



MECH PULSE

DEPARTMENTAL NEWSLETTER

Department of Mechanical Engineering

Academic Session 2025-2026 (JAN-JUNE) | Vol. 1, Issue 1

Mechanical Engineering Department Facilities



Quality Education | Innovation | Industry Readiness | Sustainable Engineering



01

INSIDE THIS ISSUE

A clean map of the newsletter sections

02 Message from Leadership	03 Department at a Glance	04 Vision, Mission, PEOs and PSOs
05 Faculty Profile	06 Academic Activities & Industry Interaction	07 Student Achievements
08 Student Activities	09 Research and Innovation	10 Faculty Achievements
11 Extension and Outreach	12 Departmental Best Practices	13 Major Statistics
14 Future Roadmap	15 Editorial Board	

02

MESSAGE FROM LEADERSHIP

Guidance, encouragement and departmental vision



Principal's Message

It gives me immense pleasure to extend my best wishes to the Department of Mechanical Engineering. The department has always played a significant role in imparting quality technical education, developing practical skills, and encouraging innovation among students. With dedicated faculty members, well-equipped laboratories, and a student-centric teaching-learning environment, the department continuously strives to prepare competent engineers for industry, higher studies, entrepreneurship, and service to society. I appreciate the sincere efforts of the faculty and students in academic, technical, co-curricular, and social activities, and I hope the department will continue to achieve greater success in the coming years.

Dr. Moloy Banerjee
Principal, RERFGI



HOD's Message

The Department of Mechanical Engineering remains committed to providing quality education, fostering research excellence, and promoting industry-oriented learning. Through continuous efforts in teaching, training, innovation, and skill development, we strive to prepare our students to meet the challenges of the rapidly evolving engineering world. This edition of the Departmental Newsletter highlights the academic, technical, research, and extracurricular achievements of our students and faculty members. I congratulate all contributors and encourage everyone to continue striving for excellence, innovation, and professional growth.

Dr. Puspendu Chandra Chandra
Head & Assistant Professor
Mechanical Engineering Department



03

DEPARTMENT AT A GLANCE

Quick one-page summary of department strength and activities

8 FACULTY STRENGTH	3 PH.D. FACULTY	107 STUDENT STRENGTH	7 LABORATORIES
1 PUBLICATIONS	2 FDPS ATTENDED	2 EVENTS CONDUCTED	3 PROFESSIONAL CHAPTERS

Particulars	Details
Faculty Strength	8
Ph.D. Faculty	3
Student Strength	107
Laboratories	7
Publications	1
FDPs Attended	2
Events Conducted	2



04

VISION, MISSION, PEOS AND PSOS

Academic direction and programme-specific focus

Vision

To be a centre of excellence in Mechanical Engineering by imparting quality education, fostering innovative research, and encouraging technological advancements. The department is committed to developing competent, creative, and socially responsible engineers equipped with the knowledge, skills, and professionalism required to address contemporary industrial challenges and contribute to sustainable national and global development.

Mission 1

To impart high-quality Mechanical Engineering education through modern teaching methodologies, advanced laboratories, industry exposure, and experiential learning.

Mission 2

To foster innovation, research excellence, and technological development by encouraging creative thinking, problem-solving abilities, and collaborative learning.

Mission 3

To nurture competent, responsible, and future-ready engineers equipped with technical expertise, professional ethics, leadership skills, and an entrepreneurial outlook to meet global industry demands.

Programme Educational Objectives (PEOs)

PEO 1

Produce competent Mechanical Engineering graduates capable of applying engineering principles to solve industrial and societal problems.

PEO 2

Equip graduates with the knowledge and skills required for successful careers in industry, higher education, research, and entrepreneurship.

PEO 3

Develop professionals with ethical values, leadership qualities, effective communication skills, and a commitment to lifelong learning.

PEO 4

Prepare graduates to adapt to emerging technologies and contribute to sustainable engineering practices in a global environment.

Programme Specific Outcomes (PSOs)

PSO 1

Design, analyse, and improve mechanical systems and components using engineering fundamentals, modern design techniques, and computational tools.

PSO 2

Apply knowledge of manufacturing, thermal, materials, and industrial engineering to develop efficient, reliable, and sustainable engineering solutions.

PSO 3

Integrate contemporary technologies, research methodologies, and professional practices to address real-world challenges in mechanical engineering and allied industries.

