



GLOBAL ACADEMY OF TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING



NEWS LETTER

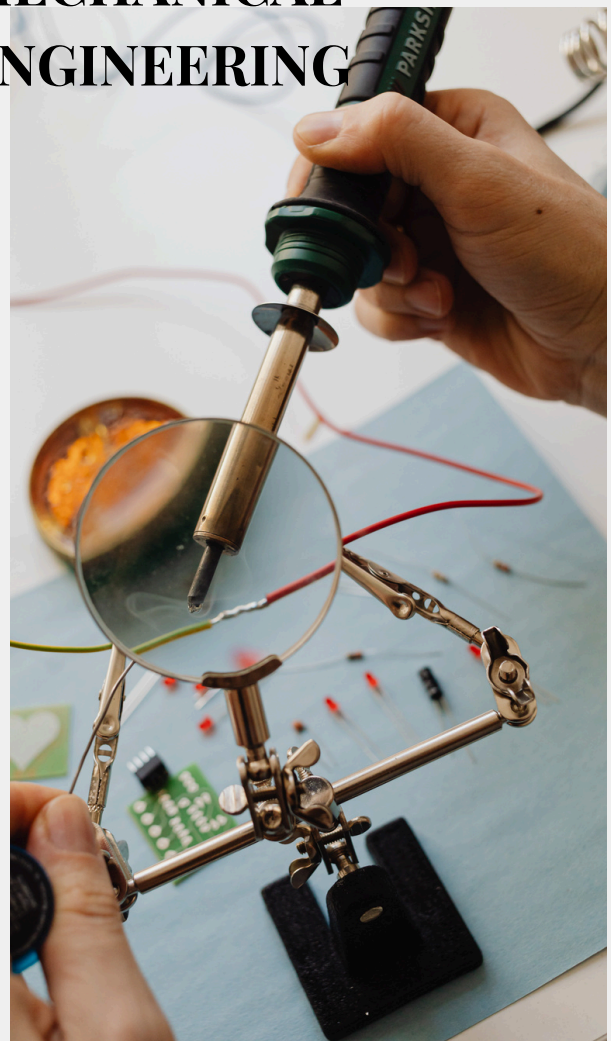
AUG 2023-JAN 2024

This edition of the newsletter reflects our department's commitment to practical learning, industry interaction, and continuous skill development in engineering education.

INDUSTRIAL EXPERIENCE

Industrial exposure plays a vital role in shaping engineering perspectives. Through organized visits and hands-on observation, students gain awareness of real-world processes, professional practices, and industrial environments that complement academic learning.

MECHANICAL ENGINEERING



GLOBAL ACADEMY OF TECHNOLOGY

INSTITUTE VISION

Become a premier institution imparting quality education in engineering and management to meet the changing needs of society.

INSTITUTE MISSION

- M1: Create environment conducive for continuous learning through quality teaching and learning processes supported by modern infrastructure.
- M2: Promote Research and Innovation through collaboration with industries.
- M3: Inculcate ethical values and environmental consciousness through holistic education programs

DEPARTMENT VISION

Become one of the leading providers of education in mechanical engineering with emphasis on research, development and innovation for the benefit of society.

DEPARTMENT MISSION

- M1: Impart quality technical education in the field of mechanical engineering through excellent teaching-learning process, modern infrastructure and computing tools.
- M2: Prepare students for successful careers by providing placements and encouraging research, development and innovation through industry-institute interaction.
- M3: Instill professional ethics and environmental consciousness amongst students through inclusive development programs.

GLOBAL ACADEMY OF TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

PROGRAM EDUCATIONAL OBJECTIVES (PEOs) of the DEPARTMENT

PEO of Graduate students in Mechanical Engineering aims to have:

- **PEO1:** Engineering competence, critical thinking, creativity, and ethical inclusivity in professional practice.
- **PEO2:** Continuous intellectual growth through advanced education, professional development, independent inquiry, and experiential learning.
- **PEO3:** Leadership and teamwork excellence throughout professional careers.

