# TECHNOLOGY UPGRADATION TRAINING PROGRAMMES

## TRAINING CALENDAR FOR 2025-2026

## 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.

## CMTI's focused areas are -

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 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 | 08th April 2025 | 7,800 | Mr. Srinivasa Rao C / Dr. Kavithaa S |
| 2 | 4101 | Laboratory Management & Internal Audit as per ISO / IEC 17025:2017 | 4 | 22nd April 2025 | 15,600 | Mrs. Khushboo / Mr. Niranjan Reddy K |
| 3 | 7101 | Geometric Dimensioning & Tolerancing | 5 | 05th 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 | 06th May 2025 | 11,700 | Dr. Kavithaa S / Mr. Srinivasa Rao C |
| 5 | 4102 | Precision Measurements & Metrology | 5 | 12th May 2025 | 19,500 | Mr. Shashikumar / Mrs. Khushboo |
| 6 | 2301 | Nano Material Characterization, SEM, XRD, SPM, Nanoindenter, etc | 4 | 13th May 2025 | 15,600 | Mr. Murugan A / Mr. Basavaraju Uppara |
| 7 | 1303 | Non Destructive Testing | 2 | 29th May 2025 | 7,800 | Mr. Srinivasa Rao C / Dr. Kavithaa S |
| 8 | 2101 | Single Point Diamond Turning (Machine Technology & Characterization Techniques) | 2 | 29th May 2025 | 7,800 | Mr. Gopi Krishna S/ Mr. Narendra Reddy T/ Mr. Prakash Vinod |
| 9 | 4203 | Thin Film Deposition Techniques & Characterization Methodologies | 3 | 09th June 2025 | 11,700 | Dr. K Manjunath / Dr. Prabhanjan Kulkarni |
| 10 | 1304 | Corrosion and its Prevention through Surface Finishing | 2 | 10th June 2025 | 7,800 | Dr. Kavithaa S/ Mr. Srinivasa Rao C |
| 11 | 2201 | Industry 4.0 & Smart Manufacturing Systems | 3 | 11th June 2025 | 11,700 | Mr. Narendra Reddy T/ Mr. Harikrishna S T/ Mr. Prakash Vinod |
| 12 | 5201 | Additive Manufacturing | 3 | 16th June 2025 | 11,700 | Mr. Vinod AR / Mr. Manjunath B N/ Mr. Harikrishna S T |
| 13 | 4103 | Calibration of Dimensional Measuring Equipments | 5 | 07th July 2025 | 19,500 | Mrs. Khushboo/ Mr. ShashiKumar |
| 14 | 2302 | Machinery Condition Monitoring for Predictive & Proactive Maintenance | 5 | 07th 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 | 09th July 2025 | 11,700 | Mr. Murugan A / Mr. Basavaraju Uppara |
| 16 | 7102 | Mechatronics & Manufacturing Automation | 5 | 14th July 2025 | 19,500 | Mr. Anil Kumar K / Mr. Shanmugaraj V |
| 17 | 1305 | Materials and Metallurgy for Non-Metallurgists | 3 | 16th July 2025 | 11,700 | Dr. Kavithaa S/ Mr. Srinivasa Rao C |
| 18 | 4204 | Advanced Signal Processing in Micro-manufacturing & Automation | 2 | 21st July 2025 | 7,800 | Dr. Debeshi Dutta / Dr. K Manjunath |
| 19 | 6101 | Part Programming of CNC Machines | 5 | 18th Aug 2025 | 19,500 | Mr. Bharath P / Mr. Vignesh Kemminje |
| 20 | 4104 | Uncertainty of Measurements for Dimensional Measurements | 3 | 20th Aug 2025 | 11,700 | Mr. ShashiKumar / Mrs. Khushboo |

