

Dear Sir / Madam,

Greetings from CMTI

We are pleased to inform you that we are conducting a 02 day Non-Residential Training programme on "**Estimation of Measurement Uncertainty by Monte Carlo Simulation Method (MCS)**", course code 0940

Highlights / Overview of the Program:

Every testing laboratory involving quantitative measurement and wishes to apply for accreditation needs to establish measurement uncertainty for all the parameters measured using various test methods. Establishing measurement uncertainty requires understanding the concept of uncertainty and thorough knowledge on technicality of the process. The presently practised GUM method has certain limitations and as such the estimated uncertainty may not be realistic one. An alternate approach for GUM is Monte Carlo Simulation Method (MCS) method which is internationally being adopted will be discussed during this course. The topics covered are :

- Fundamentals of measurement uncertainty concept
- Benefits of establishing uncertainty.
- Comparison of GUM and MCS Method.
- Approach of MCS method in estimation of uncertainty along with typical case studies.
- Interpolation technique adopted for obtaining the uncertainty value at the range where calibration data are not available.

Target Participants:

Laboratory Managers with qualifications BE/Diploma, M. Sc/ B. Sc with or without experience

Programme Schedule

It is 02 days Non Residential Training Programme scheduled to be during **11th – 12th November 2024**. The Programme will be held at Central Manufacturing Technology Institute, Bangalore

Participation Fees

Rs. 7,800 /- plus GST @ 18%*, per participant. This includes Course Kit, working veg lunch, midsession tea.**

Course Fee can be paid through **NEFT / RTGS / Demand Draft**. Demand Draft to be drawn in favor of "*Central Manufacturing Technology Institute*", payable at Bangalore and should reach CMTI one week before the actual date of commencement of the course.

Beneficiary for RTGS/NEFT

- a) **Name : Central Manufacturing Technology Institute**
- b) **GST No: 29AAATC2085K1ZJ**
- c) **Account No :10521862015**
- d) **Bank Name & Branch: State Bank of India, Yeshwanthpur Branch**
- e) **IFSC Code :SBIN0003297**
- f) **MICR Code : 560002055**

Additional Information:

1. A 10% rebate on course fee will be given to organizations nominating 3 or more participants for each programme, only if payment is made in advance, ten days before the commencement of the course.
2. Individuals/ Companies interested in participation are requested to fill in the enclosed Enrollment Form and submit at the earliest.
3. Participants are advised to proceed for the programme only after the nominations / Programme confirmed by us (by Fax / Letter / Phone / E-Mail).
4. Participants should report at CMTI on the day of commencement of the course. Participants are advised to reach Bangalore the previous day evening/ night.
5. Course will be conducted from 09:00 to 17:00 hrs. Participants may plan their return journey accordingly.
6. Participants will be given Certificate after the completion of the Training Programme
7. Enclosed are the tentative programme contents for ready reference
8. For further Information / enquiries please contact the undersigned

Note: * Taxes and other levies will be charged as per the prevailing rates at the time of Billing**