



### CMTI's focused areas are -



# **Highlights of CMTI Training Programmes**

- Subject Experts as faculty
- Lecture supported by Demos/ Practical/ Hands-on Experience sharing: new R & D Projects/ Live Case Studies etc
- Well-equipped laboratories with state of art equipment's for practical exposure
- Presentations supported with well structured course material covering latest trends
- Improved classroom ambience with audio-visual facilities
- Provides a platform for interaction with our experts
- More than three decades of experience in designing and Delivering training programmes







# ANNUAL CALENDAR FOR THE YEAR 2025 - 2026

ANNUAL CALENDAR FOR THE YEAR 2025 - 2026						
SL. NO.	COURSE CODE	COURSE TITLE	NO. OF DAYS	DATE OF COMMENCEMENT	#COURSE FEE ₹ (RS.)	CO-ORDINATOR/ FACULTY
1	1301	Measurement Uncertainty for Chemical & Mechanical Parameters by Guide for Uncertainty Measurement (GUM) Method	2	08 <sup>th</sup> April 2025	7,800	Mr. Srinivasa Rao C / Dr. Kavithaa S
2	4101	Laboratory Management & Internal Audit as per ISO / IEC 17025:2017	4	22 <sup>nd</sup> April 2025	15,600	Mrs. Khushboo / Mr. Niranjan Reddy K
3	7101	Geometric Dimensioning & Tolerancing	5	05 <sup>th</sup> May 2025	19,500	Mr. Anil Kumar K/ Mr. Jeevan Kumar P/ Mr. Kirankumar M D
4	1302	Chemical Testing & Characterization of Metallic Materials	3	06 <sup>th</sup> May 2025	11,700	Dr. Kavithaa S / Mr. Srinivasa Rao C
5	4102	Precision Measurements & Metrology	5	12 <sup>th</sup> May 2025	19,500	Mr. Shashikumar / Mrs. Khushboo
6	2301	Nano Material Characterization, SEM, XRD, SPM, Nanoindenter, etc	4	13 <sup>th</sup> May 2025	15,600	Mr. Murugan A / Mr. Basavaraju Uppara
7	1303	Non Destructive Testing	2	29 <sup>th</sup> May 2025	7,800	Mr. Srinivasa Rao C / Dr. Kavithaa S
8	2101	Single Point Diamond Turning (Machine Technology & Characterization Techniques)	2	29 <sup>th</sup> May 2025	7,800	Mr. Gopi Krishna S/ Mr. Narendra Reddy T/ Mr. Prakash Vinod
9	4203	Thin Film Deposition Techniques & Characterization Methodologies	3	09 <sup>th</sup> June 2025	11,700	Dr. K Manjunath / Dr. Prabhanjan Kulkarni
10	1304	Corrosion and its Prevention through Surface Finishing	2	10 <sup>th</sup> June 2025	7,800	Dr. Kavithaa S/ Mr. Srinivasa Rao C
11	2201	Industry 4.0 & Smart Manufacturing Systems	3	11 <sup>th</sup> June 2025	11,700	Mr. Narendra Reddy T/ Mr. Harikrishna S T/ Mr. Prakash Vinod
12	5201	Additive Manufacturing	3	16 <sup>th</sup> June 2025	11,700	Mr. Vinod AR / Mr. Manjunath B N/ Mr. Harikrishna S T
13	4103	Calibration of Dimensional Measuring Equipments	5	07 <sup>th</sup> July 2025	19,500	Mrs. Khushboo/ Mr. ShashiKumar
14	2302	Machinery Condition Monitoring for Predictive & Proactive Maintenance	5	07 <sup>th</sup> July 2025	19,500	Mr. Girish Kumar M/ Mr. Mukunda M/ Mr. Prakash Vinod
15	2304	Microscopy & Analysis: SEM, AFM, STM, Confocal Microscope, Optical Profiler, etc	3	09 <sup>th</sup> July 2025	11,700	Mr. Murugan A / Mr. Basavaraju Uppara
16	7102	Mechatronics & Manufacturing Automation	5	14 <sup>th</sup> July 2025	19,500	Mr. Anil Kumar K / Mr. Shanmugaraj V
17	1305	Materials and Metallurgy for Non- Metallurgists	3	16 <sup>th</sup> July 2025	11,700	Dr. Kavithaa S/ Mr. Srinivasa Rao C
18	4204	Advanced Signal Processing in Micro-manufacturing & Automation	2	21 <sup>st</sup> July 2025	7,800	Dr. Debeshi Dutta / Dr.K Manjunath
19	6101	Part Programming of CNC Machines	5	18 <sup>th</sup> Aug 2025	19,500	Mr. Bharath P / Mr. Vignesh Kemminje
20	4104	Uncertainty of Measurements for Dimensional Measurements	3	20 <sup>th</sup> Aug 2025	11,700	Mr. ShashiKumar / Mrs. Khushboo





