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QUARTERLY



# YAANTRIX

AN OFFICIAL NEWSLETTER PRESENTED 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

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

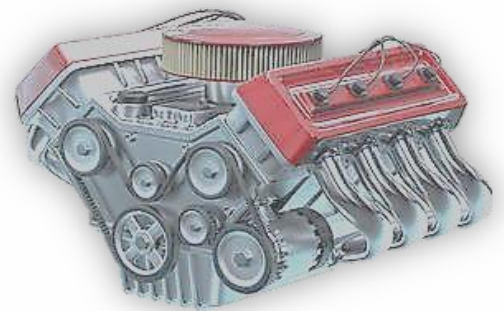
## MAIN FEATURES:

- VISION & MISSION
- ABOUT THE DEPARTMENT
- WORDS FROM HOD
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- STUDENT ACTIVITIES
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## ABOUT THE DEPARTMENT

The department of Mechanical Engineering was introduced in the college in the year 2016 with an initial intake capacity of 60 students. Currently, the department has a strength of six Assistant Professors, one workshop superintendent and one laboratory assistant to assist and support 120+ B.E. undergraduate students. The department is continuously and gradually strengthening its infrastructures including laboratories, workshops and other facilities. The department comprises of about 3 laboratories 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 the society. We are hopeful that, our students will be able to serve the various needs of the society by blending intellectual and practical experiences gained from the institute. Academic course work and projects are designed to endow students with the ability to apply their knowledge effectively for solving multidisciplinary problems.



## HOD speaks...



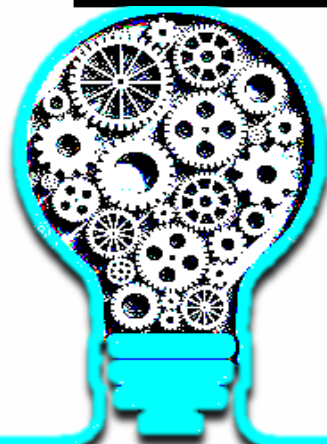
*"I am happy to inform that Department of Mechanical Engineering JIST is publishing its first issue of the Departmental Newsletter (Yaantrix). The Newsletter is a reflection of the culminative effort of faculties, students, aluminas and other stake-holders in portraying and bringing out the ethos of the Department. It is really a pride for all of us and I on behalf of this platform requests 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."*

Imtiaz Alam

Head of the Department

**"Learning gives creativity, Creativity leads to thinking, thinking provides knowledge, and knowledge makes you great"**

**~~ A.P.J. ABDUL KALAM**





## DEPARTMENTAL ACTIVITIES

- Due to COVID 19 restrictions classes of all semesters were conducted on online mode from May,2021.
- Training on ANSYS Software for 4<sup>th</sup> and 6<sup>th</sup> Semester Students was conducted in collaboration with TRTC, Amingaon Campus Guwahati.
- Departmental meeting was held on 2<sup>nd</sup> September, 2021 to discuss the subject distribution and preparation of CO-PO-Matrix of different courses.
- Offline classes for 7<sup>th</sup> semester commenced from 6<sup>th</sup> September,2021.
- Academic Internship for 4<sup>th</sup> semester under ASTU regulation was conducted by the faculties of department under online mode.
- CIE I and CIE II for 3<sup>rd</sup>, 5<sup>th</sup> and 7<sup>th</sup> Sem was held on October and November,2021 respectively.
- Successful completion of Freshers Induction Programme 2021 held in October-November,2021 was successfully co ordinated by department faculty Dr. Borad M. Borkachary and Mr. Menonjyoti Kalita.
- CIE I for 1<sup>st</sup> Semester B.Tech was held in December,2021
- Solidworks Certificate distribution for training conducted on November 2021 by department HoD, Md. Imtiaz Alam.
- Industrial visit under Azaadi Ka Amrit Mahotsav to oil installations of ONGC, Jorhat on 9<sup>th</sup> and 10<sup>th</sup> December under the guidance of Mrs. Murchana Choudhury.
- 7<sup>th</sup> Semester Project Progress Seminar was conducted in 16<sup>th</sup> December,2021.



