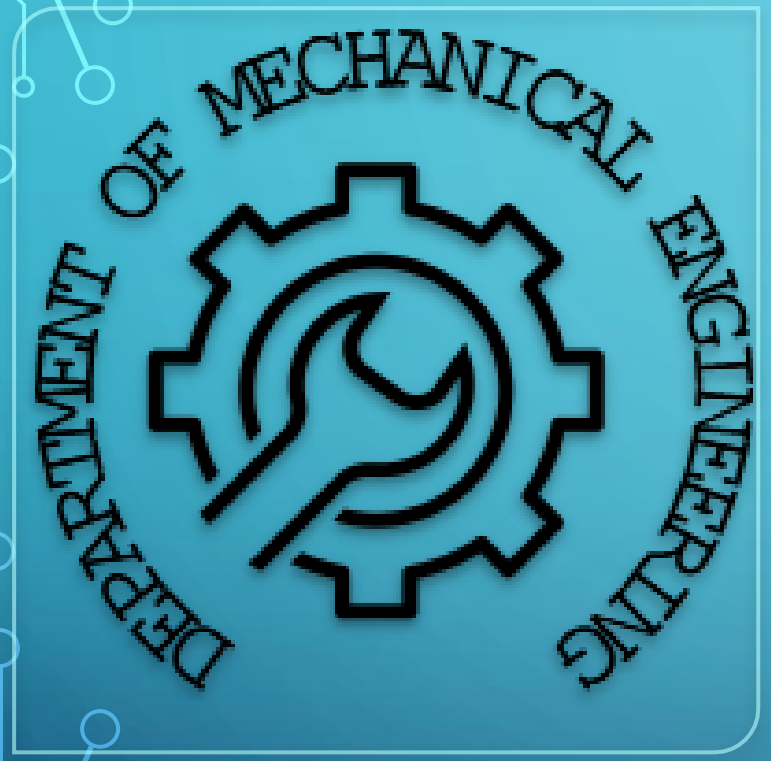
NEWSLETTER 2019-20

INSTITUTE VISION

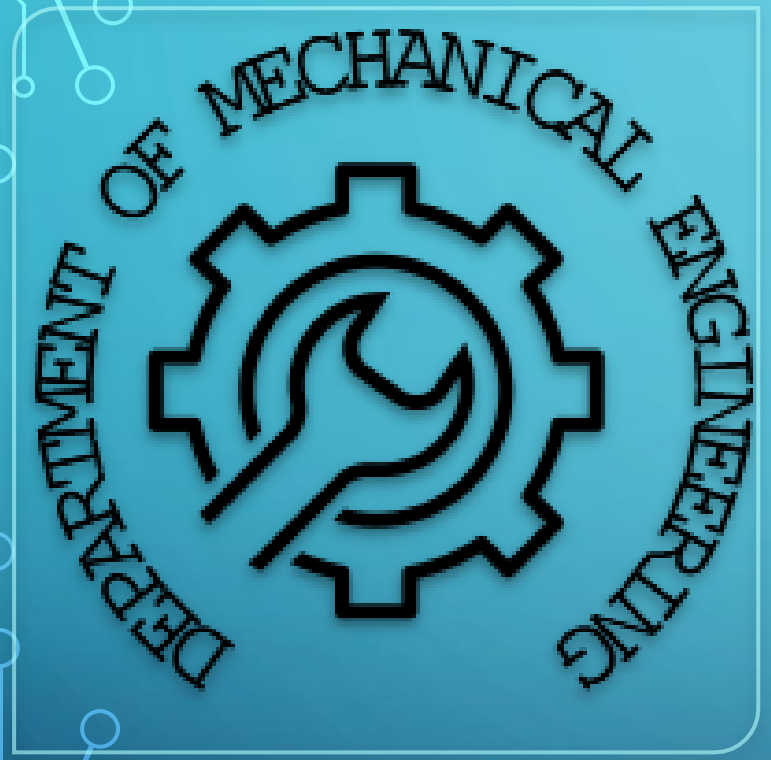
To be a premier Technical and management institution providing the best in class learning solutions for developing competent professionals.

ATRIA
INSTITUTE OF TECHNOLOGY



DEPARTMENT VISION

TO BE A CENTER OF EXCELLENCE IN MECHANICAL ENGINEERING EDUCATION AND INTERDISCIPLINARY RESEARCH TO CONFRONT REAL WORLD SOCIETAL PROBLEMS WITH PROFESSIONAL ETHICS.



