



**National Academy of Construction**

**ISO 9001:2015**

**A Society under Govt. of Telangana**

**Virtual Program**

on

**Uncertainty Measurement**

21 - 22 Dec, 2022

20 - 21 Jan, 2023;

20 - 21 Mar, 2023



NAC Grounds, Hitex, Cyberabad, Hyderabad-500084, Telangana, India

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## **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/IEC17025 and ISO/TS16949, 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/IEC17025.

## **OBJECTIVE:**

This two-day workshop will acquaint delegates with the concepts of MU & its evaluations.

This course provides a practical approach to evaluating uncertainty in measurement which is in line with the ISO principles for uncertainty estimation and current accreditation requirements.

## **COURSE CONTENT:**

- Concept of measurement uncertainty and the importance of uncertainty of measurement
- Terms & Definitions
- 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 program will be conducted Virtual / Off-line interactive environment providing scope for discussions. Emphasis will be on a highly participative style of learning through Presentations, Case Studies and hands-on exercises.

## **INFRASTRUCTURE REQUIREMENT FOR VIRTUAL PARTICIPANTS:**

A Desktop / Laptop with a high speed reliable internet connection and Audio & Video capabilities.  
A Head set is recommended.  
Virtual Class room through Zoom/Google Meet etc. Virtual Conferencing apps.

## **COURSE DIRECTOR:**

Head-Corporate Quality & Productivity Wing, NAC



## **FACULTY:**

Experts with rich experience and knowledge will share the session.

## **PROGRAM VENUE, DATES & TIMINGS:**

Venue : Virtual

Duration : 14 Hours (2 Days)

Dates :

Batch-I : 21 & 22 Dec., 2022;

Batch-II : 20 & 21 Jan. 2023 and

Batch-III :20 & 21 Mar. 2023

Timings: Daily 10:00 -17:00 Hrs., with breaks in-between for tea and lunch.

## **COURSE FEE:**

Virtual : Rs.6,000/- + 18% GST per participant. Fee Includes course material.

Course fee shall be paid before commencement of the training program.

## **CERTIFICATE:**

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

## **MODE OF PAYMENT:**

Payment may be made by Electronic Fund Transfer (NEFT) to DG, NATIONAL ACADEMY OF CONSTRUCTION - HYDERABAD - SB A/c No. 62422229281 with SBI, MADHAPUR- 500 081, IFSC Code SBIN0021162, GST No.36AAAAN0794M1Z8.

On payment of course fee, please communicate us your company / individual name and program title in the transaction reference.

## **REGISTRATION:**

To register please send your nominations giving details of name, designation, contact address, email address, mobiles number of the participant to:

The Director, EDP Trainings

National Academy of Construction,

NAC Grounds, Cyberabad, Hyderabad-500084,

Phones:(040) 23111916-917 Fax:-(040)23111997Mobile:9866114616

Email:[sheshadri@nac.edu.in](mailto:sheshadri@nac.edu.in)/[corporatequality@nac.edu.in](mailto:corporatequality@nac.edu.in)

Website:[www.https://nac.edu.in](https://nac.edu.in)

## Welcome to National Academy of Construction

National Academy of Construction (NAC) was established on the joint initiative of construction industry and State Government in the year 1998 as a “Society” and incorporated as “Public Charitable” institution. It is managed by a Governing board with the Hon’ble Chief Minister as Chairman and Hon’ble Minister for Roads and Building, the Chief Secretary of Telangana State as Vice Chairman.

NAC Headquarters is located in 46.46 acres of green campus in the IT Corridor in Hyderabad, Telangana. It has 2 Advanced Training Institutes at Hyderabad, Jagityal and several centres in the districts across Telangana State.

NAC is a unique institution which is running a whole range of training programs from the grass root level for the construction workers in skill formation/ skill up-gradation to senior level engineers and architects in all respects of the construction technology, materials etc. National Academy of Construction is an ISO 9001:2015 certified Institute and affiliated to Skill Council.

### Accolades received

1. CIDC Vishwakarma Award for the years 2016, 2018, 2019 and 2021 for Construction & Skill Development
2. Golden Peacock National Training Award 2017 and 2019 for National Training
3. Assocham Award 2019 in the category National Leadership Excellence Skill Development / Vocational Training.
4. Assocham Award 2018, 2019 (Gold Winner) and 2022 for Best Institute - Placement.

### Infrastructure

The facilities at the NAC campus consists of Auditorium, Seminar Halls, Class Rooms, Board Rooms, NAC Residency, Parking area under the Display Centre and Canteen. Well-developed Information Centre and Internet facilities are available to the participants.

NAC campus is centrally located near to Hitec City, High Tech city MMTS station & Metro station. Close to major Shopping malls, Hitex and other convention & recreational centers etc.