National Institution for Quality & Reliability

Dedicated to Quality…

NIQR ANNOUNCES

OPEX

OPERATIONAL EXCELLENCE COURSE FOR COO & YOUNG LEADERS

Date : Starting from 20th November 2026

Course Directors



Dr. N. Ravichandran



Dr. V. Swaminathan

Course Dates :
20th & 21st November 2026 (Friday & Saturday),
4th & 5th December 2026 (Friday & Saturday) &
12th December 2026 (Saturday)

Venue :
Round Table House, First Floor,
No. 80, Uthamar Gandhi Salai, Chennai - 600 034.

About NIQR

NIQR came into existence in July 1987 with the amalgamation of National Institution of Quality Assurance and Indian Association of Quality and Reliability.

National Institution for Quality and reliability is administrated by a National Executive Council functioning at the National Head Quarters at Chennai, Tamil Nadu and Executive Committee at various Branches.

Objectives:

Promote Preventive Quality Philosophy
Encourage design-stage integration of quality principles and reduction of variation across organizational systems.
Strengthen Statistical Discipline
Advance data-driven decision-making and structured measurement practices supporting stable and reliable processes.
Develop Professional Capability
Facilitate knowledge exchange and professional development through conventions, technical forums, and institutional platforms.
Recognize Excellence and Institutional Achievement
Promote benchmarking and recognition of excellence through structured awards and evaluation frame works.
Strengthen Industry-Academia Collaboration
Encourage research engagement, student participation, and institutional partnerships advancing quality and reliability disciplines.
Support National Industrial Competitiveness
Promote frameworks and practices that strengthen MSMEs, manufacturing systems, and organizational reliability aligned with national development priorities.

Contact Us for Registration:

Round Table House, First Floor,
No. 80, Uthamar Gandhi Salai, Chennai - 600 034.
Dr. V. Swaminathan - 98403 56293 Email : vsam_98@yahoo.com
Wg Cdr Mr. C Stanley John - 9940289704
Mr. S Ganesan - 9841445823

Office Phone : +91 44 2847 1530 / 9003252585
Email : niqrhq@gmail.com
Website : www.niqr.in

Our Courses

Changing Business Scenarios, Operational Excellence, Manufacturing – TPS / LEAN / TOC, Implementing WCM i.e., Basics and Plant Layout, TPM Basics, Quality Management, TQM Basics, Audits and Continuous Improvement, TEI, Manufacturing Metrics, Cost Management.

To gain insight from an internationally respected Manufacturing Expert with 58 Years of Professional Experience in Manufacturing Excellence. This exposure will help participants in appreciating, understanding, accelerating Operational Excellence in their respective organizations by adapting strategies, tools and technology learnt in the training course.

Why This Programme :

The world is changing at a tremendous speed and Business Scenario is highly volatile and turbulent. Customer expectations change every day, as we see today Science and Technology growing fast, new methodologies, new markets, new products, new regulations are in place. These pose heavy competitions and challenges to organizations and there is an urgent need to excel in every sphere of operation domain-Design to Delivery, new systems, new rules, new regulations, new knowledge.

"Organizations must recognize change early, adapt swiftly and demonstrate the agility to lead". "India is poised to become the world's third-largest economy, creating opportunities for Indian organizations to expand their global presence through their products and services".

And also many leading organizations from India will be having Global Footprints. For this to happen our Organizations have to be a Leader in their Chosen Business and Excel. This Programme is designed to give the appropriate inputs to participants, to strengthen and raise their knowledge and enhance their Capabilities.

Who Should Participate:

This Programme will be benefitting Professionals belonging to Manufacturing, Maintenance, Quality, Production Engineering, Industrial Engineering, Materials, HR and Finance & Costing.

