

YAANTRIX

AN OFFICIAL NEWSLETTER PUBLISHED BY
MECHANICAL ENGINEERING DEPARTMENT



VISION

"To produce industry ready engineers and researchers with excellent theoretical and practical knowledge by providing quality education to the under privileged sections of the society of the state and nation."

MISSION

- To develop a state-of-the-art computational and experimental facilities for teaching, research and consultancy services for industries and society.
- To produce high quality undergraduates in mechanical engineering through good academic support qualities.
- To provide an environment conducive to innovation a relativity, group work and entrepreneurial leadership by imparting training and coaching programmes in relevant skill development courses.
- To develop and serve practicing engineers, industry, government, educational and technical societies through consultancy work by providing professional expertise.
- To develop a system for effective interactions among industries, academia, alumni and other stake holders.
- To cultivate a friendly, supportive and competitive academic environment to extract the best contributions from students, faculty and staff members.

MAIN FEATURES

Vision & Mission

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ABOUT THE DEPARTMENT

The department of Mechanical Engineering was introduced in the year 2016 with an initial intake capacity of 60 students. Currently, the department has a strength of eight Assistant Professors, one workshop superintendent, one laboratory supervisor, and four laboratories and workshop staff to assist and support 240+ B.E. undergraduate students. The department is continuously and gradually strengthening its infrastructures including laboratories, workshops, and other facilities. The department comprises about nine laboratories and one workshop equipped with sophisticated instruments. The department is continuously striving to achieve excellence in education, academic and industry-oriented research as well as consultancy services to society. We are hopeful that, our students will be able to serve the various needs of society by blending intellectual and practical experiences gained from the institute. Academic coursework and projects are designed to endow students with the ability to apply their knowledge effectively for solving multidisciplinary problems.

MESSAGE FROM HOD

“I am happy to inform that Department of Mechanical Engineering, JIST is publishing its sixth issue of the Departmental Newsletter (Yaantrix).



The newsletter is a reflection of the cumulative effort of faculties, students, alumnus and other stake holders in portraying and bringing out the ethos of the Department. It is really a pride for all of us and I on behalf of this platform request the entire Mechanical Engineering community to come forward and be associated with us. I cordially appreciate the combined effort of the Editorial Team as a whole in bringing out this issue for our esteemed readers.”

DEPARTMENTAL ACTIVITIES

- 6th semester Internship II presentation was organized on 24th December 2022.
- 7th Semester Grand Viva was held in 10th January,2023.
- 7th Semester presentation on Industrial Internship was held in 11th January,2023.
- 7th Semester presentation on Project I was held in 12th January,2023
- 1st semester and 3rd Semester End Term, Lab Exam of were conducted on 2nd,3rd and 4th February, 2023.
- 8th and 6th semester mechanical engineering classes were started from 4th February,2023.
- A Departmental meeting was held on 4th February,2023 regarding allocation of subjects and preparation of routine of even semesters
- 2nd and 4th semester Mechanical Engineering classes were started from 1st March,2023.
- The Fifth issue of the Newsletter entitled “Yaantrix” of the Mechanical Engineering Department, Jorhat Institute of Science and Technology was published in March 2023.
- CIE I of even semesters (Session 2023) was conducted on the 28th, 29th, and 30th March, 2022.

FACULTY ACTIVITIES

- Nayanjyoti Talukdar was appointed as Assistant Officer Incharge of written exam Grade III (Non Technical) under Health Department held in 12th february,2023.
- Paper entitled "A Brief review and Heat Transfer analysis of the Solar dryer using Ansys CFD Simulation" presented by Animesh Barman, Ankur Saikia and Priyanka Kalita in National Conferenced "New Approaches of Basic Science towards the development of Engineering and Technology" conducted by Assam Don Bosco University, Assam in February,2023 guided by Nayanjyoti Talukdar
- Paper entitled "A Review of Recent Development of Photo Voltiac Thermal System using Nanofluid as Heat Transfer Medium" presented by Kalpita Borthakur and Avipsha Mahanta in National Conferenced "New Approaches of Basic Science towards the development of Engineering and Technology" conducted by Assam Don Bosco University, Assam in February,2023 guided by Nayanjyoti Talukdar.
- Dr. Borad M Barkachary was invited as the external evaluator for the 7th semester B. Tech Project Viva-Voce 2022-23 held on 27th January 2023 in the Department of Mechanical Engineering, Jorhat Engineering College, Jorhat-07.
- Dr. Borad M Barkachary has been recognized for serving as outstanding reviewer for the journal "Nanotechnology and Precision Engineering", American Institute of Physics (AIP) Publishing.

