



## DEPARTMENT OF APPLIED MECHANICS & BIOMEDICAL ENGINEERING



The Department started in 1962 with an original focus on academic activities in three broad areas, namely, Biomedical Engineering, Fluid Mechanics and Solid Mechanics. Over the years, the department has organically evolved in a fashion that led to blurring the boundaries between the above areas and is today a unique department that focuses on high quality research in fundamental and interdisciplinary engineering in the area of current importance.

It is the only truly graduate-focused interdisciplinary department in the Institute, housing 35+ labs with state-of-the-art facilities. The department boasts of serving with 36 faculty members currently drawn from more than eight fields of engineering and science, reflecting the innately interdisciplinary nature of the department. In addition, about 20 adjunct and visiting faculty members from reputed universities worldwide are engaged in collaborative work with our faculty colleagues and guide research theses and MTech projects. Several guest faculty augment service through course offerings in current trends.

Apart from Ph.D. and M.S. (by research), the department offers three MTech programs now, namely, Computational and Experimental Mechanics, Biomedical Engineering and Clinical Engineering. It also offers Interdisciplinary Dual Degree programs for undergraduates that align with the current interests in the Industry and research circles such as Biomedical Engineering, Computational Engineering, Energy Systems and Complex Systems.



## Programmes (M.Tech.)

- Computational and Experimental Mechanics
- Biomedical Engineering
- Clinical Engineering (Interdisciplinary programme)

## Research areas

### Solid Mechanics

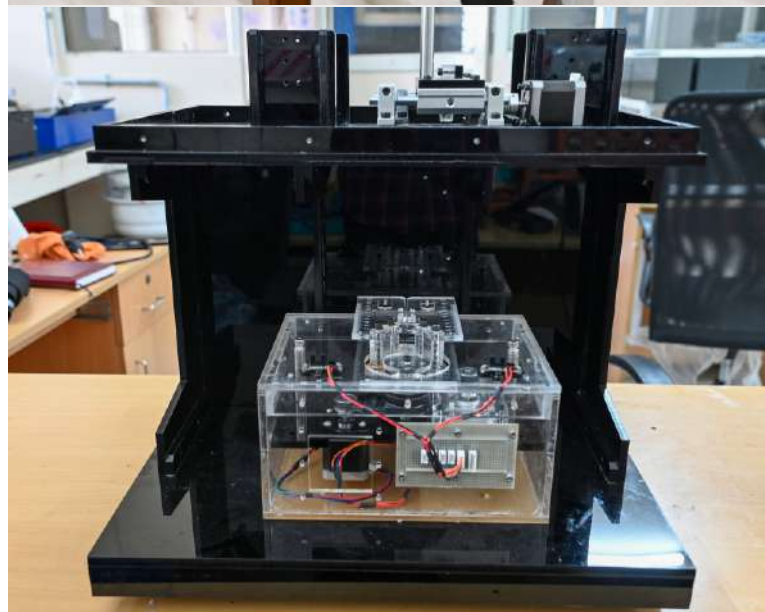
- Composite
- Digital photoelasticity
- Computational methods
- Fracture & Fatigue
- Inelasticity
- Smart materials
- Stochastic mechanics
- Vibrations

### Fluid Mechanics

- Forced shear layers
- Insect flight
- Interfacial phenomena
- Bio-fluid dynamics
- Direct simulation of turbulence
- Active flow control algorithms
- Thermal hydraulics
- Unsteady aerodynamics
- Combustion
- Multiphase flows

### Biomedical

- Bioelectronics
- Biomedical signal processing
- Haptics
- Biomedical Optics
- Biosensors
- Nanobiotech
- Tissue mechanics
- Bio metastasis