COURSE PLAN

S.No.	Topics	Sub Topics	Session No
1	Changing Business Scenario	a) Changing Business Scenario/Challenges b) Business and Operational Excellence c) Bench Marking d) Vision / Mission / Strategy/ Goals/ Tactics e) Leadership Styles	1
2	Manufacturing Systems Engineering	a) What is Manufacturing Systems b) TPS, LEAN, TOC c) Route Map to World Class Manufacturing	2
3	Elements of World Class Methodology	a) 5S – Workplace Improvement b) Flow Manufacturing c) Multi Process Handling d) SMED e) JIDOKA f) Levelled Scheduling g) Standard Operations h) POKA YOKE i) Inventory Control j) Visual Control	3 & 4
4	TPM Basics	a) Causes of Breakdowns and Defects b) What is Total Productive Maintenance c) Characteristics and Goals of TPM d) Eliminating Equipment Losses e) Autonomous Maintenance Activities in Production f) Companywide Cooperation in TPM	5
5	Quality Management	a) Definition & History of Quality Management b) Quality Planning c) Quality Assurance d) Quality Improvement e) Quality Audits f) Off-line & Online Quality	6
6	Problem Solving Tools & Techniques	a) Definition of Problem b) Approach Problem Solving c) Old & New 7 QC Tools d) Shainin Techniques e) Basics of DOE f) Choice of Problem Solving Tools	
7	TQM Basics	a) TQM Basics, Culture, The Way & Benefits b) Policy Management c) DRM d) Some standard formats e) Recognition – Deming, Malcom Balbridge, EOQC f) Implementation Steps	7

COURSE PLAN

S.No	Topics	Sub Topics	Session No
8	Safety Basics	a) Shopfloor Control, b) Fire Safety, c) Electrical Safety, d) Hazardous Safety, e) EHS	8
9	TEI (Total Employee Involvement)	a) Training, b) QC Circle, c) Suggestion Schemes, d) Career Planning	
10	Audits	a) 5S b) Manufacturing Systems c) TPM Status d) Safety Audits Continuous Improvement e) 20 Keys for Improvement	
11	Manufacturing Metrics (P2QCDS2E2M)	a) P1 - Production, b) P2 - Productivity, c) Q - Quality, d) C - Cost, e) D- Delivery, f) S1 - Safety, g) S2- Service h) E1 – Energy i) E2 – Environment j) M - Morale	9
12	Cost Management	a) Cost Control / Budget, b) Cost Reduction, c) Target Costing, d) Activity Based Costing	
13	Industry 4.0 and Application of AI	a) Customer Expectations b) Origin/ History c) Elements/ Configuration d) Benefits e) Steps for Moving Towards 4.0 f) Support Packages g) Skills Required h) Case studies i) What is AI 1. Mimicking human intelligence 2. Problem solving and reasoning 3. Learning and adaptation 4. Perception and understanding j) Applications	10
14	Manufacturing the Future Scenario	a) Digital transformation and AI b) Sustainability and Circular Economy c) Micro Factories d) Human Augmentation	
15	Feedback and ⇨	Plant Layout, Material Handling, Work Study Lean Glossary, Quality Management Glossary Maintenance Management Glossary Safety Management Glossary	11

Note:

1. This Five Day Course will begin on 20th November 2026.
2. Course Dates : 20 & 21 November 2026 (Friday & Saturday), 4 & 5 December 2026 (Friday & Saturday) and 12th December 2026 (Saturday).
3. Duration of Each Session is 9 Hours (9.00 AM – 6.00 PM) includes 1 hr Lunch Break.
4. Course Notes will be provided as Hard Copy.
5. Mini Test will be conducted as appropriate and Final Examination will be conducted for 3 hrs.
6. Certificate will be issued by NIQR and Course Directors.
7. Course days may be subject to changes based on any unforeseen circumstances.

DR.N.RAVICHANDRAN

Dr.N.Ravichandran, former Executive Director of Lucas TVS Ltd, Chennai, was born on November 27, 1947. He graduated in Mechanical Engineering from the College of Engineering, Guindy, University of Madras. Further, he obtained his post graduate diploma in "Statistical Quality Control and operation Research" from Indian Statistical Institute and Master of Business Administration from University of Madras. He was awarded PhD degree from Anna University. He completed professional training in Manufacturing Management from M.I.T., Boston, USA and also in Japan and Korea. Dr.N.Ravichandran has more than 57 years experience in various spheres of Manufacturing Management, out of which 48 years in Lucas TVS Ltd.

Dr.N.Ravichadran was conferred many prestigious awards namely, Distinguished Leadership Award from ABK-AOTS Doskai (2012), Man of Excellence Award from Vinayaka Missions University (2012), "ACADEMICIAN" Award from the International Academy for Quality (IAQ), USA (2010), "Ashoka Award" for Quality from the Indian Society for Quality (2007), "NIQR – Bajaj Auto Award" for Outstanding Quality Man for the year 2006, "Life Time Achievement Award" from Frost & Sullivan (2006), "Outstanding Contribution Award" for the growth of QC Movement in Manufacturing Sector from QCFI, Chennai Chapter (2005), "Distinguished Leadership Award" in Quality and Productivity from ABK – AOTS, Doskai, Chennai (2004). "Udyog Rattan Award" from Institute of Economic Studies, New Delhi (2002), "All India Management Award" in the National Competition for Young Managers (1981) and "Kirloskar Award of Indian Association of Quality & Reliability (1980) etc.

