

... all round development of the personality is possible only through education ...

NO COURSE FEE FOR REGISTRATION

"Current Trends in Metal Additive Manufacturing"

A twelve-day online refresher program has been designed for teachers in working higher education seeking to update their knowledge on the latest advancements in Metal Additive Manufacturing (AM), also known as 3D metal printing. The course will cover a wide range of topics, from fundamental principles to cutting-edge technologies and applications.

The program will provide a comprehensive understanding of the principles and processes of Metal Additive Manufacturing. The participants will learn about the latest advancements in materials, technologies, and applications Additive Manufacturing.

A TWELVE DAYS FACULTY **DEVELOPMENT PROGRAMME**

To be held

7th to 18th JULY 2025

Organized by

INDIAN INSTITUTE OF **TECHNOLOGY (ISM) DHANBAD**









Ministry of Education Government of India

Programme Coordinator

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Eligibility Criteria: as per MMTTP guidelines

How to register

- I. The participants should first register at https://mmc.ugc.ac.in/ using their email ID.
- 2. Use the Login credentials received over the registered Email Id to LOGIN as PARTICIPANT.
- 3. From the Dashboard click on "Apply for Other Programmes".
- 4. Click on Apply for and Select "Refresher Course".
- 5. Select Centre & Programme Date: IIT Dhanbad (ISM) (Jharkhand) (07/07/25 18/07/25)

ONLINE MODE: NO COURSE FEE

- 6. Fill in the required details like Your Subject Area Specialization; Year of Joining; Teaching Experience and others
- 7. Click on "Upload NOC" button and upload the NOC duly signed and approved by the Head of your Institution by clicking on the 'Choose File' Button.
- 8. Click on Submit button.
- 9. Last date to register is 05.07.2025, but please register well in advance to avoid last minute rush.
- 10. The participants will get a confirmation Email after registration.

MMTTP Information: https://www.ugc.gov.in/pdfnews/2241074_MM-TTP-Information-Brouchure.pdf MMTTP portal user guide: https://mmc.ugc.ac.in/S/MMTTP%20User%20Manual%20Participants.pdf

Objective & Scope

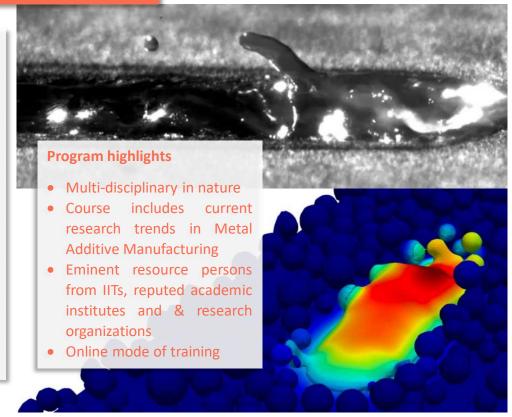
The primary objective of this twelve-day refresher program is to equip teachers with the latest knowledge and understanding of Additive Manufacturing (AM) technologies, their principles, applications, and impact across various sectors. This course aims to enable teachers to effectively integrate AM concepts into their existing curricula, develop innovative teaching methodologies, and create engaging learning experiences for students. Upon successful completion of the program, all participants will get a comprehensive understanding of the principles and processes of Metal Additive Manufacturing and its research trends.

Course content in brief

Introduction to AM processes (e.g., Powder Bed Fusion, Directed Energy Deposition).

Materials science for AM (metals, alloys, and their properties).

Design for Additive Manufacturing Principles. High-performance AM systems and technologies. Artificial intelligence and machine learning in AM. Multi-material and hybrid manufacturing.





ABOUT THE DEPARTMENT

The Department of Mechanical Engineering started the journey in 1999, and successfully completed 25 years with excellence. Presently, the department is the largest in the institute having 45 faculty members. The department offers two UG courses, one in Mechanical Engineering and another in Mining Machinery Engineering; three PG course: Thermal, Design and Manufacturing. Faculty members of the department have guided more than 250 PhD students so far.

For further details, please visit: https://www.iitism.ac.in/department-of-mechanical-engineering

ABOUT THE INSTITUTE

Indian Institute of Technology (ISM) Dhanbad, earlier known as Indian School of Mines Dhanbad. The Indian School of Mines was formally opened on 9th December 1926, by Lord Irwin, the then Viceroy of India to address the need for trained manpower related to mining activities in the country with disciplines of Mining and Applied Geology. In 1967 it was granted the status of a deemed to be university under Section 3 of UGC Act, 1956. In 2016, ISM Dhanbad has got the status of IIT. Since its establishment, IIT(ISM) Dhanbad has undergone considerable expansion of its activities, and presently it can be considered as a total technology education institute. At present, the Institute has 17 departments and several centres, which are equipped with all necessary infrastructure and worldclass faculties to undertake all kinds of fundamental and applied research problems.

CURRENT TRENDS IN METAL ADDITIVE MANUFACTURING

Under the aegis of Malaviya Teacher Training Programme

7th - 18th JULY 2025

ONLINE MODE