DEPARTMENT MISSION

M1. TO PUSH THE FRONTIERS OF PEDAGOGY AMONGST THE STUDENTS AND DEVELOP NEW PARADIGMS IN RESEARCH.

M2. TO DEVELOP PRODUCTS, PROCESSES, AND TECHNOLOGIES FOR THE BENEFIT OF SOCIETY IN COLLABORATION WITH INDUSTRY AND COMMERCE.

M3. TO MOULD THE YOUNG MINDS AND BUILD A COMPREHENSIVE PERSONALITY BY NURTURING STRONG PROFESSIONALS WITH HUMAN ETHICS THROUGH INTERACTION WITH FACULTY, ALUMNI, AND EXPERTS FROM ACADEMIA/INDUSTRY.

ABOUT THE DEPARTMENT:

Department of mechanical engineering is working towards the betterment of the students and looking into which skillset is important for the students to survive in Industries. To do that we continuously monitor our students. Department has the best faculties in their respective research areas. In Department the classrooms are equipped with projectors so the faculties can demonstrate the concept related to their courses, which helps students to visualize that how things work in the real world. There are well equipped laboratories according to VTU norms. There is a departmental library so the faculties can access all the important books related to their courses. Faculties and students can also access the college central library to issue the books of their interest. Library has multiple standard and reference books for a particular course that gives freedom to students to learn a concept from various sources and that helps a student to understand and expand their views. Department has established various research labs that helps students in their projects and if students are interested in doing rigorous research, they can also do that. Department always motivates our faculties for research in their respective area of interests. Laboratories are well equipped for executing research projects funded by KSCST and VGST.

RESEARCH LABORATORIES:

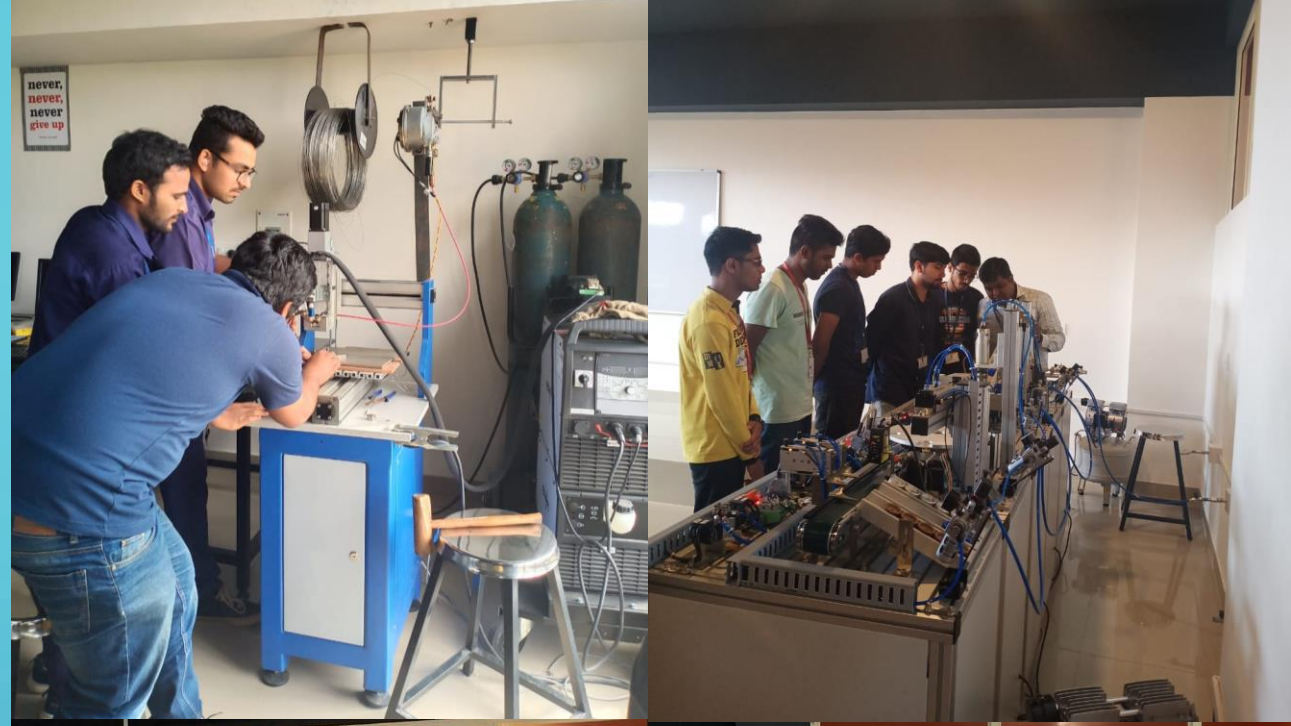
Digital Manufacturing Lab

Additive Manufacturing Lab

Bio- Mechanical Lab

Computational Mechanics Lab

This year Mechanical Department has established two new laboratories Bio-Mechanical Lab and Computational Mechanics lab. These labs will help the students to understand the versatile application of Mechanical Engineering and motivate them towards learning the new technologies and their applications in the real world.



Bio Mechanical Lab

Bio Mechanical Lab is the newest addition in the center of excellence labs at the Department of Mechanical Engineering. This lab came into existence in 2020 and is currently supervised by Mohd. Rizwan Jafar, Assistant Prof. in the Department of Mechanical Engineering. This lab intends to amalgamate Mechanical Engineering with Medical Technology. The lab has facilities like EMG recording, SNC test, MNC Test, RNS test, VEP recording. Currently, students are working on several devices to provide solutions for differently-abled people. Students work on publication-oriented research as well as product-oriented research.