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SL. NO.	COURSE CODE	COURSE TITLE	NO. OF DAYS	DATE OF COMMENCEMENT	#COURSE FEE₹ (RS.)	CO-ORDINATOR/ FACULTY
21	1306	Advanced Material Testing	2	02 <sup>nd</sup> Sep 2025	7,800	Mr. Srinivasa Rao C / Dr. Kavithaa S
22	2202	Advanced Robotics	2	08 <sup>th</sup> Sep 2025	7,800	Mr. Narendra Reddy T/ Mr. Prakash Vinod
23	3101	Design and Analysis of Experiments for Micro System Design and Processes	3	08 <sup>th</sup> Sep 2025	11,700	Dr. Ajay Jaswal / Dr. Prabhanjan Kulkarni
24	5201	Additive Manufacturing	3	10 <sup>th</sup> Sep 2025	11,700	Mr. Vinod A R/ Mr. Manjunath B N/ Mr. Harikrishna S T
25	3102	Training on Welding Technologies for Vacuum Based Systems	2	11 <sup>th</sup> Sep 2025	7,800	Mr. Pradyumna J / Dr. Ajay Jaswal
26	2305	Scanning Electron Microscopy	1	12 <sup>th</sup> Sep 2025	3,900	Mr. Murugan A / Mr. Basavaraju Uppara
27	4201	Micro & Nano Manufacturing	2	18 <sup>th</sup> Sep 2025	7,800	Mr. Karthik M S / Mr. Sunil Magadum
28	2303	Noise & Vibration Analysis Methods	4	22 <sup>nd</sup> Sep 2025	15,600	Mr. Girish Kumar M / Mr. Mukunda M/ Mr. Prakash Vinod
29	2301	Nano Material Characterization, SEM, XRD, SPM, Nanoindenter, etc	4	07 <sup>th</sup> Oct 2025	15,600	Mr. Murugan A / Mr. Basavaraju Uppara
30	3103	Semiconductor Design and fabrication processes	2	10 <sup>th</sup> Nov 2025	7,800	Mrs. Kusuma N / Mrs. Megha Agrawal
31	3104	Semiconductor packaging and characterization processes	3	12 <sup>th</sup> Nov 2025	11,700	Mr. Harsha S / Mrs. Megha Agrawal
32	2304	Microscopy & Analysis: SEM, AFM, STM, Confocal Microscope, Optical Profiler, etc	3	12 <sup>th</sup> Nov 2025	11,700	Mr. Murugan A / Mr. Basavaraju Uppara
33	1307	Materials, Metallurgy & Heat Treatment of Metals and Alloys	3	18 <sup>th</sup> Nov 2025	11,700	Mr. Srinivasa Rao C / Dr. Kavithaa S
34	1101	Gear Engineering	2	19 <sup>th</sup> Nov 2025	7,800	Mr. Ananthapadmanabha / Mr. Srinivasa Rao C
35	4105	Introduction to CMM	3	19 <sup>th</sup> Nov 2025	11,700	Mr. Siddaraju K G/ Mrs. Khushboo
36	4101	Laboratory Management & Internal Audit as per ISO / IEC 17025:2017	4	24 <sup>th</sup> Nov 2025	15,600	Mrs. Khushboo / Mr. Niranjan Reddy K
37	7101	Geometric Dimensioning & Tolerancing	5	01 <sup>st</sup> Dec 2025	19,500	Mr. Anil Kumar K/ Mr. Jeevan Kumar P/ Mr. Kirankumar M D
38	5201	Additive Manufacturing	3	10 <sup>th</sup> Dec 2025	11,700	Mr. Vinod A R/ Mr. Manjunath B N/ Mr. Harikrishna S T
39	2203	Al & ML for Manufacturing Industries	2	08 <sup>th</sup> Dec 2025	7,800	Mr. Narendra Reddy T / Mr. Prakash Vinod
40	1102	Design for Manufacturing & Assembly	2	11 <sup>th</sup> Dec 2025	7,800	Mr. Ananthapadmanabha / Mr. Anil Kumar K





