

# TECHNOLOGY UPGRADATION TRAINING PROGRAMMES

**TRAINING CALENDAR FOR 2026-2027**

## OUR VISION

HR initiatives to ensure Globally Competitive and Qualified "Industry Ready Engineers" trained and developed to take up Applied R & D activities and address Advanced Manufacturing Technology Issues.

- 1 Ultra Precision Machine Tools
- 2 Sensors & Controllers
- 3 Textile Machinery
- 4 Micro - Nano Manufacturing
- 5 Precision Metrology
- 6 Aerospace Line Replacement Units and Test Rigs
- 7 Special Purpose Machines
- 8 Skilling & Re-skilling
- 9 Surface Engineering & Laser Processing

## 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 equipments 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 2026 - 2027

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	08th April 2026	7,800	Mr. Srinivasa Rao C / Dr. Kavithaa S
2	4101	Laboratory Management & Internal Audit as per ISO / IEC 17025:2017	4	21st April 2026	20,000	Mrs. Khushboo / Mr. Niranjan Reddy K
3	2101	Single Point Diamond Turning (Machine Technology & Characterization Techniques)	3	22nd April 2026	11,700	Mr. Gopi Krishna S/ Mr. Mayank Patel/ Mr. Prakash Vinod
4	4206	Ultraprecision Machining and Advanced Surface Finishing Process - DTM, AFM, Laser Polishing	3	06th May 2026	11,700	Dr. Abhinav Kumar / Mr. Mayank Patel
5	4102	Precision Measurements & Metrology	5	11th May 2026	19,500	Mr. Shashikumar / Mrs. Khushboo
6	2301	Nano Material Characterization - SEM, XRD, SPM, Nanoindenter, etc	4	12th May 2026	15,600	Mr. Murugan A / Mr. Basavaraju Uppara
7	1303	Non Destructive Testing - DPT, MPT, UT & RT	2	25th May 2026	7,800	Mr. Srinivasa Rao C / Dr. Kavithaa S
8	4203	Thin Film Deposition Techniques & Characterization Methodologies - Sputtering, PECVD, E-Beam Evaporation & Electroplating	3	10th June 2026	11,700	Dr. K Manjunath / Dr. Prabhanjan Kulkarni
9	1304	Corrosion and its Prevention through Surface Finishing - Ni, Zn, Cr, Phosphate, Polymers	2	10th June 2026	7,800	Dr. Kavithaa S/ Mr. Srinivasa Rao C
10	2201	Industry 4.0 & Smart Manufacturing Systems	3	10th June 2026	15,000	Mr. Narendra Reddy T/ Mr. Harikrishna S T/ Mr. Prakash Vinod
11	5201	Additive Manufacturing - DMLS, DMD Machine	3	17th June 2026	15,000	Mr. Vinod A R / Mr. Manjunath B N/ Mr. Harikrishna S T
12	5101	Introduction to Embedded Systems - ARM Microcontrollers	3	22nd June 2026	11,700	Mrs. Shruthi G/ Mr. Emmanuel Gospel Raj
13	6201	Industrial Construction & Utilities (Civil & Electrical Infrastructure)	1	23rd June 2026	3,900	Mr. Arun C J/ Mr. Mohammed Azaruddin Munshi
14	7101	Geometric Dimensioning & Tolerancing	5	06th July 2026	25,000	Mr. Anil Kumar K/ Mr. Jeevan Kumar P/ Mr. Gopi Krishna S
15	4103	Calibration of Dimensional Measuring Equipments	5	06th July 2026	19,500	Mrs. Khushboo/ Mr. ShashiKumar
16	2302	Machinery Condition Monitoring for Predictive & Proactive Maintenance	5	06th July 2026	19,500	Mr. Girish Kumar M/ Mr. Mukunda M/ Mr. Prakash Vinod
17	2304	Microscopy & Analysis - SEM, AFM, STM, Confocal Microscope, Optical Profiler, etc	3	08th July 2026	11,700	Mr. Murugan A / Mr. Basavaraju Uppara
18	7102	Mechatronics & Manufacturing Automation	5	13th July 2026	19,500	Mr. Anil Kumar K / Mr. Shanmugaraj V
19	1305	Materials and Metallurgy for Non-Metallurgists-Ferrous & Non-Ferrous	3	15th July 2026	11,700	Dr. Kavithaa S/ Mr. Srinivasa Rao C