Dr.N.Ravichandran is a Fellow of the Institution of Engineers (India), Quality Council of India (QCI). Indian Institution of Production Engineers and National Institution for Quality & Reliability. Recently he has been admitted as "Fellow of Indian National Academy of Engineering" the highest recognition for an Engineer. Inspiring leader Dr.N.Ravichandran has been the primary driving force behind the many awards received by his company LUCAS TVS. These include the prestigious Deming Prize in 2004, the Frost & Sullivan Manufacturing Excellence Award in 2005 and the JIT Grand Prix from JIT Management Laboratory Japan in 2006-2007, and coveted Deming Grand Prize ("Japan Quality Medal") in 2012, joining a group of top 30 companies in the world, recognised for Quality Practices.

Eminent engineer Dr.N.Ravichandran continues the professional work by advising and mentoring many companies in India and outside, in the areas of Lean, TQM, Management Leadership & total Employee Involvement. He is also in the academic council of many Engineering colleges & Institutions and also guiding research scholars.

DR. V SWAMINATHAN

Dr Swaminathan is one of India's experts in Total Quality Management (TQM). He has risen from the ranks of a line staff to that of a general manager. During the course of discharging his duty, he made it a point to understand the nuances of quality. That, in turn, led him to learn more on quality management and ultimately made him a TQM expert.

Trained by leading Japanese, US, UK and Indian experts on TPM / TQM / Lean/SS,
Dr Swaminathan has, in turn, given training to over 36,000 employees in various cadres from line staff to CEO/MD/Chairman. Dr Swaminathan has guided many a company in competing for the prestigious and tough Deming Award. Eight companies won the award under his guidance, while two others won TPM Excellence award. Earlier, he was instrumental in Sundaram Brake Linings Ltd, where we worked from the start until his retirement, to win the Deming awards.

Dr Swaminathan has himself won various awards, including excellence awards, for his contributions in the areas of consulting, writing, quality and production, besides social work.

He is member in the professional Institutions such as SAE, NIQR, and QCFI. He is an active member in the Advisory Committee Board of Centre of Excellence in Total Quality Management at SRM Institute of Science and Technology - Deemed University, Chennai, India. He has travelled widely across the globe either for business or to impart training. He has taken part in various international seminars and workshops, where he has shared his experience.

Dr Swaminathan authored and co-authored various booklets on TQM / TPM / LEAN. He is now engaged as a free-lance trainer as well as mentor to support various companies, in India and abroad in their endeavor to move forward in business/manufacturing excellence covering TQM / TPM / Lean tools/Six Sigma. He have released book in NINE PEARLS OF TQM WISDOM in University of North America / Chicago USA. And released in Madurai, Hosur & Chennai. He also released a book in NIQR 10th Annual Six Sigma Competition "Basics of Six Sigma Reference Guide" in 2024. Currently, he is National Senior Vice-President Emeritus, NIQR. (National Institution for Quality & Reliability, Headquarters).

Learning fees:

Rs.50,000/- +18% GST
for the course per participant.

Submission of Bank Details for Payment

We are pleased to provide our bank account details for remittance through NEFT/RTGS. Kindly find the enclosed details for your reference:

Account Holder : National Institution for Quality & Reliability, Head Quarters
Account Number : 018302000003394
IFSC : IOBA0000183
Account Type : Current
Bank Name : Indian Overseas Bank
Branch : Nungambakkam

We kindly request you to process the payment at the earliest convenience. Should you require any further information, please feel free to contact us.

National Institution for Quality & Reliability

Dedicated to Quality…

QR for NIQR Office Location

National Institution for Quality & Reliability

Head Quarters

Round Table House, First Floor,
No. 80, Uthamar Gandhi Salai, Chennai - 600 034.
Phone : 2827 1530
Contact : 98403 56293 / 9003252585
E-mail : niqrhq@gmail.com / vsam_98@yahoo.com
Website : www.niqr.in