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SL. NO.	COURSE CODE	COURSE TITLE	NO. OF DAYS	DATE OF COMMENCEMENT	#COURSE FEE ₹ (RS.)	CO-ORDINATOR/ FACULTY
41	4205	Advanced Surface Finishing and Characterization Techniques	1	12 <sup>th</sup> Dec 2025	3,900	Dr. Abhinav Kumar / Mr. Mayank Patel
42	1308	Advanced Engineering Materials Testing & Characterization	3	15 <sup>th</sup> Dec 2025	11,700	Dr. Kavithaa S / Mr. Srinivasa Rao C
43	2201	Industry 4.0 & Smart Manufacturing Systems	3	15 <sup>th</sup> Dec 2025	11,700	Mr. Narendra Reddy T/ Mr. Harikrishna S T/ Mr. Prakash Vinod
44	4202	Advanced Laser Machining	1	19 <sup>th</sup> Dec 2025	3,900	Mr. Sunil Magadum / Mr. Niranjan Reddy K
45	2305	Scanning Electron Microscopy	1	13 <sup>th</sup> Feb 2026	3,900	Mr. Murugan A / Mr. Basavaraju Uppara
46	4106	CMM & Machine Tool Calibration	2	26 <sup>th</sup> Feb 2026	7,800	Mr. Siddaraju K G/ Mr. Chethan H S
47	7101	Geometric Dimensioning & Tolerancing	5	02 <sup>nd</sup> Mar 2026	19,500	Mr. Anil Kumar K/ Mr. Jeevan Kumar P/ Mr. Kirankumar M D

### **Customized Training Programme**

SL. NO.	COURSE CODE	COURSE TITLE	NO. OF DAYS	DATE OF COMMENCEMENT	CO-ORDINATOR/ FACULTY
01	3105	Level 2 Laboratory training for Semiconductor Packaging (Hands On)	5	Flexible	Mr. Harsha S / Mrs. Megha Agrawal
02	3106	Hands-on Training on Failure Analysis and Reliability for Semiconductors and Microsystems	2	Flexible	Mr. Pradyumna J / Mr. Harsha S
03	3107	Sensors, Interfaces, Controllers, IoT & Applications	3	Flexible	Mrs. Megha Agrawal / Mr. Harsha S
04	3108	Practical training on micro device/sensor development	5	Flexible	Mrs. Megha Agrawal / Mr. Pradyumna J
05	2306	Hands-on Nano Materials Characterization	5	Flexible	Mr. Murugan A
06	1309	Hands-on Material Testing	5	Flexible	Dr. Kavithaa S Mr. Srinivasa Rao C /
07	1310	Casting, Forging, Welding & Heat Treatment	5	Flexible	Mr. Srinivasa Rao C / Dr. Nagahanumaiah
08	6301	General Administrative Practices (Including Admin, Accounts & Purchases)	2	Flexible	Dr. Nagahanumaiah / Mrs. Rama / Mrs. Sharmila Mr. Adesh Jain N
09	6102	Industry Ready Training Course for Technicians (Diploma, ITI)	3 days to 3 weeks	Flexible	Mr. Raju V R / Mr. Bharath P/ Mr. Vignesh Kemminje

### Terms & Conditions:

- 1. Minimum Participants: A minimum of 10 participants is required to conduct a customized program.
- 2. Course Fee: The course fee for the customized program will be determined based on the program's content, duration, and complexity.
- 3. Customization Scope: Program content, schedule, and delivery mode can be tailored to meet specific needs, subject to mutual agreement.
- 4. The Purchase order must be placed atleast 15 days before the program.



To view or download training calendar





### **ABOUT CMTI**

Central Manufacturing Technology Institute (CMTI), an autonomous institution under the administrative control of the Ministry of Heavy Industries, Government of India, is a premier Institute of National repute, devoted to Research in various aspects of Applied Manufacturing Technology.

