GOLDEN VALLEY EDUCATIONAL TRUST

Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY Oorgaum, KGF - 563 120.



DEPARTMENT OF MECHANICAL ENGINEERING

NEWSLETTER 2022-23

PRESIDENT MESSAGE

In this digital era, the areas of Mechanical Engineering plays a significant role with Industry 4.0 in shaping modern society. The faculty have taken many initiatives to inculcate the knowledge and knowhow to the young minds. Industry sponsored laboratory in the department make it easy for the students to get trained in industry-like environment. Best wishes for the academic, research and developmental activities in the department to achieve greater heights, and for everyone associated with Eighth Edition of the "MechNEWS", and special thanks to the editorial team.

FROM PRINCIPAL DESK

The Department provides a top-notch learning environment with a group of highly competent faculty members to encourage the students to advance in their technical knowledge and foster team spirit among them to publish the Eighth Edition of the "MechNEWS". I am confident that our students will emerge as assets not only to the institution and the organization they join but also to the society at large. I congratulate all the team members of the editorial board for bringing up this issue in a better shape. Also, I invite the readers to share their suggestions for improvement in the forthcoming issues.

ABOUT THE DEPARTMENT

Mechanical Engineering is one of the core engineering disciplines that provides quality education on various applications, enabling students to understand and address several industrial aspects. Since many components across different fields require manufacturing, mechanical engineering plays a vital role in any era. The highlight of our department at Dr. TTIT includes excellent placement opportunities, experienced faculty, an effective teaching-learning environment, and well-equipped laboratory facilities. Students are encouraged to work in teams for project work, which involves material selection, design, fabrication, and development. They are also encouraged to explore and develop their own start-ups, potentially creating internship and job opportunities for themselves and others. The department motivates both students and faculty to participate in various programs (software training, hands-on workshops, technical events, seminars, and industrial visits) that help develop analytical and practical skills, which can be applied to real-world problems.

AT A GLIMPSE

WEBINAR / FDP ATTENDED INDUSTRIAL VISIT GUEST LECTURE CONDUCTED ACHIEVEMENTS PUBLICATIONS DEPARTMENT TOPPERS

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AJAY KUMAR K

VISION OF THE DEPARTMENT

To transform the students into technically competent Mechanical Engineers nurturing them in learning sustainable and innovative technology with professional ethics and social concern.

MISSION OF THE DEPARTMENT

M1: Striving to empower students with fundamentals in the field of Mechanical Engineering with innovative, managerial and professional skills.

M2: To create an environment for progressive learning through industry institute partnership.

M3: Imparting quality technical education stressing on new technology with professional ethics for the benefit of the society.

PROGRAM EDUCATIONAL OBJECTIVES (PEO)

PE01: Graduates will have successful professional careers in the Industry, adapting to evolving needs with their strong foundation in science and engineering principles.

Pe02: Graduates will engage in higher studies and professional development demonstrating innovation and research capabilities in solving real-world problems while being aware of the societal impact.

PE03 : Graduates will exhibit leadership, professional ethics, effective communication skills, teamwork and a commitment to lifelong learning.

PROGRAM SPECIFIC OBJECTIVES (PSO)

PSO-1: Design and develop components or systems in the field of Mechanical Engineering.

PSO-2: Apply modern hardware and software technologies to perform structural and thermal analysis.

WEBINAR / FDP ATTENDED

- → Dr. Manjunatha Babu N S has participated in Twenty-one days online FDP on "Teaching Platform and Tools (Technology Management in Education)" held from 15th November to 15th December 2022, organized by Scroll well.
- → Mr. Srinivas A has participated in One day hands on training workshop in "XRD & TGA" held on 09th December 2022, organized by Jyothi Institute of Technology, Bangalore.
- → Dr. Sampath A & Mr. Purnesh N has participated in Three days online workshop on "3D printing technology" held from 23rd to 25th December 2022, organized by EduXlabs, IIT Madras.