*# Course Fee is Exclusive of Taxes*

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|---|---|---|---|---|---|---|
| 21 | 1306 | Advanced Material Testing | 2 | 02nd Sep 2025 | 7,800 | Mr. Srinivasa Rao C / Dr. Kavithaa S |
| 22 | 2202 | Advanced Robotics | 2 | 08th 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 | 08th Sep 2025 | 11,700 | Dr. Ajay Jaswal / Dr. Prabhanjan Kulkarni |
| 24 | 5201 | Additive Manufacturing | 3 | 10th Sep 2025 | 11,700 | Mr. Vinod A R/ Mr. Manjunath B N/ Mr. Harikrishna S T |
| 25 | 3102 | Welding Technologies for Vacuum Based Systems | 2 | 11th Sep 2025 | 7,800 | Mr. Pradyumna J / Dr. Ajay Jaswal |
| 26 | 2305 | Scanning Electron Microscopy | 1 | 12th Sep 2025 | 3,900 | Mr. Murugan A / Mr. Basavaraju Uppara |
| 27 | 4201 | Micro & Nano Manufacturing | 2 | 18th Sep 2025 | 7,800 | Mr. Karthik M S / Mr. Sunil Magadum |
| 28 | 2303 | Noise & Vibration Analysis Methods | 4 | 22nd 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 | 07th Oct 2025 | 15,600 | Mr. Murugan A / Mr. Basavaraju Uppara |
| 30 | 3103 | Semiconductor Design and fabrication processes | 2 | 10th Nov 2025 | 7,800 | Mrs. Kusuma N / Mrs. Megha Agrawal |
| 31 | 3104 | Semiconductor packaging and characterization processes | 3 | 12th Nov 2025 | 11,700 | Mr. Harsha S / Mrs. Megha Agrawal |
| 32 | 2304 | Microscopy & Analysis: SEM, AFM, STM, Confocal Microscope, Optical Profiler, etc | 3 | 12th Nov 2025 | 11,700 | Mr. Murugan A / Mr. Basavaraju Uppara |
| 33 | 1307 | Materials, Metallurgy & Heat Treatment of Metals and Alloys | 3 | 18th Nov 2025 | 11,700 | Mr. Srinivasa Rao C / Dr. Kavithaa S |
| 34 | 1101 | Gear Engineering | 2 | 19th Nov 2025 | 7,800 | Mr. Ananthapadmanabha / Mr. Srinivasa Rao C |
| 35 | 4105 | Introduction to CMM | 3 | 19th Nov 2025 | 11,700 | Mr. Siddaraju K G/ Mrs. Khushboo |
| 36 | 4101 | Laboratory Management & Internal Audit as per ISO / IEC 17025:2017 | 4 | 24th Nov 2025 | 15,600 | Mrs. Khushboo / Mr. Niranjan Reddy K |
| 37 | 7101 | Geometric Dimensioning & Tolerancing | 5 | 01st Dec 2025 | 19,500 | Mr. Anil Kumar K/ Mr. Jeevan Kumar P/ Mr. Kirankumar M D |
| 38 | 5201 | Additive Manufacturing | 3 | 10th Dec 2025 | 11,700 | Mr. Vinod A R/ Mr. Manjunath B N/ Mr. Harikrishna S T |
| 39 | 2203 | AI & ML for Manufacturing Industries | 2 | 08th Dec 2025 | 7,800 | Mr. Narendra Reddy T / Mr. Prakash Vinod |
| 40 | 1102 | Design for Manufacturing & Assembly | 2 | 11th Dec 2025 | 7,800 | Mr. Ananthapadmanabha / Mr. Anil Kumar K |

*# Course Fee is Exclusive of Taxes*

# 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 |
|---|---|---|---|---|---|---|
| 41 | 4205 | Advanced Surface Finishing and Characterization Techniques | 1 | 12th Dec 2025 | 3,900 | Dr. Abhinav Kumar / Mr. Mayank Patel |
| 42 | 1308 | Advanced Engineering Materials Testing & Characterization | 3 | 15th Dec 2025 | 11,700 | Dr. Kavithaa S / Mr. Srinivasa Rao C |
| 43 | 2201 | Industry 4.0 & Smart Manufacturing Systems | 3 | 15th Dec 2025 | 11,700 | Mr. Narendra Reddy T/ Mr. Harikrishna S T/ Mr. Prakash Vinod |
| 44 | 4202 | Advanced Laser Machining | 1 | 19th Dec 2025 | 3,900 | Mr. Sunil Magadum / Mr. Niranjan Reddy K |
| 45 | 2305 | Scanning Electron Microscopy | 1 | 13th Feb 2026 | 3,900 | Mr. Murugan A / Mr. Basavaraju Uppara |
| 46 | 4106 | CMM & Machine Tool Calibration | 2 | 26th Feb 2026 | 7,800 | Mr. Siddaraju K G/ Mr. Chethan H S |
| 47 | 7101 | Geometric Dimensioning & Tolerancing | 5 | 02nd 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

*# Course Fee is Exclusive of Taxes*

## 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
Central Manufacturing Technology Institute
Tumkur Road, Bengaluru - 560022
**E-mail:** mtt@cmti.res.in
**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.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 the courses.
- Course will be conducted from 09:00 to17:00 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**

**09449842686 / 78**

**080-22188367**

**training@cmti.res.in**


To view or download training calendar

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