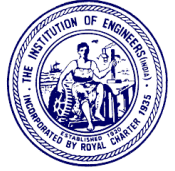




Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)
Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. Telangana, India



QUALITY & PRODUCTIVITY DIVISION

ONLINE PROFESSIONAL DEVELOPMENT PROGRAMME

Uncertainty Measurement

07 – 08 June 2021



Powered by
ESCIUpSkill
A Smart Learning Platform

Online Interactive Sessions | Digital Learning | Online Assessment | Experts Online Support

Introduction

Measurements are always made for a purpose – may be to answer a specific question or to help solve a problem. Whenever a measurement is made there will always be some uncertainty about the result due to unavoidable errors in the measurement process. The validity of absolute measurements made have little meaning unless the uncertainty of the test or calibration process is known. Many standards, including ISO/IEC 17025 and ISO/TS 16949, require that the uncertainty of measurement be taken into account when performing test and calibration activities.

Knowledge of the uncertainty associated with measurement results allows a judgment to be made as to whether the data are likely to be 'fit for purpose'. If comparisons of results are being made, The evaluation of the uncertainty associated with measurement results is a requirement for testing laboratories accredited to ISO/IEC 17025.

Objectives

This two-day workshop will acquaint delegates with the requirements of ISO/IEC 17025, particularly the salient principles in the expression of Uncertainty in Measurement, which defines methodologies to calculate uncertainty budgets, as well as covering the basic statistics required.

This course provides a practical approach to evaluating uncertainty in testing laboratories which is in line with the ISO principles for uncertainty estimation and current accreditation requirements. The course assumes no prior knowledge of uncertainty evaluation.

Course Coverage

- Introduction to the concept of measurement uncertainty and the importance of uncertainty of measurement
- Basic concepts: traceability, uncertainty and terminology
- Statistics for measurement uncertainty estimation
- Impact of uncertainty on results and compliance with specifications
- Type A uncertainties and selection of statistical tools
- Type B uncertainties, identification and use
- Combined uncertainties
- Expanded uncertainties and confidence intervals
- Reporting of uncertainties
- Worked examples

Methodology

The programme will be conducted in an interactive environment providing greater scope for discussions. Emphasis will be on a highly participative style of learning through Lectures, Group discussions, Case Studies and hands-on exercises.

(An ISO 9001:2015 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

Target Participants

- Laboratory and Technical Personnel
- Assessors of Laboratory/Quality Management Systems
- Assessors of calibration and testing laboratories
- Quality and Technical Managers
- Quality and Design Engineers & Others

Although not essential, personnel attending this course should have a basic knowledge of mathematics and statistics.

Programme Dates & Timings

Dates: 07 – 08 June 2021

Timings: After Registration Participant can access **ESCI LMS platform** for digital Learning

Online Session timings will be from 09:45 – 17:15 hrs with 15 Minutes Tea breaks and 1hr Lunch Break.

Course Director

Head, Quality & Productivity Division,
Engineering Staff College of India, Hyderabad.

Course Fee

₹ 6,000/- per participant. Experts Online Support and Reading Material Softcopy.

GST @18% is to be paid extra and above the training fee as training. **PAN Card No.** AAATT3439Q. **GST No:** 36AAATT3439Q1ZV, **HS No.:** 999293 (under commercial training or coaching services – clause 65(105) (ZC) of Finance act – 1994).

Programme fee is to be paid in favour of **“THE INSTITUTION OF ENGINEERS (INDIA) – 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 – **Axis Bank** A/c No. **912010049234564** with The Axis Bank Ltd, Old Mumbai Hwy, Cyberhills Colony, P Janardhan Reddy Nagar, Gachibowli Hyderabad-500032 by NEFT/ RTGS/ IFSC Code No. UTIB 0000733 – MICR No.500211020. **While using EFT method of payment, please ensure to communicate us your company name, our invoice reference and programme title.**

Registration

Online registration shall be available on ESCI **web portal** : www.esciupskill.org / www.escihyd.org

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

A Certificate of participation will be awarded to each participant on conclusion of the programme.

Quality & Productivity Division, Engineering Staff College of India

Gachi Bowli, Hyderabad – Telangana 500 032

Phone: 040 – 66304133 (EPABX) 66304110/109/108 (Direct), Fax: 040 – 66304103

Email: qp@escihyd.org **web portal:** www.escihyd.org