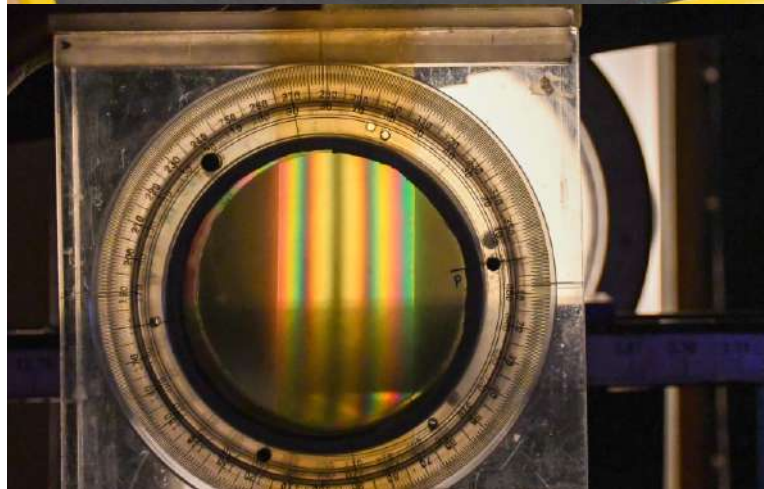
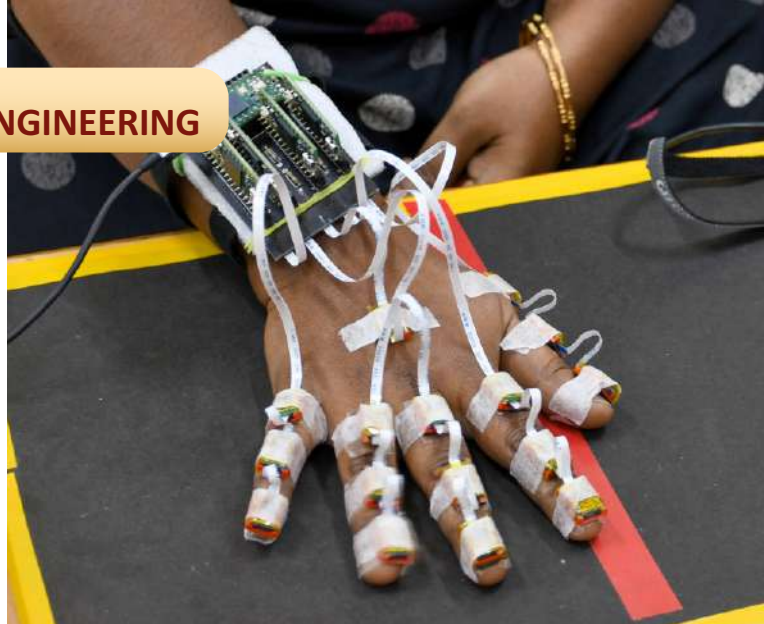






## DEPARTMENT OF APPLIED MECHANICS & BIOMEDICAL ENGINEERING

### Placements





## DEPARTMENT OF APPLIED MECHANICS & BIOMEDICAL ENGINEERING



### Faculty

Dr. Abhijit Chaudhuri  
Dr. Anubhab Roy  
Dr. Anuradha Banerjee  
Dr. A Arockiarajan  
Dr. K Arul Prakash  
Dr. Arun Kumar Thittai  
Dr. Babji Srinivasan  
Dr. A P Baburaj  
Dr. Ganesh Tamadapu  
Dr. Ilaksh Adlakha  
Dr. Lakshminath Kundanati  
Dr. C Lakshmana Rao  
Dr. Mahesh Panchagnula  
Dr. M Manivannan  
Dr. Pijush Ghosh  
Dr. B S V Prasad Patnaik  
Dr. V V Raghavendra Sai  
Dr. S Ramakrishnan

Dr. M Ramasubba Reddy  
Dr. K Ramesh  
Dr. Rinku Mukerjee  
Dr. Sarith P Sathian  
Dr. Satyanarayanan Seshadri  
Dr. Saumendra Kumar Bajpai  
Dr. Sayan Gupta  
Dr. Shaikh Faruque Ali  
Dr. M S Sivakumar  
Dr. N Sujatha  
Dr. S Swathi  
Dr. Vagesh D Narasimhamurthy  
Dr. S K M Varadhan  
Dr. S Vengadesan  
Dr. Kiran Raj M  
Dr. S Ganga Prasath  
Dr. Danny Raj M  
Dr. Kannabiran Seshasayanan

