Malaviya Mission Teacher Training Programme (MMTTP)

Indian Institute of Technology Mandi
Kamand, Mandi, Himachal Pradesh

12 Days Refresher Course on Core Subject & Interdisciplinary (residential)

on

Differential Equations and Physics Informed Neural Networks with Applications in Engineering (In-person Mode)

23 February – 7 March, 2026

About the Course:

The Malaviya Mission Teacher Training Programme (MMTTP) on differential equations and physics-informed neural networks (PINNs) with Applications in engineering is a 12-day intensive residential course hosted by IIT Mandi, designed to provide participants with a comprehensive understanding of ordinary differential equations and physics-informed neural networks. In this course, we will focus on the theoretical and numerical aspects of ordinary and partial differential equations, followed by the fundamentals of Machine learning and PINNs.

In this course, there will be a total of 72 contact hours of lectures, including hands-on practice sessions, in which theoretical and numerical solutions of differential equations will be studied together with the fundamentals of machine learning and PINNs.

The course begins with foundational concepts of Differential Equations, machine learning and physics-informed neural networks. Several lectures will be delivered by the resource persons from IIT/IISc on the theory, methods and computations of differential equations (ODE/PDE). Theoretical as well as computational aspects of ordinary differential equations and partial differential equations will be covered in this refresher course. Also, the fundamentals of machine learning and physics-informed neural networks will be covered by the speakers. Participants will also earn the laboratory training on the numerical solutions of ODE/PDEs. There will be a few laboratory trainings on PINNs and Machine Learning as well. The course culminates in hands-on project execution, seminar presentations, and assessments. Overall, the resource persons of this programme will be experienced faculty members from IITs and IISc.

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 with 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 a 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 "Refresher Course on Core Subject & Interdisciplinary (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 two weeks' duration, with a minimum of 12 working days and 72 contact hours (six hours a day, six days a week). The course will have 48 lectures by resource persons, including hands-on sessions, project works and other activities.

- There will be an 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 the Career Advance Scheme.

- Application/registration is free of cost.

- Boarding, tea, snacks and working lunch will be provided to the participants.

- A Certificate will be issued to those who have attended all the sessions and have qualified for 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.

Organizing Committee	MMTTP Coordinator	Course Coordinator(s)
Patron: Prof. Laxmidhar Behera, Director, IIT Mandi	Prof. Atul Dhar	Dr Vikash Kumar Tripathi

Important Dates	Contact
Application Deadline Date: 10 Feb,2026	Dr Vikas Kumar Tripathi Assistant Professor SMSS, IIT Mandi
Programme Start Date: 23 Feb 2026 End Date: 7 March 2026	

Relevant Important Links:

Step-by-Step Application Guide:

https://docs.google.com/document/d/1SOIiugdzej7vADgE3a_CYWIigdYHGOKW/edit

Participant Manual Link:

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

MMTTP Website Link:

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