## FACULTY ACTIVITIES

- ✂ Dr. Borad M Barkachary undergone 12 weeks NPTEL Certification course (Swayam) and NPTEL-AICTE Faculty Development Program on “Introduction to Mechanical Micro machining” offered by NPTEL, IIT Kharagpur from 18<sup>th</sup> Jan. to 09<sup>th</sup> Apr. 2021.
- ✂ Dr. Borad M Barkachary participated in one day online Webinar on 'Single point diamond turning and nano- finishing processes' conducted by CMTI, Bengaluru on 3rd December, 2021.
- ✂ Dr. Borad M Barkachary along with co-author Dr. Srikrishna N. Joshi published a paper titled “Borad M Barkachary and. “Numerical Computation and Analysis of Cutting Forces during Nanometric Scratching of Silicon Carbide” in the Journal of Institution of Engineers (India) Series C, pp. 1-10. (2021).
- ✂ A paper titled “Hole Making in CARALL Fiber Metal Laminates: A Study”, authored by Advith K Sridhar, Gururaj Bolar and Borad M Barkachary, is presented in International Conference on Experimental and Computational Methods in Manufacturing (ICECMM), North Eastern Regional Institute of Science and Technology, Arunachal Pradesh, (28-29, September 2021).
- ✂ Dr. Borad M Barkachary becomes the Life Member of the Indian Society for Technical Education on 18-01-2021.
- ✂ Dr. Borad M Barkachary becomes the Life Member of The Institution of Engineers (India) on 25-01-2021.
- ✂ Dr. Borad M Barkachary was appointed as a Single Point of Contact for AICTE SLA Assessment Test held on 22<sup>nd</sup> and 23<sup>rd</sup> September 2021.
- ✂ Dr. Borad M Barkachary was appointed as a co-ordinator for 21 days Student Induction Program (SIP), JIST, 2021 for newly admitted B Tech 1<sup>st</sup> Semester 2021 Batch held from 21<sup>st</sup> Oct. to 14 Nov. 2021.



- ✂ Dr. Borad M Barkachary is appointed as a co-ordinator of NBA Accreditation of Jorhat Institute of Science & Technology w.e.f. 10/12/2021.
- ✂ Dr. Borad M Barkachary was appointed as the external examiner for the 7<sup>th</sup> and 8<sup>th</sup> semester B. Tech Project Viva-Voce to be held on 27<sup>th</sup> April & 30<sup>th</sup> August 2021 respectively at 9:00 AM in the Department of Mechanical Engineering, Jorhat Engineering College, Jorhat-07.
- ✂ Dr. Borad M Barkachary has completed a one year research project as principal investigator entitled “Numerical Modelling, Simulation and Experimental Study of Nanoindentation of Silicon and Silicon Carbide” funded by ASTU under TEQIP III.
- ✂ Md. Imtiaz Alam has completed a one year research project as principal investigator entitled “Designed of a newly silencer for automobile specifically for flooded areas” funded by ASTU under TEQIP III.
- ✂ Md. Imtiaz Alam is appointed as a Co-ordinator of Innovation and Start up Cell, JIST.
- ✂ Md. Imtiaz Alam is appointed as a Training and Placement Officer of Training and Placement Cell, JIST.
- ✂ .Mr. Nayanjyoti Talukdar has completed a one-year research project as principal investigator entitled “Non thermal plasma process for development of Si Photovoltaics” funded by ASTU under TEQIP III.
- ✂ Mr. Nayanjyoti Talukdar has been working as AICTE co-ordinator of JIST.
- ✂ Mr Nayanjyoti Talukdar has been appointed as Assistant Officer Incharge for conducting B.E 3rd Semester Examination.



