

Short Term Training Program (STTP) on
“Advancements in Materials and
Manufacturing process”
From 27th to 31th December 2024
(Online Mode)

REGISTRATION FORM

Name:

Designation:

Organization:

Qualification:

Correspondence Address:

.....

.....

Tel. (O) (R)

(M)

E-Mail:

Registration Fee: NA

Date: Place:

Signature

Note: Photocopies of registration form may be used.

Scan for Registration by QR Code and Link:



Link: <https://forms.gle/dZjoL1fn4Ht5gqXK9>

Chief Patron
Smt.Preeti Patel
Chancellor

Madhyanchal Professional University (MPU), Bhopal,
India, 462044

Patron
Dr Ajit Singh Patel
Pro Chancellor

Madhyanchal Professional University (MPU), Bhopal,
India, 462044

Chairman
Prof. (Dr) S. D. Pandey
Vice Chancellor, MPU, Bhopal

Convenor
Prof. S.K. Singh
Dean Engineering, MPU, Bhopal

Co-Convenor
Dr. P.N.Ahirwar
Associate Professor, HOD Mechanical Engineering
(MPU)

Coordinators
Dr M. R. Kumar
Assistant professor, MMED, NIT Raipur, C.G.
&
Prof. B. Kumar
Assistant professor
School of Mechanical Engineering, MPU

Address for Correspondence
Prof. B. Kumar
Assistant professor, ME, MPU, Bhopal
Email: Coordinatorresearchinc@mpu.ac.in
Contact No.7987056831
&
Dr M. R.Kumar
Assistant professor, MMED, NIT Raipur
Email: mrkumar.mme@nitrr.ac.in
Contact No. 6005086916

Short Term Training Program
on

**Advancements in Materials and
Manufacturing Process**

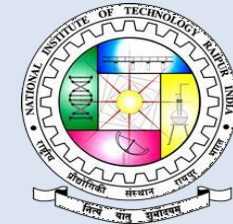
From 27th to 31th December 2024



(Online Mode)

Organized by

**Department of Metallurgical and Materials
Engineering, NIT, Raipur**



&

**School of Mechanical Engineering
Madhyanchal Professional University Bhopal**



About the Institute:**NIT Raipur**

National Institute of Technology (NIT) Raipur, formerly known as Government Engineering College (GEC) Raipur, is established in 1956. The institute has established its unique identity for the development of high-quality human and knowledge resources. It was declared as 'National Institute of Technology' by the Government of India on 1st December 2005 and then an 'Institute of National Importance' in May 2007 vide the National Institute of Technology Act 2007. With over six decades of glorious history as a premier technical education institution in India, NIT Raipur now offers 12 UG and 14 PG programs. In addition to the UG and PG programs, NIT Raipur also offers Ph.D. in 18 disciplines of science and technology.

Madhyanchal Professional university

Madhyanchal Professional University (MPU) was established in 2018 under the aegis of Vanshpati Smriti Shiksha Samiti (VSSS), Bhopal. Since 2002, the Samiti has been promoting a group of 8 colleges at Bhopal and Indore under the banner of PAEL GROUP OF INSTITUTIONS (PGOI) in professional fields ranging from Diploma to Post graduation imparting knowledge and skills to think 'Beyond the Future'. In the span of 18 years PGOI has earned its name and fame not only in the country but also abroad; to expand higher education for socio-economic development of the Nation besides scientific and technological advancement. The University is mandated to provide higher education leading up-to Ph.D. in the disciplines of Science, Education, Humanities, Commerce, Management, Engineering, Medical, Paramedical, Pharmacy, Nursing, Agriculture, Animal Sciences, Forestry, Law, Journalism, Mass Communication, Environment and many other branches. Major emphasis of the UNIVERSITY is to inculcate skill and knowledge to promote innovative development that will lead to prosperity and social development of the people.

About Department:**Metallurgical & Materials Engineering NIT Raipur**

The Department of Metallurgical and Materials Engineering was established in 1956. The Department offers B.Tech. The Department of Metallurgical and Materials Engineering at NIT Raipur is as old as institute itself. The students from this department became the twinkling stars of all the nearby Metallurgy based plants, Mini-steel plants, national laboratories, Defence services. Bhabha Atomic Research Centre, HAL, BHEL, SAIL.

Mechanical Engineering Madhyanchal Professional University Bhopal

The School of Mechanical Engineering, established in 2018 under the Vanshpati Smriti Shiksha Samiti (VSSS), Bhopal, offers a program that goes beyond traditional manufacturing, embracing emerging fields like robotics, smart materials, and digital manufacturing. With a focus on Industry 4.0, students explore areas such as nanotechnology, CAD, and smart machines.

Objectives:

The Scientific Social Responsibility (SSR) policy of the Anusandhan National Research Foundation (ANRF), implemented by the Government of India, seeks to cultivate a sense of social responsibility among grantees of the Science and Engineering Research. This policy aims to harness the scientific resources and expertise of these grantees to benefit a broader community of Science and Technology (S&T) stakeholders, with a particular focus on researchers with limited resources and the wider society. Key SSR initiatives under this policy include sharing research facilities, mentoring emerging faculty and researchers, fostering a research-oriented environment among students and the academic community, and promoting public outreach and knowledge dissemination. The policy ensures that these activities are aligned with the scientific work of the grantees, are minimal in scope, and integrated effectively. The combined efforts of all are expected to foster a strong research culture in India, where scientific progress and social responsibility go hand in hand.

Theme/Scope of STTP:

The STTP on "Advancements in Materials and Manufacturing Processes" will provide a comprehensive exploration of the latest innovations shaping modern industries. It will cover an introduction to modern materials, highlighting the development of high-performance, sustainable materials that meet the evolving demands of various sectors. Participants will delve into emerging manufacturing technologies, focusing on cutting-edge methods such as additive manufacturing (3D printing), which is revolutionizing design and production. The STTP will also examine advancements in surface engineering and coatings that enhance durability and performance, along with the role of digitalization and simulation in optimizing manufacturing processes. Additionally, there will be a strong focus on material recycling and waste reduction strategies, addressing the growing need for sustainable practices. The integration of smart materials and sensors in manufacturing, aimed at improving automation, real-time monitoring, and product functionality, will also be explored.

Topics to be covered:

- Introduction to Modern Materials and Manufacturing.
- Emerging Manufacturing Technologies
- Advancements in Additive Manufacturing (3D Printing)
- Advanced Surface Engineering and Coatings
- Digitalization and Simulation in Manufacturing
- Material Recycling and Waste Reduction
- Smart Materials and Sensors in Manufacturing

Targeted Participants:

- *Faculties of Engineering Colleges and Universities.*

Registration Fee Details (in INR):

Participants	Amount (in Rs)
Faculty/Students	Free

Application in the prescribed format must reach the coordinator on or before 26th December, 2024. The selected candidate will be informed by email as per the schedule. Certificates will be issued to the participants only after attending the complete course.