CMTI plays a vital role in ushering leading edge technologies for manufacturing engineering industries in today's competitive environment. It has the state-of-the-art-equipment, trained and highly skilled manpower to meet the future requirements of industries.

The Institute undertakes Research, Develop Technologies and train manpower in the following focused areas and deploys them into industrial applications. The centre called Academy of Excellence for Advanced Manufacturing Technology (AEAMT) in CMTI offers practical based training for more than five decades. Our trainees profile includes practicing engineers, graduating students & faculty from National & International Organization.

### CMTI Academic Affiliate Programme (CAAP Scheme)

The CMTI Academic Affiliate Programme (CAAP Scheme) is a membership initiative designed to offer academic institutions access to specialized facilities and training opportunities. With an annual membership fee of ₹1 lakh plus applicable taxes, the scheme provides a variety of benefits. Affiliates gain access to CMTI's advanced lab facilities valued at ₹50,000, covering areas like Machining, Calibration, Inspection, Testing, and MEMS Packaging. Additionally, short-term training programs worth ₹50,000 are available annually. Other perks include lab visits, workshops, guest lectures, and opportunities for collaboration and internships for students. The scheme also outlines specific terms regarding the usage and renewal of services and benefits, ensuring a productive partnership between CMTI and academic affiliates.

For More Information: https://drishti.cmti.res.in/assets/files/caap.pdf

### INFRASTRUCTURE AVAILABLE AT THE CENTRE

The AEAMT centre at CMTI boasts state-of-the-art infrastructure designed to facilitate effective learning, collaboration, and professional development. The facilities include:

•Library • Digital Classrooms • Executive Classroom • Video Conference Room • Seminar Hall









### - CMTI LIBRARY:

CMTI Library, popularly known earlier as N.I.C.M.A.P. (National Information Centre for Machine Tools & Production Engineering), has a comprehensive collection of more than 30,000 documents (Books, Journals, Reports, Standards, and Non-Book Materials) predominantly related to machine tools & production engineering to meet the information needs of machine tool & general engineering industries, R&D units, academic institutions and individuals pursuing research activities.

Library activities are computerized using "KOHA – an Integrated Library Management Software". Some of the primary services rendered by the library are bibliographic data search facilities, article supply on request, resource-sharing arrangements with other libraries, etc.

Sl. No.	Resource	On Shelf
01	01 Books	
02	Bound Volume	7382
03	Standards	11088
04	Reports	7382
05	Periodicals Subscription	15











### MANUFACTURING TECHNOLOGY TODAY:

CMTI has been publishing Manufacturing Technology Today (MTT), a monthly journal, since 2002. Technical papers/short communication discussing various aspects of Manufacturing Technology, including innovations, original research work, experimental investigations, best industrial practices, and case studies, are invited for publication.

Manufacturing Technology Today (http://www.i-scholar.in/index.php/MTT) is part of i-Scholar, one of the leading gateway for Indian Journals online. CMTI and Informatics Publishing Ltd continued to serve print subscriptions within

India.

Archives on i-Scholar - 2002 to date
Archives on https://mtt.cmti.res.in - 2019 to date

Articles published in the Manufacturing Technology

Articles published in the Manufacturing Technology Today (MTT) journal are indexed in Google Scholar, Crossref, Scilit, Dimensions AI, etc.

### For subscription and Article related queries, please contact:

Editorial - Manufacturing Technology Today Library & Publication Central Manufacturing Technology Institute Tumkur Road, Bengaluru - 560022

Email: mtt@cmti.res.in
Website: https://cmti.res.in

# Manufacturing Technology Today Volume 24 Insue 1 January 2025 Central Manufacturing Technology Institute Tumkur Road, Bengaluru - 500 022

### CMTI MACHINE TOOL DESIGN HANDBOOK

This handbook is a comprehensive collection of useful design data and reference material needed by practising machine tool engineers and engineering students. This fully indexed volume covers the design of machine elements, machine tool design practices, electrical and hydraulic systems of machine tools, and machining data together with standard mathematical and basic engineering reference data. The handbook presents various aspects of machine tool design with suitable illustrations and tables contributed by senior designers in machine tools. It is an authoritative, practically oriented handbook consolidating the theoretical and working design practices. The handbook aims to serve students, design engineers and development engineers of machine and equipment with guidelines for making reliable and practical solutions. It will be an indispensable handbook in the field of machine tools and production engineering.