✂ Mr. Nayanjyoti Talukdar and Mr. Mridul Deka has attended workshop on “Innovation and Entrepreneurship: Creating a culture” organized by Centre for Innovation and Future Studies, AASC in collaboration with ASTEC on 20th February, 2021

✂ Mr. Mridul Deka has completed a one year research project as principal investigator entitled “To investigate the performance and emission of a CRDI engine under the different fuel injection techniques and different blend of biodiesel and petroleum diesel” funded by ASTU under TEQIP III.

✂ Mr. Mridul Deka has been appointed as a verifying officer in CEE, 2021 in JIST for Mechanical Engineering Department.

✂ Mr. Mridul Deka along with Dr. P.K. Mahanta of JEC and Mr. Nabajit Dev Choudhury of ASTU has published a chapter in “Advances in Thermofluids and Renewable Energy” published by Springer, Singapore in the month of October, 2021.

✂ Mr. Mridul Deka has been appointed as assistant officer in charge for conducting B.E. 1st, 3rd, 5th and 7th Semester Compartmental Examination, 2021.

✂ Mr. Mridul Deka has been appointed as a member of Academic Cell, JIST.

✂ Mr. Menonjyoti Kalita has participated and completed successfully 1 week FDP on “Engineering Modelling and Simulation organized in June, 2021 by NIT Jamshedpur.

✂ Mr. Menonjyoti Kalita has participated and completed successfully 1 week FDP on “Introduction to Mathematical Modelling on Smart Materials and their application” organized in July, 2021 by IIT, Jammu.

✂ Mr. Menonjyoti Kalita has participated and completed successfully 2 week FDP on “Robotics and Automation” organized in July, 2021 by Jamia Millia Islamia (A central university), New Delhi.

✂ Mr. Menonjyoti Kalita has been appointed as a Co-ordinator of B.Tech 1st Semester Students Induction Programme held in October- November, 2021.



✂ Mr. Menonjyoti Kalita has been appointed as Assistant Officer in Charge, CEE 2021 Examination, held in September, 2021 held in JIST as one of the examination centre.

✂ Mr. Menonjyoti Kalita has completed a one year research project as Collaborative principal investigator entitled "Designed of a newly silencer for automobile specifically for flooded areas" funded by ASTU under TEQIP III.

✂ Mrs. Murchana Choudhury has attended "One day webinar on the "Importance of Accreditation in Technical Education System" organized by Jorhat Engineering College on 7th September, 2021.

✂ Mrs. Murchana Choudhury has attended "One day webinar on the "Job opportunities & readiness of the Engineering students of NER for various competitive exam of the country " organized by Jorhat Engineering College on 11th September, 2021.

✂ Mrs. Murchana Choudhury has attended "One day workshop on "Aligning Engineering and Polytechnic Education in the line of National Education Policy, NEP 2020: Creating a roadmap for the state of Assam" organized at Assam Engineering College by AICTE on 12th November 2021.