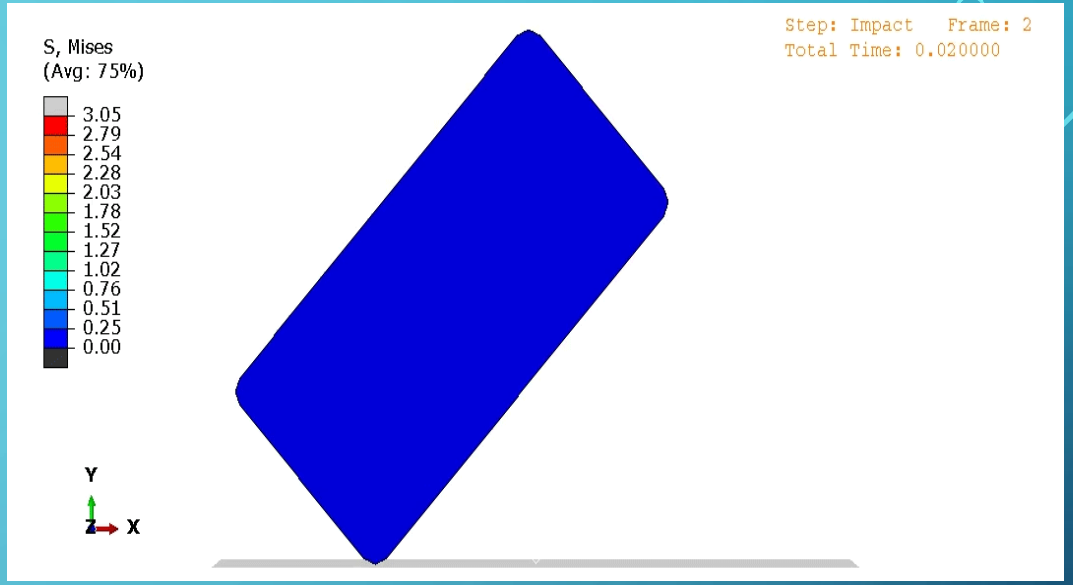
Computational Mechanics Lab

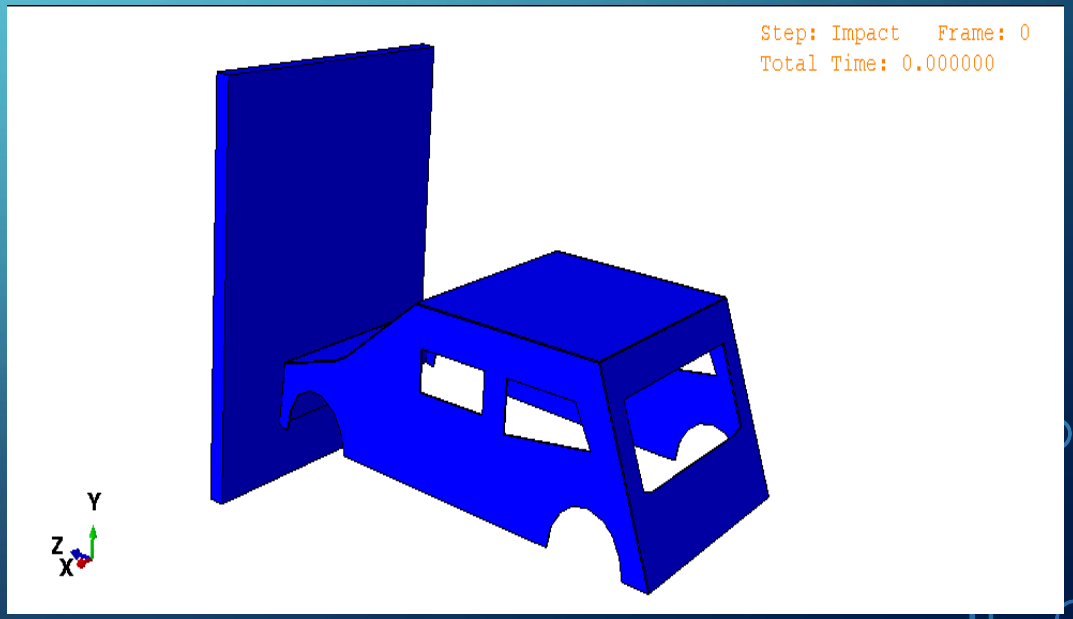
The Computational Mechanics Lab at Atria Institute of Technology was established in 2019 in collaboration with Dassault System Solutions. As a part of academia-industry interface, students are involved in projects across a gamut of domains such as aerospace, automotive, electronics, biomechanics, and heavy equipment industries. The software package consists of the following:

ABAQUS Suite - which provides complete numerical solutions for sophisticated engineering problems.

FE Safe Suite – provides safety features for critical components with increased fatigue life, enabling users to include complex loading patterns and multi-axial fatigue and other safety capabilities.

Tosca Suite - provides powerful optimization solutions for lightweight, stiff, and durable parts to maximize performance and discover new design possibilities.





PROJECT PROPOSALS APPROVED FOR SPONSORSHIP/ FUNDS/GRANT-IN-AID/TRAINING

DEPARTMENT OF MECHANICAL ENGINEERING ALSO AWARDED THE FINANCIAL ASSISTANCE BY VTU FOR INNOVATIVE PROJECTS OF FINAL YEAR GRADUATE STUDENTS FOR THE YEAR 2019-2020 .

Project: Powder Feed Plasma Arc Additive Manufacturing
Guide: Suyog Jhavar
Amount Sanctioned: 5000
Students Name: Mr. NABEEL AHMED, Mr. MOHAMMED RIZWAN, Mr. D VAISHAL, Mr. CHIRAG RAGHAVENDRA

Project: Joining of Dissimilar Metals
Guide: Srinivas Chari
Amount Sanctioned: 5000
Students Name: Mr. VINAYPRASAD, Mr. YATHISH M, Mr. HARHAVARDAN & Mr. TEJESVI CHAKRAVARTHY

DEPARTMENT OF MECHANICAL ENGINEERING AWARDED THE FINANCIAL ASSISTANCE BY KARNATAKA STATE COUNCIL FOR SCIENCE & TECHNOLOGY (KSCST) AND SELECTED FOR STATE LEVEL SEMINAR & EXHIBITION UNDER 43RD KSCST 2020.

Project: Surface Finish by LASER Polishing
Guide: Srinivasa Chari V
Amount Sanctioned: 5500
Students: Mr. GOUTHAM P K, Mr. CHANADU S, Mr. KARTHIK R & Mr. BASAVA N

Project: Development of Sonic Extinguisher Using Disrupting Phenomena with Waves
(This project was awarded as the Best project in the Mechanical Engineering discipline)
Guide: Mr. VIJAYAKUMAR S TOTAD
Amount sanctioned: 5000
Students: Mr. VINOD KUMAR R & Mr. KISHORE V S

TRAINING PROGRAM

Under the supervision of Mr. Praveen Kumar B. C, Siemens Mechatronic Systems Certification Program - Assistant (Level-1) training program was conducted. Around 107 students were exposed to the new technology. Students were trained in Digital Manufacturing Lab in association with SITRAIN Training for Industry (siemens.co.in).