05

FACULTY PROFILE

Concise profile with qualification, experience and interest areas



Dr. Puspendu Chandra Chandra

Designation: Assistant Professor

Qualification: PhD

Experience: 11 years+

Interest: Manufacturing Technology



Dr. Pritish Banerjee

Designation: Associate Professor

Qualification: PhD

Experience: 3 years+

Interest: Manufacturing Technology



Dr. Sabyasachi Mukherjee

Designation: Assistant Professor

Qualification: PhD

Experience: 9 years+

Interest: Composite Materials



Mr. Aninda Das

Designation: Assistant Professor

Qualification: M.Tech

Experience: 10 years+

Interest: Manufacturing Technology



Mr. Arpan Mandal

Designation: Assistant Professor

Qualification: M.Tech

Experience: 8 years+

Interest: Thermal Engineering



Mr. Ashes Rakshit

Designation: Assistant Professor

Qualification: M.Tech

Experience: 7 years+

Interest: Production Engineering



Mr. Debtanu Patra

Designation: Assistant Professor

Qualification: M.Tech

Experience: 6 years+

Interest: Glass Nano Composites, Manufacturing Technology



Mr. Souvik Nandi

Designation: Assistant Professor

Qualification: M.Tech

Experience: 1 year

Interest: Production Engineering

06

ACADEMIC ACTIVITIES & INDUSTRY INTERACTION

Webinars, workshops, resource persons, participation and outcomes

Event 1: One-Day Technical Webinar

Materials in Everyday Life: Evolving Concepts for Sustainable Development

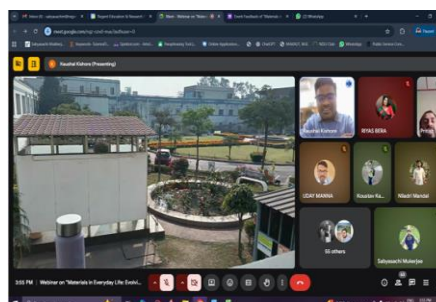
Date & Time: 17th January 2026, 03:45 PM onwards

Mode: Google Meet platform

Participants: 116

Resource Person: Mr. Kaushal Kishore, Principal Researcher in R&D at Tata Steel, Jamshedpur

Outcome: The webinar enhanced participants' understanding of materials in everyday life and their role in sustainable development. It promoted knowledge of materials science, industrial applications, green manufacturing, circular economy and eco-friendly engineering practices.



Event 2: Two-Day Hands-on Training Workshop

Drone-Based Intelligence Systems for Modern Defence Applications: Innovation, Startups and Entrepreneurship

Venue: RERF Seminar Hall

Date & Time: 30th and 31st January 2026, 10:00 AM to 5:00 PM

Participants: 344

Resource Person: Mr. Saikat Banerjee, Founder & CTO, CSID Technomatrix Pvt. Ltd.

Outcome: The workshop strengthened knowledge and practical skills in drone-based intelligence systems for defence applications. The programme offered exposure to live demonstrations, safety practices, regulatory aspects, innovation, startups and entrepreneurship opportunities.





07

STUDENT ACHIEVEMENTS

Institute topper list and scholarship data

Institute Topper List (2025-2026 Odd Semester)

Semester	Rank	Name	Roll Number	Type	SGPA/CGPA
3rd Sem	1st	KOUSHIK SARKAR	26300724031	Regular	7.00
3rd Sem	2nd	RUPAM KOLEY	26300724013	Regular	6.66
3rd Sem	3rd	NARAYAN PAUL	26300725061	Lateral	6.51
5th Sem	1st	ATANU PAUL	26300723003	Regular	7.84
5th Sem	2nd	AKASH KUNDU	26300723001	Regular	7.66
5th Sem	3rd	HIRALAL MAITI	26300724021	Lateral	7.58
7th Sem	1st	SIDDHARTHA HAZRA	26300723040	Lateral	8.49
7th Sem	2nd	AMAN JHA	26300722009	Regular	8.43
7th Sem	3rd	ANTIMA BERA	26300722011	Regular	8.38

Scholarships

Scholarship Name	Semester	No. of Students
Swami Vivekananda Merit-Cum-Means Scholarship (V 4.0)	3rd Sem	10
Swami Vivekananda Merit-Cum-Means Scholarship (V 4.0)	5th Sem	5



