Malaviya Mission Teacher Training Programme (MMTTP)

Indian Institute of Technology Mandi
Kamand, Mandi, Himachal Pradesh

06 Days INTERDISCIPLINARY STC
on

Product Design and development using CAD CAM CAE
(In-person Mode)

January 19 – 24, 2026

About the Course:

The short-term course on "Product Design and Development using CAD, CAM and CAE" is designed to provide faculty members with a comprehensive understanding of modern product development methodologies integrating digital design, simulation, and manufacturing technologies. The course focuses on the complete product development lifecycle—from opportunity identification and conceptualization to detailed design, prototyping, simulation, optimization, and manufacturing.

Participants will gain hands-on exposure to **CAD modeling**, **additive manufacturing**, **finite element analysis (FEA)**, **computational fluid dynamics (CFD)**, **thermal simulations**, and **CAM-based CNC machining**. The course also emphasizes **reverse engineering techniques**, **design for manufacturability (DFM)**, **product architecture**, and advanced CAE-driven design decision-making.

Through expert lectures, guided hands-on sessions, and industry-inspired case studies, the course aims to strengthen participants' ability to apply engineering tools and computational techniques for the design, analysis, and optimization of real-world products. By the end of the programme, participants will be able to independently conceptualize, design, evaluate, and refine engineering products using modern digital manufacturing and analysis tools.

Participants Eligibility Criteria

Faculty members working in universities and colleges that are included under Section 2(f) of the UGC Act. The teachers of colleges that do not yet come within the purview of Section 2(f), but have been affiliated to a university for at least three years, will be permitted to participate in the courses. These conditions apply only to Residential Training Programmes/Courses.

Application/Registration Procedure

The participants should first register at https://mmc.ugc.ac.in/ and create an account.

- After logging in as participant using User ID and Password, from the dashboard, click on "Apply for Guru Dakshta (FIP), Refresher Course and Short-Term Programme/Faculty Development Programme", next start filling the application form.
- In the application form, select "Apply for" as "Short Term Programme (residential)", next give details of your earlier participation in FIP, next select "Programme Name & Centre Name" as "Indian Institute of Technology Mandi", later fill in the remaining items and submit the application form.

Salient Features of the Course

- The course will be of one weeks' duration, with a minimum of 6 working days and 36 contact hours (six hours a day, six days a week). The course will have 24 hours of lectures by resource persons and 12 hours of hands-on sessions, project works and other activities.
- There will be MCQ based assessment examination conducted at the end of the course. This course will be considered for fulfilment of the requirements as laid down by UGC for Career Advance Scheme.
- Application / registration is free of cost.
- Accommodation and fooding will be free of cost during the programme.
- A Certificate will be issued to those who have attended all the sessions and have qualified the Assessment examination.

This course is beneficial for individuals looking to stay updated with current trends in research and improve their overall academic and professional output. After attending the course, the participants will independently and accurately be able to perform better research, writing and analysis.

Programme Director	Course Coordinator(s)
Prof. Atul Dhar	Dr. Himanshu Pathak
Dr. Sunny Zafar

Important Dates	Contact
Programme Start Date: 19 January 2026
End Date: 24 January 2026	mmttp@iitmandi.ac.in
Application Deadline Date:
12/01/2026	

Relevant Important Links:

Step-by-Step Application Guide:
https://docs.google.com/document/d/1SJi0rq4vrAq0X2Wz7HpWSLE_bNZ2S-Af3eImmVqd2Hg/edit?usp=sharing

User Participant Manual Link:
https://mmc.ugc.ac.in/S/MMTTP%20User%20Manual%20Participants.pdf

MMTTP Website: https://mmc.ugc.ac.in/