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20	4204	Digital Signals Driving Micro-Manufacturing & Automation - MATLAB & Python	2	20th July 2026	7,800	Dr. Debeshi Dutta / Dr. K Manjunath
21	5102	Industrial Test Measurement & Data Acquisition-Labview Training (Hands on)	2	03th Aug 2026	7,800	Mrs. Shruthi G/ Mrs. Anitha Devi S
22	5104	Product Innovation, Technology Readiness & Commercialization	2	12th Aug 2026	7,800	Dr. Tapas Debanath/ Mr. Tom Thampy
23	4104	Uncertainty of Measurements for Dimensional Measurements	3	17th Aug 2026	11,700	Mr. ShashiKumar/ Mrs. Khushboo
24	6101	Part Programming of CNC Machine	5	24th Aug 2026	25,000	Mr. Bharath P/ Mr. Vignesh Kemminje
25	1306	Advanced Material Testing	2	01st Sep 2026	7,800	Mr. Srinivasa Rao C/ Dr. Kavithaa S
26	5201	Additive Manufacturing - DMLS, DMD Machine	3	07th Sep 2026	15,000	Mr. Vinod A R/ Mr. Manjunath B N/ Mr. Harikrishna S T
27	3102	Welding Technologies for Vacuum Based Systems - TIG, Electron Beam, Nitrogen Parallel Seam Sealer	2	07th Sep 2026	12,000	Mr. Pradyumna J/ Dr. Ajay Jaswal
28	2202	Advanced Robotics (Cobots)	2	09th Sep 2026	7,800	Mr. Narendra Reddy T/ Mr. Prakash Vinod
29	3101	Design and Analysis of Experiments for Micro System Design and Processes	3	09th Sep 2026	11,700	Dr. Ajay Jaswal/ Mr. Pradyumna J
30	2305	Scanning Electron Microscopy - Fractography, Conductive Material imaging	1	11th Sep 2026	3,900	Mr. Murugan A / Mr. Basavaraju Uppara
31	4201	Micro & Nano Manufacturing	2	17th Sep 2026	7,800	Mr. Karthik M S/ Mr. Sunil Magadum
32	2303	Noise & Vibration Analysis Methods - Dynamic Balancing, FRF, FFT, Vibro Acoustic	4	21st Sep 2026	15,600	Mr. Girish Kumar M/ Mr. Mukunda M/ Mr. Prakash Vinod
33	5103	Industrial Machine Automation & Controls - PLC, HMI, SCADA	3	05th Oct 2026	15,000	Mr. Raghu Kodi/ Mrs. Shruthi G
34	2301	Nano Material Characterization - SEM, XRD, SPM, Nanoindenter, etc.	4	06th Oct 2026	15,600	Mr. Murugan A / Mr. Basavaraju Uppara
35	2101	Single Point Diamond Turning (Machine Technology & Characterization Techniques)	3	07th Oct 2026	11,700	Mr. Gopi Krishna S/ Mr. Mayank Patel/ Mr. Prakash Vinod
36	4101	Laboratory Management & Internal Audit as per ISO/IEC 17025	4	02nd Nov 2026	20,000	Mrs. Khushboo / Mr. Niranjan Reddy K
37	3103	Semiconductor Design and Fabrication Processes	2	16th Nov 2026	7,800	Mrs. Kusuma N / Mrs. Megha Agrawal
38	3104	Semiconductor Packaging and Characterization Processes	3	18th Nov 2026	11,700	Mr. Harsha S / Mrs. Megha Agrawal
39	1101	Gear Engineering - Spur, Helical, Bevel, Worm & Gear Box	2	17th Nov 2026	7,800	Mr. Ananthapadmanabha/ Mr. Pavan N
40	2304	Microscopy & Analysis - SEM, AFM, STM, Confocal Microscope, Optical Profiler, et	3	18th Nov 2026	11,700	Mr. Murugan A / Mr. Basavaraju Uppara