08

STUDENT ACTIVITIES

Participation, research summary and professional growth

Events	Participants
Technical events	25
Quiz competitions	20
Cultural participation	01
Sports achievements	02

09

RESEARCH AND INNOVATION

Participation, research summary and professional growth

Item	Number
Conferences	2
Book of Abstracts	2

10

FACULTY ACHIEVEMENTS

Participation, research summary and professional growth

Item	Number
FDPs	3
Professional Memberships	3

Professional Membership

Name of the Memberships	Faculty Name
IEI	Dr. Sabyasachi Mukherjee
IEI	Dr. Puspendu Chandra Chandra
IIW	Dr. Pritish Banerjee



11

EXTENSION AND OUTREACH ACTIVITIES

NSS and community-oriented programmes

NSS Activities

The department actively participated in NSS and community outreach activities, promoting social responsibility, civic awareness, environmental consciousness, patriotism and value-based education among students.

Sl. No.	Event Name	Date	Participant No.
1	Swami Vivekananda's 164th Birth Anniversary - Run for Swadeshi (Swadeshi Sankalp Run)	12th January 2026	89
2	National Voters Day 2026	15th January 2026	24
3	77th Republic Day	26th January 2026	20
4	World Environment Day	17th April 2026	73



12

DEPARTMENTAL BEST PRACTICES

Student support, experiential learning and continuous improvement

Best Practice Overview

The Department of Mechanical Engineering follows several best practices to improve academic performance, student engagement, technical skill development and overall professional growth. These practices help students receive continuous support from faculty members and create a student-centric learning environment.

Mentor-Mentee System

Each faculty mentor guides a group of students regarding academics, attendance, discipline, career planning, higher studies and personal development. Regular sessions help identify student issues and provide guidance.

Industry Mentoring

Expert lectures, industrial visits, workshops and professional interactions help students understand current industrial practices, emerging technologies and career opportunities.

Research Groups

Small research groups focus on renewable energy, manufacturing, thermal engineering, materials, automation and emerging mechanical engineering technologies.

Remedial Classes

Remedial classes are arranged for slow learners and students requiring additional academic support. Important topics are revised, doubts are cleared and previous-year questions are discussed.

Project-Based Learning

Mini projects, major projects, model-making, design activities and real-life problem-solving assignments develop creativity, teamwork, technical knowledge and practical engineering skills.

Outcome

The practices improve student participation, academic performance, practical learning, teamwork, communication skills and industry readiness while supporting continuous quality improvement.