PROGRAM SPECIFIC OUTCOMES (PSOs) of the DEPARTMENT

After successful completion of Mechanical Engineering Program, the graduates will be able to:

- **PSO1:** Specify, design, and analyze machine elements using CAD/CAE software.
- **PSO2:** Evaluate thermal performance of Heating, Ventilation & Air-Conditioning systems, electronic systems, Solar Roof Top Photo-Voltaic systems using experimental approach or /and CFD tools and design these systems for better performance.
- **PSO3:** Develop composite materials, manufacturing processes and products in an efficient, safe and cost-effective manner.

PROGRAM OUTCOMES

Engineering Graduates will be able to:

PO1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

INDUSTRIAL VISIT

Industrial Visit – Magod Laser (Jigani Plant)

The visit to Magod Laser – Jigani Plant introduced students to advanced machining and laser-based manufacturing techniques used in modern industrial production.

About the company:

Magod Laser is a leading Indian firm specializing in laser cutting and precision machining solutions.

Semester	Industry Visited	Date of Visit	Subject Mapping
V sem	CMTI	28/08/2023	Workshop on IIOT implementation in metal casting
IV Sem	Magod Laser-Jigani Plant	24/08/2023	Advanced Machining techniques

Industrial Visit – CMTI

Students visited CMTI and attended a workshop on IIoT implementation in metal casting, gaining insights into smart manufacturing and industrial automation

About the organization:

CMTI is an autonomous R&D institute under the Ministry of Heavy Industries, Government of India, focused on manufacturing technology and precision engineering.

NPTEL ONLINE CERTIFICATION CLEARED BY FACULTIES

SI NO	Name of the faculty	Title of the program	Duration
1	Savitha.D.C	NPTEL Online course on " Thermal operations in Food process Engineering: Theory and Applications"	July-October 2023
2	Dr.Shreekala N	NPTEL Online course on " Operations and supply chain management"	July-October 2023

STUDENTS PARTICIPATION IN PROFESSIONAL EVENTS

Sl. No	Name of the student	Name of the Event	Date of Event	Name of Award
1	Purnavi S.Gowda	Infosys spring board - Basics of Python	22/11/2023	Certified
2	Purnavi S.Gowda	Infosys spring board - Fundamentals of Information security	31/10/2023	Certified
3	Sachin.S	Infosys spring board- Fundamentals of Information security	9/11/2023	Certified
4	Abdul Aziz	Udemy- Aerospace Engineering :Aircraft Fundamentals and Advanced	4/11/2023	Certified
5	Vinodh Prasad.K.R	MSME - Training on Autocad	18/09/2023	Certified
6	Shashank.H	Udemy- Fusion 360 Beginners course	20/01/2024	Certified
7	R.Likhith	infosys spring board- Supply chain management	5/10/2023	Certified
8	Kalyan Rao.M	Mind luster- Autocad mechanical Design	26/01/2024	Certified

9	Shashank.S.D	Mind luster- Autocad mechanical Design	9/1/2024	certified
10	Pranam .J.Rai	Infosys spring board- Drone	8/1/2024	certified
11	Vamshi Sreenivasula Reddy	Great Learning Academy- Python -fundamentals for beginners	30/10/2023	certified
12	Kiran.D.S	Great learning academy- Python for Machine Learning	30/10/2023	certified
13	Kiran.D.S	Great learning academy-Python- Fundamentals for beginners	10/10/2023	certified
14	Shravan Shetty	Coursera- Introduction to Microsoft Excel	10/11/2023	certified
15	N. Rauhaan Khasim	coursera- Introduction to Microsoft Excel	10/11/2023	certified
16	Nikith.N	Coursera- Introduction to Microsoft Excel	12/10/2023	certified
17	B. Dheemanth Prakash	Infosys spring board- Creating Responsive web pages using Bootstrap 4	21/09/2023	certified
18	B. Dheemanth Prakash	CMTI-Workshop on "IIOT Implementation in Metal Casting & Demonstration of Integrated Smart Foundry	28/08/2023	Participated
19	Chiranjeevi V.	Workshop on "IIOT Implementation in Metal Casting & Demonstration of Integrated Smart Foundry”	28/08/2023	Participated