**“Education is not the learning of facts, but the training of the mind to think”**

**~~ALBERT EINSTEIN**





## STUDENTS' ACTIVITIES

- Dip Deori, student of 5<sup>th</sup> Semester, has done a certificate course on "Solid Works" for one month duration in 2021.
- Biswajit Das, student of 7<sup>th</sup> Semester, has done a certificate course on "Solid Works" for one month duration in 2021.
- Biki Baruah, student of 5<sup>th</sup> Semester, has done a course on "Fluid machines (NPTEL)" (IIT KHARAGPUR) for a duration of 8 weeks. He has also done a course in Coursera on "Engineering project Management under Rice University" for a duration of 5 weeks.
- Dhruva Jyoti Saikia, student of 3<sup>rd</sup> Semester, has done an internship on "Online Event Management" in AASHMAN Foundation for a period of 3 months in 2021.
- Hasinur Rahman, student of 7<sup>th</sup> Semester, has done two certificate courses on "CNC machining on lathe" and "CNC machining on milling" in Tool Room and Training Centre, Guwahati under Ministry of MSME – Government of India from 19.03.2021 to 18.04.2021.
- Amar Nath, student of 5<sup>th</sup> Semester, has done a certificate course on "ANSYS COURSE" in Tool Room and Training Centre, Guwahati" under Ministry of MSME – Government of India from 19.03.2021 to 18.04.2021.
- Abhishekh Sarmah, student of 3<sup>rd</sup> Semester, has done an online certificate course on AutoCad for duration of 6 weeks in 2021.
- Richita Hazarika, a student of 5<sup>th</sup> Semester, has done a NPTEL online certification course on "Robotics" funded by Ministry of HRD, Govt. of India during the period of July-September in 2021
- Abhishek Paul, a student of 3<sup>rd</sup> Semester has done an NPTEL online certification course on "Robotics", funded by Ministry of HRD, Govt. of India during the period of July-September in 2021. He has completed one month internship program on "IoT with Machine Learning" organized from 22.11.2021 to 24.12.2021 at NIT Karnataka, Surathkal. He has also done a two days certificate course on "The story of Photoelectric Effect" organized by IIT Kanpur.
- Abinash Chetia, a student of 3<sup>rd</sup> Semester has done an online certificate course on "AutoCad" for a duration of 6 weeks in 2021.
- Partha Pratim Khanikar, a student of 3<sup>rd</sup> semester has done an online certificate course on "Python Programming" for a duration of two weeks in December, 2021.
- Antara Das, a student of 3<sup>rd</sup> Semester has done a certificate course on "Graphic Designng for Everyone" for a period of one month in 2021.
- Rahul Das, a student of 7<sup>th</sup> Semester has done a certificate course on "Solid Works" in Tool Room and Training Centre, Guwahati under Ministry of MSME – Government of India from 19.06.2021 to 19.07.2021

- Adnan Mahmood , Ashimjyoti Chutia, Saurov Baidya, students of 7<sup>th</sup> Semester has done training at NF Railways Mechanical Workshop, Dibrugarh from 29.03.2021 to 12.04.2021
- Hridoy Ranjan Das, a student of 5<sup>th</sup> Semester, “Student Development Program on Python” organised by E & ICT Academy, IIT Kanpur from 18.10.2021 to 23.10.2021. He has completed two NPTEL Certification Courses on “Developing Soft Skills and Personality” and “Ethics in Engineering Practice” during a period of 8 weeks from September – November. He has also done a certification course on “Artificial Intelligence and Machine Learning” organised by Power Electronics and Instrumentation Department, JIST from 05.08.2021 to 04.09.2021.
- Arshad Iqbal, a student of 7<sup>th</sup> Semester has done two certificate courses on “CNC machining on lathe” and “ANSYS” in Tool Room and Training Centre, Guwahati under Ministry of MSME – Government of India from 19.03.2021 to 18.04.2021. He has achieved Advanced Diploma in Computer Application from CAREER POINT, Jorhat, Assam, under National Board of Computer Education in 2021.
- Sanjibonny Buragohain, a student of 7<sup>th</sup> Semester has got recognition as Citizen Scientist under NASA by participating in the asteroid search campaigning organised by International Astronomical Search Collaboration (IASC) in partnership with National Aeronautics and Space Administration.
- Adnan Mahmood , Ashimjyoti Chutia, Saurov Baidya, students of 7<sup>th</sup> Semester has done three online certificate courses on “Solidworks”, “Delcam”, “CNC Milling(programming)” in Tool Room and Training Centre, Guwahati under Ministry of MSME – Government of India from 02.01.2021 to 01.02.2021, 17.12.2020 to 15.01.2021, 05.12.2020 to 04.01.2021 respectively.
- Adnan Mahmood , Ashimjyoti Chutia, Saurov Baidya, Pelican Pegu, Sushma Pegu Madhurjya Mohan, Antarikha Pathak, Irina Goyari, , Tarannum Farhad Zaman students of 7<sup>th</sup> Semester has done training at ASTC from 03.12.21 to 02.01.2021.