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SL. No.	COURSE CODE	COURSE TITLE	NO. OF DAYS	DATE OF COMMENCEMENT	#COURSE FEE ₹ (RS)	CO-ORDINATOR/FACULTY
41	1307	Materials, Metallurgy & Heat Treatment of Metals and Alloys	3	18th Nov 2026	11,700	Mr. Srinivasa Rao C / Dr. Kavithaa S
42	4105	Introduction to CMM & its applications	3	18th Nov 2026	11,700	Mr. Siddaraju K G/ Mrs. Khushboo
43	7101	Geometric Dimensioning & Tolerancing	5	30th Nov 2026	25,000	Mr. Anil Kumar K/ Mr. Jeevan Kumar P/ Mr. Gopi Krishna S
44	1102	Design for Manufacturing & Assembly	2	03rd Dec 2026	7,800	Mr. Ananthapadmanabha/ Mr. Murali Krishna/ Mr. Anil Kumar K
45	2203	AI & ML for Manufacturing Industries	1	08th Dec 2026	3,900	Mr. Bhavya Verma
46	5201	Additive Manufacturing - DMLS, DMD Machine	3	09th Dec 2026	15,000	Mr. Vinod A R/ Mr. Manjunath B N/ Mr. Harikrishna S T
47	4205	Advanced Surface Finishing and Characterization Technique - AFM, Electrochmeical polishing etc.	1	11th Dec 2026	3,900	Dr. Abhinav Kumar / Mr. Mayank Patel
48	1308	Advanced Engineering Materials Testing & Characterization	3	14th Dec 2026	11,700	Dr. Kavithaa S / Mr. Srinivasa Rao C
49	2201	Industry 4.0 & Smart Manufacturing Systems	3	14th Dec 2026	15,000	Mr. Narendra Reddy T/ Mr. Harikrishna S T/ Mr. Prakash Vinod
50	4202	Laser Based Material Process & Applications	1	18th Dec 2026	3,900	Mr. Sunil Magadum / Mr. Niranjan Reddy K
51	2305	Scanning Electron Microscopy - Fractography, Conductive Material imaging	1	11th Jan 2027	3,900	Mr. Murugan A / Mr. Basavaraju Uppara
52	5106	Qualification Testing of Hydraulic Systems & Its LRU's - Pumps, Actuators, Valves & Filters	2	12th Jan 2027	7,800	Mr. Dattatreya / Mr. Deepak Singh
53	4206	Ultraprecision Machining and Advanced Surface Finishing Process	3	20th Jan 2027	11,700	Dr. Abhinav Kumar/ Mr. Mayank Patel
54	4106	CMM & Machine Tool Calibration	2	22nd Feb 2027	7,800	Mr. Siddaraju K G/ Mr. Chethan H S
55	6202	Materials Planning & Effective Utilization in Construction (Civil & Electrical Infrastructure)	1	23rd Feb 2027	3,900	Mr. Arun C. J./ Mr. Mohammed Azaruddin Munshi
56	1103	Principles of Flat Pad Air Bearing Design & Basics of 2D CFD (Computational Fluid Dynamics) Simulation	1	23rd Feb 2027	3,900	Mr. Yogesh Basavaraj Patil
57	7101	Geometric Dimensioning & Tolerancing	5	01st Mar 2027	25,000	Mr. Anil Kumar K/ Mr. Jeevan Kumar P/ Mr. Gopi Krishna S

### 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	Books	8853
02	Bound Volumes	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 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

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Website: <https://cmti.res.in>

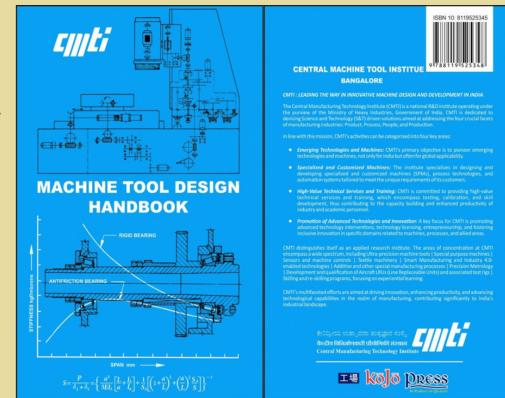


## ▪ CMTI MACHINE TOOL DESIGN HANDBOOK

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](https://standardsmedia.com) and [Amazon.in](https://amazon.in) and [flipkart.com](https://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 the courses.
- 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 Levies 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.	29AAATC2085K1Z

### Our Customers



### FEEDBACK FROM INDUSTRY



- The course was excellent and very useful in understanding corrosion in metallurgy.
- Trainers were knowledgeable, professional, and well-prepared.
- Industry 4.0 & Quality 4.0 were introduced effectively.
- The course content was relevant to industry needs.
- Course materials were well-organized, structured, and useful for future reference.



- This course provided good learning experience in understanding the fabrication flow of sensors.
- The overall learning experience was great and the course was well designed with a very detailed syllabus.
- Had very good hands-on experience with the fabrication process and got the chance to explore the semiconductor facility.
- Overall experience was excellent, with participants finding it very helpful for their professional development.

*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:

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To view or download training calendar

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