20	Prabhanjan G. Shastri	Internship & Job Preparation	10/9/2023	completed Internship
21	Prabhanjan G. Shastri	Training program on "Programming with python"	20/08/2023	Certified
22	Kalyan Rao. M	AutoCAD Mechanical Design-Mindluster	26/01/2024	Certified
23	Naveen Kumar A.D	Internship Training program at BHEL	20/09/2023	Certified
24	Tarun P	Runner up in JK tyre Indian carting race	16/10/2023	Runner up
25	Vivek R	Runner up in JK tyre Indian carting race	16/10/2023	Runner up
26	G. Yograj	GTTC-Skill development training program	1/8/2023	Certified
27	Abdul Aziz	Mood Indigo-Training on Web Development course	9/1/2024	Certified
28	Dinesh R	Infosys spring board- Fundamentals of Information security	9/11/2023	Certified
29	Dinesh R	Infosys spring board-Fundamentals of Cryptography	7/11/2023	Certified
30	Purnavi S Gowda	Infosys spring board-Blender-Beginners	20/11/2023	Certified
31	Gagan K	Ministry of skill development-CNC Programmer	1/12/2023	Certified
32	Sudarshan Rao.P.S	CMTI Internship	3/1/2024	Participated

MOOC COURSE

SL. NO	Student Name	USN	Course Registered	Date
1	Dinesh R	1GA22ME002	An online course on Fundamentals of Information security	9/11/2023
2	Dinesh R	1GA22ME002	An online course on Fundamentals of Cryptography	7/11/2023
3	Purnavi S.Gowda	1GA22ME011	An online course on Blender-Beginners	20-11-2023
4	Purnavi S.Gowda	1GA22ME011	An online course on Basics of Python	22-11-2023
5	Purnavi S.Gowda	1GA22ME011	An online course on Fundamentals of Information security	31-10-2023
6	Sachin.S	1GA22ME014	An online course on Fundamentals of Information security	9/11/2023
7	Abdul Aziz	1GA22ME001	An online course on Artificial Intelligence A-Z 2023bUILD 5 AI(Incl. ChatGPT)	9/11/2023
8	Vinodh Prasad.K.R	1GA21ME424	Training on Autocad	18-09-2023

9	Rohith.S	1GA20ME024	An online course on Supply chain Management	7/12/2023
10	R.Likhith	1GA20ME022	An online course on Supply cahin management	5/10/2023
11	Vamshi Sreenivasula reddy	1GA22ME408	An onile course on Python -fundamentals for beginners	5/10/2023
12	Kiran.D.S	1GA22ME413	An onile course on Python for Machine Learning	5/10/2023
13	Kiran.D.S	1GA22ME413	An onile course on Python -fundamentals for beginners	5/10/2023
14	Shravan Shetty	1GA21ME015	An onile course on Introduction to Microsoft Excel	10/11/2023
15	N. Rauhaan Khasim	1GA21ME008	An onile course on Introduction to Microsoft Excel	10/11/2023
16	Nikith N	1GA21ME009	An onile course on Introduction to Microsoft Excel	10/12/2023
17	B.Dheemant h Prakash	1GA21ME002	An onile course on Creating Responsive web pages using Bootstrap 4	21-09-2023

FACULTY RESEARCH PUBLICATIONS

Sl. No	Name of the Faculty	Title of the Paper	Name of the Journal
1	Dr.T.Prashanth	Performance analysis of a gas turbine engine with intercooling and regeneration process - Part 1	International Journal of Turbo and Jet Engines
2	Dr.T.Prashanth	Performance analysis of a gas turbine engine via intercooling and regeneration- Part 2	International Journal of Turbo and Jet Engines

