

Eligibility Criteria for Participants

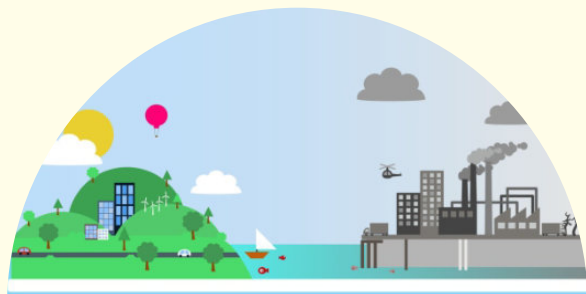
- Faculty members in Central, State, Deemed to be Universities, Private Universities, Institutions of National Importance, Colleges and other HEIs.
- Faculty members from HEIs under various Professional Councils (AICTE, etc.)
- Contractual, Ad-hoc, Guest faculty Teachers, Tutors and Demonstrators in HEIs.

Registration Process

- The participants should first register at <https://mmc.ugc.ac.in/>
- After logging in as Participant, from the dashboard, click on "Apply for Other Programmes"
- Next, select "Short Term Programme/Faculty Development Programme" and select "Indian School of Mines, Dhanbad (27/10/25 - 01/11/25)" as Programme Centre.
- Fill in the other required details and upload the NOC duly signed by the Head of your Institution.
- Click on the Submit button. The participants will get a confirmation Email after registration.

For detailed guidelines on the MMTP, please visit the following link:
<https://mmc.ugc.ac.in/>

*Last Date of
Registration
 October 25, 2025*



Programme Coordinators

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SIX-DAY SHORT-TERM PROGRAM ON ADVANCES IN CARBON CAPTURE AND UTILIZATION TECHNOLOGIES: BRIDGING SCIENCE AND PRACTICE

Dates: 27 October 2025 to 01 November 2025

Under the aegis of

**MALAVIYA MISSION TEACHER
 TRAINING PROGRAMME (MMTTP)**

Venue: IIT (ISM) Dhanbad



Organized by



**Dept. of Chemical Engineering &
 Dept. of Mechanical Engineering
 IIT(ISM) DHANBAD
 Dhanbad-826004, Jharkhand, India**

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

About the STP



The primary objective of this six-day short-term training programme is to disseminate recent developments in the field of carbon capture and its conversion technologies to fill out the knowledge gaps the participants have and help them stay ahead of the curve. The course also aims to offer the participants an unprecedented opportunity and a competitive edge to learn from the leaders of the field, with a platform for exchanging ideas with experts across the country, ultimately leading to scientific and technological development through collaborations.

We believe that after the successful completion of the course, the participants will not only be able to identify the current needs and gaps in these areas but will also be able to formulate novel approaches to address major problems and become adept at the changing trends in the field, and hopefully incorporate that in their further professional life.

Program Highlight

- Multi-disciplinary in nature
- Online mode of training
- For faculty members and researchers
- Six days in-depth knowledge-sharing platform on state-of-the-art carbon capture and its conversion technologies
- Case studies
- Eminent resource persons from IITs/NITs and reputed industries
- No Registration Fees
- Soft copy of study materials
- Certificate of Participation for successful participants



Course Content

- Introduction to the climate crisis, net-zero emissions goal, and carbon capture and its conversion technologies.
- Pre and Post-combustion Carbon Capture Technologies.
- Direct Air Capture of CO₂.
- CO₂ Conversion Technologies.
- Industrial Practices and Case Studies on CCU.
- Understanding Carbon Credits and Related Government Policies.

Course Instructors

Faculty members from various IITs, NITs & Universities and research scientists and executives from reputed national R&D organizations and industries.

Venue

Indian Institute of Technology (ISM) Dhanbad, Jharkhand - 826004

About the Institute



The Indian Institute of Technology (Indian School of Mines) constituted under the Institute of Technology Act, 1961, is administered through IIT Council - the apex body, GoI for uniform and smooth governance of Pan-IIT in our country. The academic profile of the Institute changed over the time to keep abreast with the technological challenges and societal aspirations. The Institute has been in service of the nation, contributing immensely to nation-building for almost a century.

At present, the Institute has 17 departments and several centres, which are equipped with all necessary infrastructure and world-class faculties to undertake all kinds of fundamental and applied research problems. For further details, please visit: <https://www.iitism.ac.in/>

About the Departments



Department of Chemical Engineering

Since its inception in 2010, the Department of Chemical Engineering has aimed to instil in all the students the essential skills of critical thinking and creative problemsolving for their success in the practice of chemical engineering. The department offers academic and research programs leading to B.Tech, M.Tech and PhD degrees. Many of the graduated students are placed in reputed national and multinational organizations. A substantial number of the students are also engaged in higher studies and research in reputed institutes in India and abroad.

Department of Mechanical Engineering

The Department of Mechanical Engineering started its journey in 1999. Presently, the department has 46 faculty members. The department offers two UG courses (Mechanical Engineering, and Mining Machinery Engineering), and PG courses in Thermal, Design, and Manufacturing specializations. Faculty members of the department have guided more than 200 PhD students so far. Major research areas of the department are microfluidics, aero-acoustics, biomechanics, robotics, renewable energy, tribology, refrigeration, CFD, fluid-structure interactions, turbomachinery, modern-manufacturing, fluid power, mining machinery along with conventional thermal engineering and machine design.

**No Registration
fees**