

Greetings from CMTI

We are pleased to inform you that we are conducting a 05 day Non-Residential Training programme on "**Precision Measurements & Metrology** ", course code **0310**

Highlights / Overview of the Program:

This course aims at providing a theoretical base along with practical training on shop and laboratory methods for measurement of dimensional and geometrical errors and surface finish. It covers various measurement methods and evaluation techniques adopted in precision measurement. Participants will also be appraised of the usage of sophisticated equipments such as Laser Interferometer, Co-ordinate Measuring Machine, Lead Screw Testing Machine etc. Use of computers for evaluation of data with case studies is also highlighted. The participants will be given hands on experience on different types of measuring equipment.

Target Participants:

Personnel in Metrology, Inspection & Quality Assurance Depts.

Programme Schedule

It is 05 day Non Residential Training Programme scheduled during **31st July – 04th August 2023**. The Programme will be held at Central Manufacturing Technology Institute, Bangalore

Participation Fees

Rs. 19,500/- 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) GST No. to be shared while sending your nomination / Registration (If a company is exempted from GST they have to provide GST Exemption certificate).
- 9) Please note that Course fee once paid will not be refunded. However, change in nomination will be permitted.

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

For further enquiries / registration / nominations, please contact:
Mrs. Asha R Upadhyaya, Scientist – F & Centre Head – AEAMT,
09449842686 / 78 Fax: (080) 2337 0428
E-mail– training@cmti.res.in

CENTRAL MANUFACTURING TECHNOLOGY INSTITUTE

Tumkur Road, Bangalore 560 022

Training Programme On "Precision Measurements & Metrology"

Tentative programme contents

Day	Topic
Day 01	Registration
	Introduction to Precision Measurements
	Introduction to Dimensional Metrology & Nano Metrology
	Visit to CMTI Labs
	Demo I – Dimensional Metrology ULM, Profile Projector, Metroscope, Height Gauge Etc.,
Day 02	Surface Metrology I (Straightness & Flatness)
	Surface Metrology II (Circularity & Cylindricity)
	Demo II - Dimensional Metrology Bevel Protractor/ Electronic Level, Autocollimator
	Demo III – Surface Metrology -I (Straightness, Flatness & Squareness)
Day 03	Inspection of Threads
	Demo IV– Surface Metrology -II (Circularity & Cylindricity by conventional Methods & Form Tester)
	Demo V Thread Measurements
Day 04	Introduction to CMM & its Applications
	Calibration of Machine Tools & CMM
	Demo VI - CMM
Day 05	Calibration – Needs & Requirements
	Surface Metrology III Surface Roughness
	Demo VII - Surface Metrology -III (Surface Roughness)
	Demo VIII - Calibration of Measuring Instruments.
	Concluding Session