



Training Programme for Welding Technologies for Vacuum Based Systems

Course Code : 3102

From 11th -12th Sep 2025

TARGETED AUDIENCE:

- This Training is ideal for Engineers, Technicians, and Professionals involved in the design, fabrication, and maintenance of vacuum-based systems.

Contact



9449842686/78



training@cmti.res.in

CENTRAL MANUFACTURING TECHNOLOGY INSTITUTE
Tumkur Road, Bengaluru - 560 022

Greetings from CMTI !

We are pleased to inform you that we are conducting a **02 days** Non-Residential Programme on “Welding Technologies for Vacuum Based Systems”, course code : 3102.

Key Takeaways :

- Participants will gain insights into material selection, surface preparation, and welding processes such as TIG welding, electron beam welding, and laser welding, which are critical for achieving high vacuum integrity.
- The course will also cover the common weld defects, Surface , sub-surface and volumetric defects, that can come up during welding.
- These defects include porosity, spatter, surface crack, inclusions, incomplete fusion, blow holes, incomplete penetration, etc. understand their causes, and implement effective corrective and preventive measures.
- An information on various destructive and non-destructive techniques available to characterize the defects.
- Through interactive sessions, practical demonstrations, and case studies, attendees will develop a strong foundation in vacuum welding technology, ensuring their ability to apply best practices in industries such as aerospace, semiconductors, scientific instrumentation, and nuclear research.

Programme Co-Ordinator :

- **Mr. Pradyumna J**

Pradyumna J has worked as Graduate Engineer Trainee at National Aerospace laboratory (NAL, Bangalore) at High Speed Combustion Test Facility in the year 2008-09. Post completion of his masters he joined CMTI in 2012 and currently holding the post of Scientist-C, he is having 7 years of Professional experience in the field of Design & Development of subsystems for Machine Vision, Product design for various In house & customer requirement, Designing of MEMS Sensors, MEMS Fabrication process, MEMS Characterization process and Micro System Packaging processes.

- **Dr. Ajay Jaswal**

He is currently working as Scientist B at the Sensor Technology Development Centre and has 5 years' experience in the academic domain as an Assistant Professor.

Programme Schedule

- It is a **Two (02) Days** Non – Residential Training Programme scheduled on **11th – 12th Sep 2025**. The Programme will be held at Central Manufacturing Technology Institute, Bengaluru.

Programme Fees

Rs.7,800/- 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 are advised to proceed with the Programme only after the nominations / Programme is confirmed by us (by fax/Letter/phone, or 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 a 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***