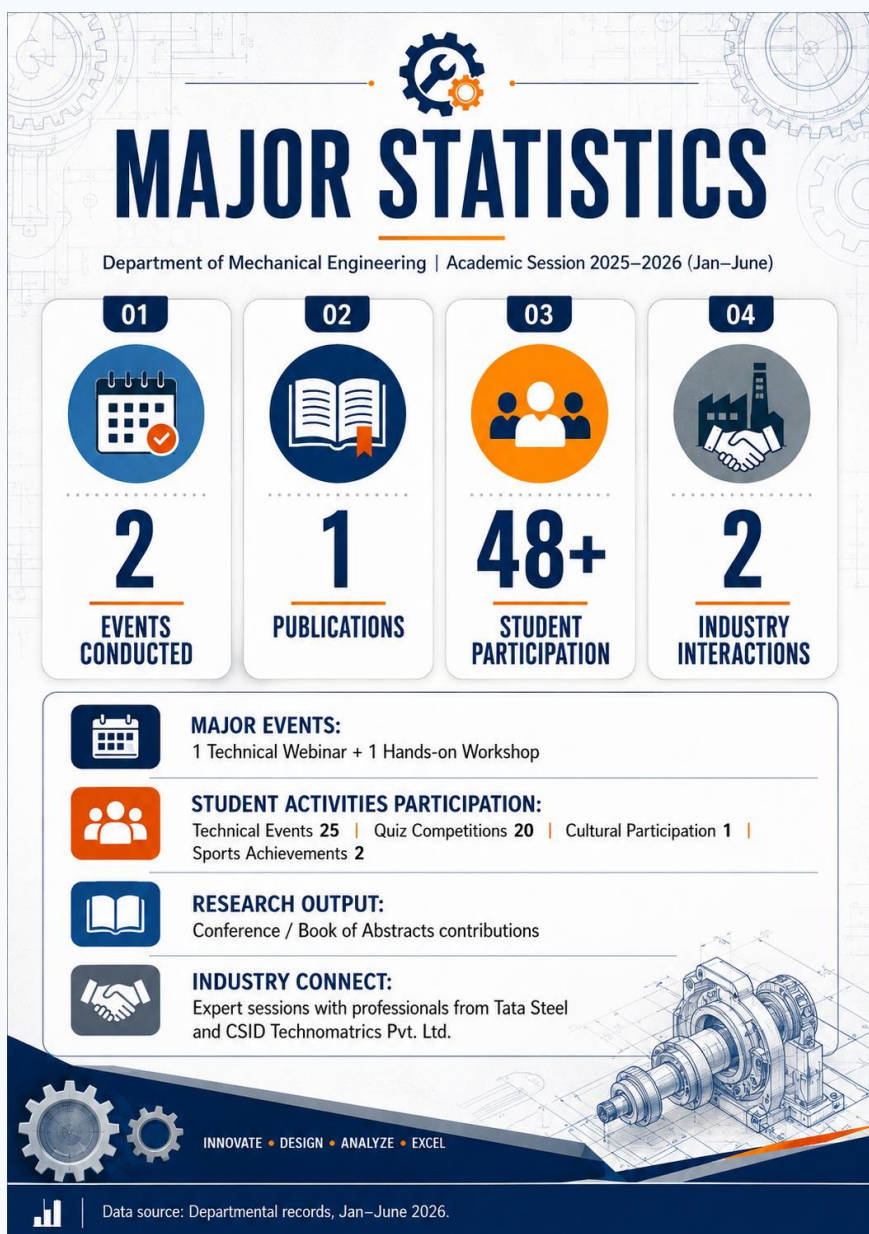
13

MAJOR STATISTICS

Editable infographic-style one-page summary

2	1	460	206
EVENTS CONDUCTED	PUBLICATIONS	ACADEMIC PARTICIPANTS	NSS PARTICIPANTS
48	2		
STUDENT ACTIVITIES	INDUSTRY INTERACTIONS		

Infographic Summary Table





14

FUTURE ROADMAP

Plans for the next six months

Roadmap Objective

The Department of Mechanical Engineering has planned several academic, research and student-development initiatives for the next six months to strengthen technical learning, industry exposure, innovation and overall departmental growth.

New Laboratories

Upgrade existing laboratories and develop modern experimental facilities in advanced manufacturing, thermal engineering, CAD/CAM, automation, robotics, renewable energy and materials testing.

New Courses

Introduce value-added and skill-based courses such as ANSYS, SolidWorks, 3D Printing, CNC Programming, Electric Vehicle Technology, Industrial Automation, MATLAB/Python for Engineers and Drone Technology.

Conferences and Technical Events

Organize seminars, webinars, workshops, faculty development programmes and national-level technical events involving academicians, researchers, alumni and industry experts.

Research Targets

Increase publications, conference participation, patents, copyrights, funded project proposals and interdisciplinary research in renewable energy, advanced materials, manufacturing, thermal systems, automation and sustainable engineering.

Student Development Initiatives

Continue industrial visits, internships, project competitions, technical quizzes, coding contests, design challenges, soft skill training, placement preparation, GATE guidance and entrepreneurship awareness programmes.

Overall Objective

Improve academic quality, practical exposure, research output, industry collaboration, placement readiness and student participation in technical and professional activities.



EDITORIAL BOARD

Team responsible for newsletter preparation and publication

Role of the Editorial Board

The Editorial Board is responsible for collecting, reviewing, editing, designing and compiling departmental activities, achievements, events and academic updates. The board ensures that the newsletter represents the progress, creativity and achievements of the Department of Mechanical Engineering in a well-organized and attractive manner.

Faculty Editors

Mr. Debtanu Patra

Mr. Ashes Rakshit

Mr. Arpan Mandal

Student Editors

Sanju Sau

Trisha Biswas

Design Team

Mr. Debtanu Patra

Mr. Ashes Rakshit

Mr. Arpan Mandal

Responsibilities

The Editorial Board coordinates with faculty members, students, alumni and departmental committees to collect relevant information for publication. The team works on content editing, layout design, photo selection, proofreading and final preparation of the newsletter.

Acknowledgement

The Department of Mechanical Engineering sincerely appreciates the efforts of the Editorial Board, faculty members, student contributors and design team for their valuable contribution in preparing and publishing the departmental newsletter.

- End of Newsletter -