

INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, MUMBAI

**OFFLINE WORKSHOP ON ESTIMATION & EXPRESSION OF  
UNCERTAINTY IN MEASUREMENT  
AS PER NABL - 141**

(Code No. 2368101)

1. Duration : Two Days (Offline Training Programme)
2. Date : 28<sup>th</sup> – 29<sup>th</sup> February 2024
3. Daily Timings : **9:30 am to 01.30 pm**  
**02.15 pm to 05.30 pm**
4. Venue : **Training Programme will be conducted Offline.**
5. Fee/participant : **Rs. 8,260/-** (Rs. 7,000/- + 18 % GST) per participant  
**Payment can be transferred through NEFT/RTGS or DD drawn in favour of IDEMI, Payable at Mumbai in advance to confirm the nomination.**  
**You can also make online payment by using following link:**  
<https://rzp.io/l/gGcnfmx>

6. Who should attend :

Persons working in All types of Calibration & Testing Laboratories, Quality Assurance Department, Quality Control Department and R & D Labs who are concerned with measurement, testing, calibration and quality assurance.

8. Why should you attend :

The expression of '**Uncertainty in Measurements**' is an integral component of the certificate being issued by the calibration and testing laboratories. The results must be produced with a high degree of exactness in measurement system. This concept is equally true for all other fundamental units of measurement as per ISO/IEC 17025 (General requirements for the competence of testing and calibration laboratories). Further, repeated observations made during precision measurement of any parameter are rarely found identical even when these are made under the same conditions.

This is due to the UNCERTAINTY in measurement, which is prevalent in all measurements which need to be estimated and evaluated.

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9. Objectives :

This training is designed to expose the participants not only to the concept of measurement uncertainty, but also provide an understanding of how to actually estimate and evaluate the same for different types of measurement as per NABL Document No. 141. Participants would be required to estimate and evaluate measurement uncertainty of actual case studies.

10. Training Contents :

- a) Uncertainty: concept, sources & measures
- b) Definitions of related terms and phrases
- c) Estimation & Evaluation of standard uncertainty
- d) Type A & B Uncertainty, Standard Uncertainty, Combined Uncertainty, Degrees of Freedom, Sensitivity Coefficient, Coverage Factor, Expanded Uncertainty
- e) Step by step procedure for Estimation and Evaluation of **Uncertainty in Measurement**
- d) Case studies in Calibration of Pressure, Temperature, Mass, Electrical, Dimension Parameters

11. Faculty: 1) Mr. Pradeep Gujarathi, Deputy Director (Elect.), IDEMI, Mumbai  
2) Mr. Pankaj Ambekar, Senior Technical Assistant, IDEMI, Mumbai.

12. Certificate of participation will be issued to each attending participant.



# वैद्युतिक मापन उपयंत्र अभिकल्प संस्थान, मुंबई

## INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, MUMBAI TECHNOLOGY CENTRE



भारत सरकार की सोसाईटी  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय,  
Government of India Society  
Ministry of Micro, Small & Medium Enterprises

### BANK MANDATE

NAME OF THE ORGANISATION	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS
BANK	INDUSTRIAL DEVELOPMENT BANK OF INDIA
BRANCH	CHEMBUR BRANCH
TYPE OF ACCOUNT	CURRENT ACCOUNT
ACCOUNT NO.	018102000013350
IFSC CODE	IBKL0000018
MICR CODE	400259005
IDEMI PAN AND GST NO.	AAA AI0012M AND 27AAA AI0012M1Z1
E MAIL	accounts@idemi.org

For Insitute For Design Of Electrical Measuring Instruments

  
Authorised Signatory

  
Authorised Signatory

Institute For Design of Electrical Measuring Instruments  
S T Tope Marg, Sion P O, Chunabhatti,  
Mumbai - 400022.



Swatantryaveer Tatya Tope Marg, Chunabhatti, Sion. P.O., Mumbai - 400 022. (M.S.)

Phone : (022) - 2405 0301/2/3/4 Fax : (022) - 2405 0016.

Website : [www.idemi.org](http://www.idemi.org) | Email : [info@idemi.org](mailto:info@idemi.org)



(Amended)

**Government of India**  
**Form GST REG-06**  
[See Rule 10(1)]

**Registration Certificate**

**Registration Number :27AAAAI0012M1Z1**

1.	Legal Name	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS			
2.	Trade Name, if any	INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENT			
3.	Constitution of Business	Society/ Club/ Trust/ AOP			
4.	Address of Principal Place of Business	IDEMI BUILDING, ST TOPE MARG, SION PO, CHUNABHATTI, Mumbai City, Maharashtra, 400022			
5.	Date of Liability	01/07/2017			
6.	Date of Validity	From	01/07/2017	To	Not Applicable
7.	Type of Registration	Regular			
8.	Particulars of Approving Authority	Maharashtra Goods and Services Tax Act, 2017			
Signature					
Name		RAJESH BHASKAR JADHAV			
Designation		Deputy Commissioners of State Tax			
Jurisdictional Office		GHATKOPAR-WEST_503			
9.	Date of issue of Certificate	04/12/2020			
Note: The registration certificate is required to be prominently displayed at all places of Business/Office(s) in the State.					

**This is a system generated digitally signed Registration Certificate issued based on the approval of application granted on 04/12/2020 by the jurisdictional authority.**