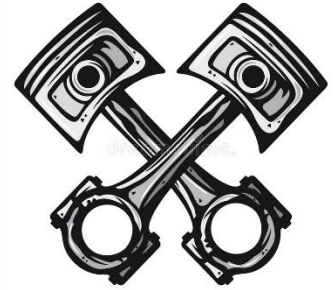


## ALUMNI SECTION

- ✖ Siddhartha Brahma passed out student (Batch 2016-2020) cleared GATE 2021 and admitted in M.Tech programme under IIT, Guwahati.
- ✖ Shekhar Sharma passed out student (Batch 2017-2021) cleared GATE 2021 and admitted in M.Tech programme under NIT, Rourkela.
- ✖ Rahul Sonowal passed out student (Batch 2017-2021) cleared CAT and admitted in MBA programme under IIM, Raipur.
- ✖ Pritom Borbora passed out student (Batch 2017-2021) cleared MAT and admitted in MBA programme under NIT, Kurushretra.
- ✖ Mustafidul Hasan Ahmed passed out student (Batch 2017-2021) cleared GATE 2021 and admitted in M.Tech programme under NIT, Nagpur
- ✖ Rajesh Koiri passed out student (Batch 2016-2020) placed in ONGC.
- ✖ Rudranee Choudhury passed out student (Batch 2016-2020) placed in Tata Consultancy Services.
- ✖ Majaharul Islam passed out student (Batch 2016-2020) placed in Cognizant Technology Solutions.
- ✖ Dyuti Sunder Dutta passed out student (Batch 2016-2020) placed in Infosys limited.
- ✖ Siddharth Kumar Jha passed out student (Batch 2017-2021) placed in CYIENT LTD.
- ✖ Bishal Mazumdar passed out student (Batch 2017-2021) placed in OSK Food and Technology Pvt Ltd
- ✖ Bibhash Bora and Anshuman Baruah passed out student (Batch 2016-2020) admitted in M.Tech programme under Tezpur University.
- ✖ Anshuman Gogoi passed out student (Batch 2016-2020) admitted in MBA programme under Tezpur University.
- ✖ Ripon Jyoti Gogoi passed out student (Batch 2017-2021) admitted in M.Tech programme under Dibrugarh University.
- ✖ Biswajeet Thakuria passed out student (Batch 2016-2020) admitted in M.Tech programme under Dibrugarh University.
- ✖ Manash Jyoti Deka passed out student (Batch 2016-2020) admitted in M.Tech programme under Energy Institute Bangalore

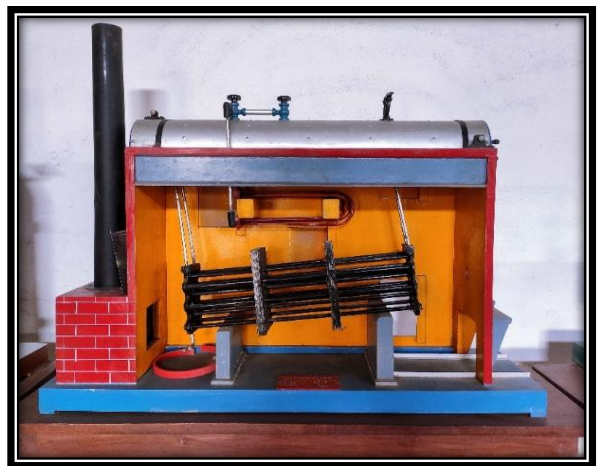




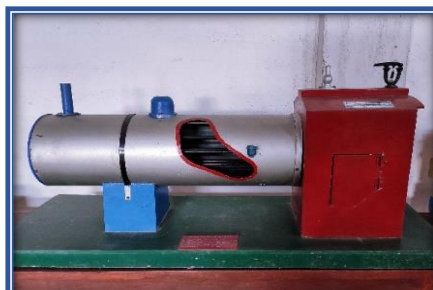


## PHOTO GALLERY





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Suchibrota Bordoloi



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