FACULTY ACTIVITIES

- Dr. Borad M Barkachary along with co-author Dr. Srikrishna N. Joshi published a book chapter titled “Ultra-Precise Single Point Diamond Turning Process and Its Low Cost Alternative Methods” in the EBook “Low Cost Manufacturing Technologies”- Proceedings of NERC-2022 (eBook ISBN-978-981-19-8452-5).
- Dr. Borad M Barkachary attended one day online Workshop on “A hands-on Introduction to Additive Manufacturing Simulation” organized by NPTEL, IIT Madras on 03rd February 2023.
- Dr. Borad M Barkachary appointed as convenor of the committee for formulating the Vision and Mission of the institute on 04th February 2023.
- Dr. Borad M Barkachary attended one week Faculty Development Program on Universal Human Value-II organized by AICTE, NCC-IP from 13th to 18th February 2023.
- Dr. Borad M. Barkachary is appointed as JISTSU's Teacher-In-Charge of Major and Minor Games of on 28th March 2023.
- Dr. Borad M. Barkachary performed as a reviewer for the Journal “Journal of Manufacturing Processes” (Publisher: Elsevier).
- Dr. Borad M Barkachary appointed as an Executive Member for National Digital library of India (NDLI) club authority for Jorhat Institute of Science and Technology

FACULTY ACTIVITIES

- Paper entitled "Turbo-Battery Charging System for Energy Recovery from Exhaust of an Internal Combustion Engine: A Review and Critique of Research", presented by Hridoy Ranjan Das in National Conference "New Approaches of Basic Science towards the development of Engineering and Technology" conducted by Assam Don Bosco University, Assam in February, 2023 guided by Dr. Mridul Deka
- Dr. Mridul Deka is appointed as Faculty In Charge of Boys Common Room JITSU
- Paper entitled "Eco Friendly Bio Composite Packaging Materials as a Substitute of Plastic Bags" authored by Menonjyoti kalita and Dr. Pradip Baishya published in Souvenir, Assam Engineering College having ISBN No.978-93-83588-32-9 (25th February, 2023)
- Menonjyoti Kalita completed Faculty Development Programme on Introduction to Machine Learning and Deep Learning organised by NITTTR, Kolkata from 27th March to 31st March, 2023.
- Paper entitled "Pool boiling heat transfer enhancement and bubble visualization on a microporous copper over CuO filmed surface through combination of chemical etching and electrochemical deposition", authored by Sanjib Kalita , Dipak Sen, Pulak Sen, Sudev Das and Bidyut Baran Saha in International Communications in Heat and Mass Transfer (February, 2023)

STUDENT ACTIVITIES

- Richita Hazarika and Subham Saha of 8th semester presented a paper entitled "Using Phase Change Material in Solar Dryer: A Review and Critique of Research" in National Conference "New Approaches of Basic Science towards the development of Engineering and Technology", conducted by Assam Don Bosco University, Assam in February, 2023.
- Kalpita Borthakur and Avipsha Mahanta presented a paper entitled "A Review of Recent Development of Photo Voltaic Thermal System using Nanofluid as Heat Transfer Medium" in National Conference "New Approaches of Basic Science towards the development of Engineering and Technology" conducted by Assam Don Bosco University, Assam in February, 2023.
- Hridoy Ranjan Das of 8th semester presented a paper entitled "Turbo-Battery Charging System for Energy Recovery from Exhaust of an Internal Combustion Engine: A Review and Critique of Research", in National Conference "New Approaches of Basic Science towards the development of Engineering and Technology" conducted by Assam Donbosco University, Assam in February, 2023.

STUDENT ACTIVITIES

- Biki Baruah of 8th Semester qualified GATE 2023 held in January, 2023.
- Animesh Barman, Ankur Saikia and Priyanka Kalita presented a paper entitled "A Brief review and Heat Transfer analysis of the Solar dryer using Ansys CFD Simulation" in National Conferenced "New Approaches of Basic Science towards the development of Engineering and Technology" conducted by Assam Don Bosco University, Assam in February, 2023.
- Bibhuti Bhusan Dutta of 6th semester Got 1st prize in Quiz competition on the occasion of National Science Day, organized at JIST.
- Trishanu Saikia of 6th Semester is elected as Social Service Secretary in JITSU Election

ALUMNI SECTION

- Rohit Kumar Sahu (2016-2020) got placed in Infosys Limited.
- Rohan Das(2017-2021)Cleared APSC prelims 2022 and waiting for ADRE grade 3 result..
- Neelam Kath Hazarika (2017-2021) completed certificate from INFYTQ.
- Pritom Borbora (2017-2021) got placed in CKinetics.
- Hasinur Rahman (2018-2022) got placed in Ajmal Super 40.
- Hirok Jyoti Dutta (2018-2022) cleared Agricultural Engineering Exam conducted by AAU,Jorhat

PHOTO GALLERY



EDITORIAL BOARD

Advisors



Dr Borad M. Barkachary

Dr Mridul Deka



Editors



Menonjyoti Kalita

Dr Bhaskar Ranjan Tamuli



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