

Greetings from CMTI

We are pleased to inform you that we are conducting a 04 day Non-Residential Training programme on "**Noise & Vibration Analysis Methods (Basic & Advanced)**", course code **0150**

Highlights / Overview of the Program:

Noise & Vibration is becoming a key attribute that the engineers have to take into account to deliver high quality product. The course is designed to provide theoretical and practical knowledge in measurement, analysis and mitigation of noise & vibration in machines. The course is aimed to help engineers to gain sufficient knowledge to do troubleshooting of NVH problems in machines, automobiles and appliances. Noise & Vibration measurement methods, instrumentation, standards, analysis – basic and advanced analysis techniques such as bearings & gear box analysis, order tracking, FRF, Sound intensity analysis & Noise source ranking, etc will be covered in detail with practical demonstration and presentation of case studies.

Course Contents

- Noise & Vibration – Fundamentals
- Instrumentation for Noise & Vibration measurement & analysis
- Noise & Vibration measurement, Basic analysis methods
- Noise & Vibration measurement standards, Metrological investigation of vibro-acoustic problems
- Advanced analysis methods such as bearing & gear box analysis, order tracking, FRF, sound intensity analysis, Noise source mapping & ranking, etc.
- Case Studies

Target Participants:

Engineers / Managers from NVH Group, Product Development group, Maintenance & Quality Departments

Programme Schedule

It is 04 day Non Residential Training Programme scheduled during **11th - 14th September 2023**. The Programme will be held at Central Manufacturing Technology Institute, Bangalore

Participation Fees

Rs. 15,600/- 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
“Noise & Vibration Analysis Methods (Basic & Advanced)”
Tentative Programme Schedule

Day & Date	Particulars
Day 1	Fundamental concepts in dynamic properties of Mechanical system, Fundamentals of Vibration & Noise
	Instrumentation for Noise and Vibration
	Demonstrations
Day 2	Fourier Analyzer & its Application Vibration & Noise - Measurement and Analysis
	Vibration Monitoring for Predictive Maintenance
	Demonstrations
Day 3	Noise & vibration — advanced analysis (Bearings & Gear Box analysis, Order tracking, system analysis and FRF), Vibration isolation
	Dynamic Balancing of Rotors
	Demonstrations
Day 4	Sound intensity & sound power measurements, Noise source identification
	Case studies.
	Standardisation aspects
	Demonstrations
	Concluding session