- ➔ Dr. Manjunatha Babu N S has participated in Seven days online workshop on "Outcome Based Education" held from 01st to 09th February 2023, organized by PSG Institute of Technology, Coimbatore, Tamil Nadu.
- → Mr. Mahendran J has attended One Week online FDP program on "Universal Human Values" from 20th to 25th February 2023 conducted and organized by ICT Academy.
- → Dr Manjunatha Babu N S has attended Seven Days online FDP on "First Hand Experience on SPSS" from 01st to 7th March 2023, organized by Research Foundation of India.
- → Mr. Purnesh N has attended One Week online FDP program on "Universal Human Values" from 06th to 10th March 2023 conducted and organized by ICT Academy.
- → Mr. Saravana Prasad R has attended One Week online FDP program on "Universal Human Values" from 03rd to 07th April 2023 conducted and organized by AICTE.
- → Dr Manjunatha Babu N S, has participated in "IP awareness programme under National Intellectual Property Awareness Mission" on 26th April 2023 organized by Intellectual Property Office, India.
- → Dr. Sampath A has attended One Week online FDP on "Trimble Sketch" from 19th to 24th June 2023 conducted and organized by ICT Academy.
- → Mr. Purnesh & Mr. Mahendran has attended One-week online FDP on "Digital Prototyping using CATIA" from 10th to 14th July 2023, organized by ICT Academy.
- Dr. Sampath A has attended One Week online FDP on "Autodesk Fusion 360" from 10th to 14th July 2023, conducted and organized by Department of Mechanical Engineering, Lendi-Institute of Engineering & Technology, Andhra Pradesh.
- → Dr. Narasimha C has attended One-week online FDP program on "Microsoft Azure AI Fundamentals" from 10th to 14th July 2023, conducted and organized by ICT Academy.
- → Dr. Sampath, Mr. Purnesh & Mr. Mahendran has attended One-week International FDP program on "NLP & ChatGPT Applications" from 14th to 19th August 2023, organized by Secab Institute of Engineering & Technology in collaboration with EXCELR.

INDUSTRIAL VISIT

An "Industrial Visit to Deccan Hydraulics Pvt Ltd" was arranged to the students of Mechanical and Electrical Engineering on 12th August 2023.

GUEST LECTURE CONDUCTED

→ Dr. Madeva Nagaral, Manager, ARDC, HAL-Bangalore has delivered an expert talk on "Product Design & Development in an Aerospace Domain" for all Mechanical & Electrical Engg students on 28th October 2022 organized under The Institution of Engineers – Kolar Local Centre.



→ Mr. Sathyavrath N, Diamler Trucks Innovation Centre India – Bangalore has delivered an expert talk on "Automotive Product Development – a holistic approach" for 5th & 7th semester mechanical & electrical engineering students on 15th November 2022 organized under IEI – KLC.



→ Mr. Nageshwaran B – Dr TTIT Alumni, Diamler Trucks Innovation Centre India – Bangalore has delivered an expert talk on "Overview on Indian Automotive Industry" for 5th & 7th semester mechanical & electrical engineering students on 28th December 2022 organized under IEI – KLC.



Dr. Hariharan Chandrashekar, Trustee – AltTech Foundation – Hyderabad has delivered an expert talk on Foundation Green for all stream and various institution engineering students on 16th January 2023 organized under The Institution of Engineers – Kolar Local Centre.

Dr. Bharat M, Asst Prof – Dr TTIT has delivered an expert talk on Problem Solution Fit and Product Market Fit for all stream engineering students on 23th January 2023 organized under IEI – KLC.



Dr. Bhargava H R, Associate Professor – Garden City University, Bangalore has delivered a technical talk on "Process of Innovation Development & Technological Readiness Level" to Mechanical & Electtrical Engg Students on 21/02/2023 conducted under IEI – KLC.



