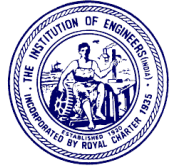




Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)
Old Bombay Road, Gachibowli, Hyderabad – 500032, T.S, India

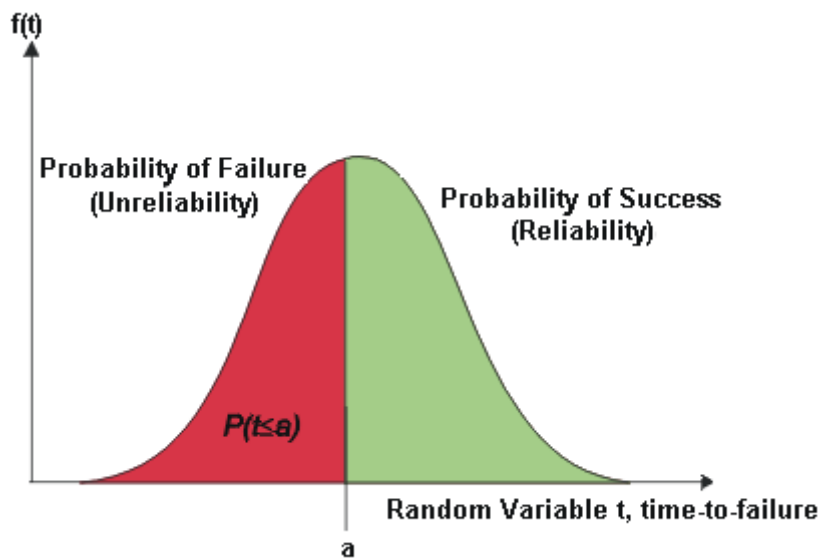


Quality & Productivity Division

Continuing Professional Development Program on

Quality & Reliability Management

13 – 15 September, 2017



(An ISO 9001:2008 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

INTRODUCTION

Today engineering systems are becoming more complex to design and build because of factors such as accelerated growth in new technologies system complexity and size. Quality and Reliability of a product or a service is essential for very survival of the Organisation. To improve the chances that a system will perform satisfactorily during its useful life, the interest in reliability and quality control has been growing at a considerable rate in recent years. Every organization is striving hard to continuously improve the quality and reliability of their products and in-turn their customer base.

Reliability is concerned with the performance of a product over its entire life time, quality control is concerned with the performance of a product at one point in time, usually during the manufacturing process. As stated in the definition, reliability assures that components, equipment and systems function without failure for desired periods during their whole design life, from conception (birth) to junking (death). Quality control is a single, albeit vital, link in the total reliability process. Quality control assures conformance to specifications. This reduces manufacturing variance, which can degrade reliability. Quality control also checks that the incoming parts and components meet specifications, that products are inspected and tested correctly, and that the shipped products have a quality level equal to or greater than that specified.

The program addresses practical pathways towards manufacturing cost reduction through product quality and reliability improvement. It explores ways to reduce or eliminate the impact of life limiting failure mechanism in design and manufacturing processes.

OBJECTIVES

- Design process that leads to reliable systems with built-in quality.
- Fewer warranty-period failures for better operational reliability in the field, better image of organization and lower repair costs;
- Better economy through fault detection and correction during the product-development cycle
- Improved overall quality of the process/product and weed out infant-mortality

COVERAGE

- Introduction to Quality & Reliability
- Concepts of Quality, Quality Management and Cost of Quality,
- Quality Management System Requirements/ Performance Improvements Measures
- Quality Improvement Tools/RCA
- Reliability, Maintainability, Availability, absolute and relative availability, reliability evaluation techniques, reliability activities in system design, reliability data.
- Failure Models
- Time dependent failure model: Weibull distribution, failure modes, burn-in life, three parameter Weibull
- Reliability of Systems
 - Simple System
 - State Dependent System
 - Physical Reliability Model
 - Design for Reliability
- Reliability Accelerated Testing
- FMECA, FTA
- Reliability Data & Analysis
- New Concepts in Reliability
 - Reliability Evaluation Using MIL-HDBK-217 plus
 - Bayesian techniques for reliability Estimation
 - Condition Monitoring
- Case Studies

METHODOLOGY

The program will be conducted in an interactive environment providing ample scope for discussions. More emphasis will be given in the direction of providing practical solutions with demonstration. Emphasis would be laid on sharing experiences and problems

TARGET PARTICIPANTS

Scientists, Managers, Designers, Manufacturing Engineers, Quality Engineers, Reliability Engineers, and others involved in improving product quality and reliability will benefit from attending this course. There are no prerequisites for this course; however, some background in engineering or sciences will be helpful.

PROGRAMME VENUE, DATES & TIMINGS

Venue: Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachi Bowli, Hyderabad. 500032. TELANGANA STATE, India.

Dates: 13 – 15 September, 2017 (3 Days).

Timings: On the first day Registration will commence at 0900 hrs. On all other days the program timings will be from 0945 - 1715 hrs with breaks in between for tea and lunch.

COURSE ADVISOR

Sri S K Verma, Chief Mentor – Engineering Staff College of India

COURSE DIRECTOR

Sri D Sheshadri, Head – Quality & Productivity Division, Engineering Staff College of India

FACULTY

Apart from core internal faculty, experts from industry, consulting firms, government organizations, academic and research institutions, etc. will share the sessions.

COURSE FEE

Rs.16,500/- (Residential) + 18% GST per participant. Fee includes, course material, course kit, twin-sharing/single AC accommodation as per availability, breakfast, lunch, dinner, tea / coffee and snacks during the actual days of training program.

DISCOUNTS

- ❖ **Non-Residential Fee:** 10% discount on course fee is allowed for non-residential participants.
- ❖ **Group Discount:** Additional 10% discount for three or more participants, if sponsored by the same organization.

(All Discounts are applicable only if fee is received at ESCI before commencement of the program)

GST is to be paid extra over and above the training fee, as training is also brought under the purview of GST

PAN Card No: AAATT3439Q; **GSTIN:** 36AAATT3439Q1ZV

Program fee is to be paid in favour of “**IE(I)–Engineering Staff College of India**” in the form of demand draft payable at Hyderabad.

Alternatively the payment may be made by **Electronic Fund Transfer (EFT)** to ESCI - SB A/c No. 10007111201 with The SBI, PBB, Rajbhavan Road Branch, Khairatabad, Hyderabad-500004 by **NEFT/ RTGS/ IFSC Code No. SBIN 0004159 – MICR No.500002075.**

While using EFT method of payment, please ensure to communicate us your company name, our invoice reference and program title.

REGISTRATION

Online registration shall be available on ESCI website.

To register, manually please send your nominations giving details of name, designation, contact address, email address, mobiles no, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to :

The Head
Quality & Productivity Division
Engineering Staff College of India,
GachiBowli, Hyderabad – 500032,
Phone: 040 –66304133, 66304110 / 4109 / Fax : 040-23000336
Email : qp@escihyd.org URL : www.escihyd.org

CERTIFICATE

A certificate of participation will be awarded to each participant on conclusion of the program.

GENERAL INFORMATION

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of outstation participants, ESCI will facilitate pick-up and drop from Airport / Railway Stations / Bus Stations, if travel plans are received at least 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participant directly to the Cab.
- ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in at 1200 hrs.) and one day after conclusion (Check-out at 1200 hrs.) of the program duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation)
- Well developed Information Centre and Internet facilities are available to the participants.