CMTI Machine Tool Design Handbook is available in leading e-commerce stores like standardsmedia.com.com and Amazon.in and flipkart.com

### CMTI - DRISHTI

# Design Research and Innovation by Harvesting Science and Technology for Industries

Drishti portal provides open and collaborative framework to problem solvers and problem owners for developing sustainable manufacturing technologies and innovative products/systems in a collaborative manner.

### Prime Objective:

The development of the web-based Technology Innovation Platform, "DRISHTI@CMTI" is to provide an open eco-system for research and development in manufacturing technologies by encouraging the virtual networking and interaction between all the relevant resources available in India and the stakeholders on an open and collaborative platform to kick-start innovations.



For More Information Visit: https://www.drishti.cmti.res.in





### Note

- Participants are advised to proceed for the programme only when Programme is confirmed by us (by Fax/ Letter/ Phone/ E-Mail).
- The programme may be cancelled/ postponed if nominations are not adequate in number. CMTI has the right to postpone/ cancel
- Course will be conducted from 09:00 to 17:00 hrs. Participants may plan their return journey accordingly.
- # Course fee is per person & is Exclusive of taxes (Taxes & other Levis will be charged at applicable rates at the time of Billing).
- 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.
- A rebate on course fee will be given to participants from Academia, (30% for Faculty & 50% for Full Time Students).
- Academic Institutions who are members of CMTI can opt for CAAP (GMT/ Academy Affiliate Programme) scheme & avail training programs of their choice worth Rs. 50,000/- (Rupees Fifty Thousand only).
- Course Fee includes Program Kit, Mid-Session Tea & Vegetarian Lunch.
- Course Fee can be paid through NEFT / RTGS / Demand Draft.
- GST No. to be shared while sending your nomination / Registration (If a company is exempted from GST, they have to provide GST Exemption certificate).
- Demand Draft to be drawn in favour of "Central Manufacturing Technology Institute", payable at Bangalore and should reach CMTI one week before the actual date of commencement of the course.
- Please note that Course fee once paid will not be refunded. However, change in nomination will be permitted.
- Limited accommodation is available at CMTI Guest House on sharing basis, subject to availability and on payment basis. Accommodation is provided only for the participants and not to their spouse/friends.

Beneficiary details for RTGS / NEFT			
Name	Central Manufacturing Technology Institute		
Account Number	10521862015		
Bank Name & Branch	State Bank of India, Yeshwanthpur Branch		
IFSC Code	SBIN0003297		
MICR Code	560002055		
GST NO.	29AAATC2085K1ZJ		

## Our Customers































### FEEDBACK FROM INDUSTRY



This course serves as a solid foundation for mechanical engineers, offering valuable insights into traditional manufacturing methods. It is especially informative for newcomers to the field, providing a strong understanding of core concepts. The content is well-structured and highly beneficial for building essential skills in the field.

Design for Manufacturing and Assembly -from 12th - 13th December 2024 GKN Aerospace Engine Systems India Pvt Ltd, Bengaluru



The training institute provides excellent knowledge, offering a highly informative and well-organized session. The training program itself was very good, delivering valuable insights in a structured and easy-to-understand manner. The information shared throughout the course was both relevant and useful. Overall, the training session was well executed, making it a positive and enriching experience

Laboratory Quality Management & Internal Audit as per ISO/IEC 17025:2017 from 25th - 28th November 2024. ITC Limited, Bengaluru

CMTI also conducts customized / tailor made On-site Programmes at Customers' Premises and Exclusive/ Corporate Training Programmes at CMTI based on customer requirements.

### For further enquiries / registration / nominations, **Please Contact:**

- Shri. Arun Kumar J G, Joint Director & Center Head, AEAMT **Central Manufacturing Technology Institute, Tumkur Road, Bangalore - 560 022**
- Shri. Anil Kumar K, Group Head, AEAMT **Central Manufacturing Technology Institute,** Tumkur Road, Bangalore - 560 022



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training calendar



For further details please visit us at our website https://cmti.res.in/short-term-training-program