Dr. Kiran Kumar N, Assistant Professor – Vemana Institute of Technology, Bangalore has delivered a technical talk on "Human Values, Life Ethics and Technology" to Mechanical & Electtrical Engg Students on 06th July 2023 conducted under IEI–KLC.



Mr. Md Azar Hussain & Mr. Vijay Kumar, Experts from Indoskill (Aqmenz Automation Pvt Ltd) handled a three days skill development course on "Deep Drive into Python Libraries with Application Projects" for 4th Semester Mechanical, Electronics, Electrical Engineering Students from 20th to 22nd July 2023 under the aegis of IEI, IETE, IIC, IQAC in student Centre,

FACULTY / STUDENTS ACHIEVEMENTS

- → Dr. Mohan Kumar K, Associate Prof, attended as Subject Expert and Conference Chair for the 4th National Conference on "Recent Trends in Engineering Science and Technology (BCREST – 2023)" held on 30th May 2023 at CBIT- Kolar.
- → Dr Manjunatha Babu N S, attended as a session chair, in the "21st ISME 2023 international conference on advances in mechanical engineering conducted and organized by Department of Mechanical Engineering, PES University, Bangalore from 13th to 15th July 2023.
- → Students of 4th Semester Mr. Frank Paul Edison, Mr. Vishnu Raj, Mr. Rohit, Mr. Shylesh and Mr. Prashanth have donated Blood on 16th June 2023 under NSS Activity conducted at Dr. TTIT – KGF.
- → Mr. Ajay Kumar has completed 12 NPTEL courses
- → Mr. Gopinath, Mr. Hemanth Kumar. Mrs. Sushmitha has won a best model for the project entitled "Exercising Water Pump" under innovation contest conducted by IIC – Dr. TTIT – KGF.
- → Mr. Ajith M has received second prize in ISF Congress celebrations conducted by IETE on 17th September 2022.
- → Mr. Girish Gautam has completed "10 weeks Virtual internship on Cyber security" from Dec 2021 to Feb 2022 organized by AICTE in collaboration with Eduskills.
- → Mr. Karthikeyan V, 2018-2022 batch student has secured 4th Rank with 9.43 CGPA under VTU-Belagavi.
- → Mr. Mushahid 2018-2022 batch student has qualified in GATE 2023 with a score of 304 and an all india rank of 881.

- → Mr. Aravind A, student of 3rd Sem participated in the Sustainability Hackathon Challenge – Bootcamp organised by EDII and Anna Iniversity – Chennai on 29th Mar 2023.
- → Mr. Ajay Kumar, Student of 8th semester participated in the National Level Quiz on Scientific Foundations of Health conducted by Dr. TTIT on 9th May 2023.
- → Mr. Ajay Kumar K, Mr. Praveen RR, Mr. Kevin Mathew, Mr. Yavaraj under the guidance of Prof. Anitha Devi has received First Prize in Project Expo 2023 held on 20th May 2023 organized by IIC – Dr. TTIT.

PUBLICATIONS

- → Mrs. Anitha Devi S H & Dr H G Shenoy has presented a research paper entitled "Mechanical behaviour and tensile fractography of boron carbide fillers reinforced epoxy L-12 polymer composites" in International Conference on Recent Developments Mechanical Engineering (ICRDME) 2023 organized by SIT, Tumkur from 3rd to 4th March 2023.
- → Dr Manjunatha Babu N S, presented a research paper titled "Experimental Study on Thrust Force and Torque Post-Drilling of Hybrid Glass/Kevlar FRP Laminates" authored by Dr. Mohan Kumar K, Dr. Sampath A, Dr. Manjunath A, Mr. Srinivas A, Dr. Thyagaraj N R, in the "21st ISME 2023 international conference on Advances in Mechanical Engineering conducted and organized by Department of Mechanical Engineering, PES University, Bangalore from 13th to 15th July 2023.

