Training Programme

On

Noise & Vibration Analysis Methods

Course Code: 2303

22nd -25th September 2025

Key Takeaways

- **Basics of Noise and Vibration, Instrumentation for Noise and Vibration Measurement, Noise and Vibration Measurement and Analysis, Dynamic Balancing, FRF Measurements, FFT Analysis, Waterfall diagram, Order Tracking, Sound Pressure and Sound Power Measurement, Sound Intensity Analysis, Noise Source Mapping and Ranking.**

CONTACT US

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CENTRAL MANUFACTURING TECHNOLOGY INSTITUTE

Tumkur Road, Bengaluru - 560 022

About AEAMT

Centre for Skill Development, is a flagship initiative of CMTI, aims to enhance the knowledge and skills of practicing engineers, create job ready engineers to the Indian Manufacturing sector and to bridge the gap between industry and academia.

Focused Area / Objectives :

- Fundamentals of Noise and Vibration.
- Instrumentation for Noise and Vibration Measurement and Analysis.
- Fourier Analyser and its applications.
- Vibration Monitoring
- Advanced Noise and Vibration Analysis.
- Vibration Mitigation.
- Dynamic Balancing (on balancing machine and in-situ balancing)
- Sound Power and Sound Intensity, Noise Mapping and Ranking of Sources.

Targeted Audience :

Engineers/Managers from NVH Testing Domain/Groups, Product Development Group, Research and Development Group, Maintenance and Quality Departments.

Program Coordinator :

Mr. Girish Kumar M is currently working as Scientist- E at the Centre for Smart Manufacturing, Precision Machines Tools & Aggregates. He has 23 years of research experience at CMTI. His Research interests are in the domain of Noise and Vibration, Condition Monitoring of Rotating Machinery, Dynamic Behavior Studies of Machine Tools, NVH Bench Marking of the Products (Machine Tools, Automobiles, House Hold Appliances), Modal Analysis, Operation Deflection Shapes and Operation Modal Analysis of Structures and Machinery, Dynamic Balancing of rotors, Condition Monitoring through Infrared Thermography, Sound Intensity and Sound Power Measurements, Problem Investigation, Analysis and Mitigation-both immission and emission aspects of noise and vibration. Smart Manufacturing and Industry 4.0.

Programme Schedule :

It is a **04-days** Non - Residential Training Programme scheduled on **22nd -25th September 2025**. The Programme will be held at Central Manufacturing Technology Institute, Bengaluru.

Participation Fees :

Rs. 15,600/- plus GST @ 18%***, per participant. This includes Course Kit, veg lunch, mid-session 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 Bengaluru 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 :

- 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.
- Individuals/ Companies interested in participation are requested to fill in the enclosed Enrollment Form and submit at the earliest.
- Participants are advised to proceed for the programme only after the nominations / Programme confirmed by us (by Fax / Letter / Phone / E-Mail).
- Participants should report at CMTI on the day of commencement of the course. Participants are advised to reach Bangalore the previous day, evening/ night.
- Course will be conducted from 09:00 to 17:00 hrs. Participants may plan their return journey accordingly.
- Participants will be given Certificate after the completion of the Training Programme
- Enclosed are the tentative programme contents for ready reference
- GST No. to be shared while sending your nomination / Registration (If a company is exempted from GST they have to provide GST Exemption certificate).
- 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**

Tentative Programme Schedule

Days	Topics
Day 1	Fundamental concepts in dynamic properties of Mechanical system, Fundaments 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

For further enquiries/registration / nominations, please contact:
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