FACULTIES PRESENTED IN CONFERENCES

SINO	Name of Teacher	Title of the programme	Duration
1	Dr.Shreekala.N	International conference on Recent advances in Fluid mechanics & Nano electronics	12-07-2023 to 14-07-2023
2	Mr.Asha.P.B	21st International conference on Recent advances in Mechanical Engineering	13-07-2023 to 15-07-2023
3	Dr. Ravi kumar.V	21st International conference on Recent advances in Mechanical Engineering	13-07-2023 to 15-07-2023

4	Mr. Poornachandra	21st International conference on Recent advances in Mechanical Engineering	13-07-2023 to 15-07-2023
5	Dr. Ravi kumar.D.V	21st International conference on Recent advances in Mechanical Engineering	13-07-2023 to 15-07-2023
6	Mr.Kiran.R	21st International conference on Recent advances in Mechanical Engineering	13-07-2023 to 15-07-2023

FACULTY DEVELOPMENT PROGRAM ATTENDED BY FACULTIES

SI NO	Name of the faculty	Title of the programme	Duration
1	Dr.G.R.Gurunagendra	Short term course on "Recent Trends in MEMS Technology(RTMT 2023)	11-12-2023 to 15-12-2023
2	Asha P.B	FDP on "Recent Trends in Additive Manufacturing"	18-12-2023 to 22-12-2023
3	Dr.V.Ravi Kumar	FDP on "Recent Trends in Additive Manufacturing"	18-12-2023 to 22-12-2023
4	Poornachandra	FDP on "Recent Trends in Additive Manufacturing"	18-12-2023 to 22-12-2023
5	R.Kiran	FDP on "Recent Trends in Additive Manufacturing"	18-12-2023 to 22-12-2023
6	Poornachandra	FDP on "Statistical Abalysis & Financial Modelling"(SAFM-2023)	18-12-2023 to 23-12-2023
7	R.Kiran	FDP on "Statistical Analysis & Financial Modelling"(SAFM-2023)	18-12-2023 to 23-12-2023

8	Savitha.D.C	FDP on "Statistical Analysis & Financial Modelling"(SAFM-2023)	18-12-2023 to 23-12-2023
9	Dr.V.Ravi Kumar	FDP on "Statistical Analysis & Financial Modelling"(SAFM-2023)	18-12-2023 to 23-12-2023
10	Asha P.B	FDP on "Statistical Analysis & Financial Modelling"(SAFM-2023)	18-12-2023 to 23-12-2023
11	Asha P.B	FDP on "Data Analysis & visualization using Tableau"	16-08-2023 to 22-08-2023
12	Dr.V.Ravi Kumar	FDP on "Data Analysis & visualization using Tableau"	16-08-2023 to 22-08-2023
13	Poornachandra	FDP on "Data Analysis & visualization using Tableau"	16-08-2023 to 22-08-2023
14	R.Kiran	FDP on "Data Analysis & visualization using Tableau"	16-08-2023 to 22-08-2023
15	Gurusharan	FDP on "Data Analysis & visualization using Tableau"	16-08-2023 to 22-08-2023
16	Dr.Shreekala.N	FDP on "Data Analysis & visualization using Tableau"	16-08-2023 to 22-08-2023
17	Dr.Shreekala.N	FDP on "Operations and supply chain Management"	July-October 2023
18	Dr.Shreekala.N	FDP on "Statistical Analysis & Financial Modelling"(SAFM-2023)	18-12-2023 to 23-12-2023

Name of the Editor :

Dr. Shreekala N

Bhuban R Bharawaj (1GA22ME402) (VI)

Student Members :

Shreecharn S Bhat (1GA22ME432)

Prabhanjan G Shastri (1GA21ME011) (VI)