of TPM and ways & means of achieving them
- \* SMED towards reduction of set up times
- \* JIT (Just in Time), Kanban, TPS (Toyota Production System), Kaizen, Poka yoke
- \* Lean Manufacturing System –Eight types of Muda (waste) in Lean and their major causes & remedies
- \* SGIA(Small Group Improvement Activity)
- \* Overview on Lean Six Sigma





# Module 5

## V : Advanced TQM Tools and Techniques and their applications- 100 Marks

- \* Decision-making under Certainty, under Risk and under Uncertainty.
- \* Seven New QC Tools: Affinity Diagram, Interrelationship Diagram, Decision Tree Diagram, Prioritization Matrix, Matrix Diagram, Process Decision Program Chart, Activity Network Diagram
- \* Advance Root Cause Analysis techniques
- \* Acceptance Sampling by Variables
- \* MSA, Measurement Uncertainty,
- \* Basics of Reliability Engineering
- \* Multiple Correlation and Regression Analysis with two Independent variables.
- \* Chi-Square, Student's t and F distributions, ANOVA, Tests of Hypotheses and their applications
- \* Basics of Design of Experiments (DOE): CRD, RBD, LSD, GLSD, 2n Factorial Designs.
- \* Applications of all the above tools & techniques in Industry, Business. Administration and Marketing of Manufacturing as well as Service Sectors



# Module 6

## VI : Total Quality Management Applications - 100 Marks

- \* Stakeholders` needs and expectations
- \* Value Creation and Support Processes
- \* Functional objectives- Development of measures, goals and targets on them
- \* Work Force Focus, Approaches to Relationship Management
- \* TQM in Supply Chain Management, Basics of Finance and Accounts
- \* Market and Customer Segmentation
- \* Customer Satisfaction, Development and implementation of Customer Complaint Management System
- \* Development and Execution of Quality Plan and Quality Planning
- \* Quality in Service Systems
- \* TQM Application in Service Sectors: IT, Education, Utilities, Banking & Finance, Hospitality, & Health Care Sectors

# Key Programme Takeaways



## Certificate

In line with the New Education Policy of Government of India, candidates completing any module are given certificates for each module.

On completion of first four modules, participants will be eligible to get **Diploma in TQM**. Candidates having graduate qualification can opt for **Post Graduate Diploma in TQM** with additional two modules.



# Benefits of Association with NCQM

On joining the course, you become part of NCQM's Membership Network. Benefits are

- 01 Free access to Webinars and Lectures by imminent industry professionals
- 02 Receive Quarterly News Magazine: Quality Striving for Excellence
- 03 Opportunity to deliver lectures/ webinars in your area of expertise
- 04 Opportunity to become part of NCQM's Faculty for Training and Consulting
- 05 Get concession in NCQM Training and Certification Programs

## Programme Details

### Batches

Registrations are accepted throughout the year however the participants are grouped in two batches

January Batch: Admissions from October to March

July Batch: Admissions from April to September

### Eligibility, Duration and Course Fee

Course	Minimum Qualification	Duration in Months Min – Max.	Course Fee
Diploma in TQM	Diploma in Engineering or Degree in any discipline with at least 1 year work experience	6 to 24 Months	Rs. 12500/- plus 18% GST
Post Graduate Diploma in TQM	Degree in any discipline with at least 3 year work experience	12 to 36 Months	Rs. 15000/- plus 18% GST

- Fees include course material, contact session and exam fee. For retake of exam, addl. Fee of Rs. 500/- per paper will be charged.
- One year NCQM Student Membership with benefits of membership
- Students can pay the course fees in full or in two instalments – 50% at the time of registration and 50% within 3 months of registration
- NCQM Members will get 10% discount on course fees. Addl. Group (> 2 participants) discount of 5% is also given to corporates.

### Mode of Payment

Payment can be made through Net banking (NEFT, RTGS, IMPS), Cheque or DD

Account Name: National Centre for Quality Management, Bank Name & Branch : Union Bank of India, Ghatkopar (W),

Account No. : 023810100037658, Type of Account: Saving Account, IFS Code: UBIN0802387

PAN:AAATN3205E GST No. :27AAATN3205E1Z

Register online:



<https://www.ncqm.com/pg-dtqm-dtqm-registration-form.php>

# Learning

## Receipt of Course material and instructions

On registration, you get course books with comprehensive coverage of the course syllabus. Instructions are sent along with the course material for effective learning

## Flexible Self- Study

Course can be completed in one to three year duration based on the convenience and pace of learning selected by you.

## Contact Sessions

Online contact sessions are conducted covering the course books by experienced faculty every six months before the examinations. Participants get opportunity to clarify their queries during the sessions. Online Contact sessions are conducted for providing guidance and resolving students' difficulties. Online Contact Session of 8 Hours duration for each paper will be conducted. There is no additional fee for attending the contact sessions.

## Project Work

Project work is aimed to make the participants identify application of concepts of each module and demonstrate application of at least one concept per module. Prior to appearing in examination, students will have to submit a hand written project report of minimum 6 to 10 pages for each paper on the concepts & techniques learnt and their applications in their own spheres of activities. These reports will be graded by respective faculty as A/B/C/D. For passing, students must acquire either A, B or C grade. Students getting grade D will have to resubmit the assignment.

## Online Exams

Online Exams on weekends are conducted every six month. Participants can select the modules as per their convenience.

Online examinations in June / December every year. Examination on each paper will be of 3 hours duration and of 100 marks. The exam papers will comprise of objective questions (principles and application) and short answer questions.

Students can appear for the examination in parts, i.e. can select papers to be appeared in an examination.

## Certification

On successful completion of each module, participants are given Certificates. Diploma Certificate is issued on completion of requisite modules for the selected course.

### Certification Criteria for PGD-TQM/ D-TQM

Pass: 50% aggregate marks and minimum 35 marks in each module with at least C grade in each project.

First Class: 60% to 69% aggregate marks and minimum 40 marks in each module with at least C or B Grade in each project.

Distinction: 70% & above aggregate marks and minimum 50 marks in each module and at least B Grade in each project.



National Centre for Quality Management (NCQM) was established in 1985 as a not for profit making enterprise by a group of enlightened industrialists and professionals to spread the culture of quality in India. Today, it is one of the premier professional organizations engaged in dispensing quality and related services to various sectors of Industry through seminars, training, education, publications, research and advisory services. NCQM conducts programs and workshops related to TQM, ISO 9001 on QMS, ISO 14001 on EMS & ISO 45001 on OH&SMS, TPM, SPC, Audits, Six Sigma, 5S & 8W, RCA & RRCA.

NCQM has its headquarter in Mumbai and extension centres at Ajmer, Bengaluru, Coimbatore, Navi Mumbai, New Delhi and Pune.

NCQM has been running the Diploma in Total Quality Management course since 1990. The course has been upgraded as Post Graduate Diploma in Total Quality Management starting July 2021. The examinations have been changed to online mode to enable maximum participation test the understanding of basic principles and application of the tools and techniques. The course materials are regularly reviewed and thoroughly revised with updated contents.

## VISION

*Be a premier professional institution and spread Quality culture in all aspects of human endeavors.*

## MISSION

- NCQM shall operate as 'not for profit' service organization
- Provide knowledge and expertise to Business, Industry and Society in pursuit of Quality Leadership
- Ensure total satisfaction to stakeholders through professional training, consultancy, seminars, workshops, interactive programs and publications.

## NATIONAL CENTRE FOR QUALITY MANAGEMENT

(Society Registered under Bombay Public Trust Act.1950 Reg.No.F.10488 (Bom) dt 29/6/1985)

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