

Hindusthan College of Engineering and Technology, Coimbatore

About RESEARCH CENTRE – Mechanical Department

The mission of the Department of Mechanical Engineering is to produce mechanical engineering graduates who will possess the acumen, competence, and skills needed to enter, succeed, and lead in professional practice or post-graduate studies. The goal is to provide learning and nurturing environment that stimulates faculty and students to collaborate in solving practical problems, motivate lifelong learning, and help reach their highest potential.

Mechanical Engineering is one of the most creative, broadest and most versatile of the engineering professions. Mechanical Engineers have initiated and implemented commendable progress in innovative areas like robotics, vibration control, energy conversion, energy management, fluid dynamics, power production, manufacturing, computer-aided design, machine design, and material science. Collectively, the faculty has practical experience of solving real problems in these areas and with this experience they help students develop as transformational leaders in Engineering.

Department of Mechanical Engineering offers a two year post graduate M.E course in CAD/CAM as there is a growing importance of application of computers in the field of Mechanical Engineering. Students will learn how to use computer tools in the conception, design, improvement, and analysis of mechanical products, processes, and systems, as well as in the manufacturing area. Computer aided design, Computer Integrated many fracturing and finite element analysis are among the topics in which students specialise.

Anna University approved research supervisors have been working on a plethora of research specialization's span over the following areas:

- Manufacturing Engineering
- Energy Engineering
- Refrigeration and Air Conditioning
- Computational Fluid Dynamics
- Composite Materials and Industrial Engineering
- Welding
- Surface Engineering

Academic Research –Research Area

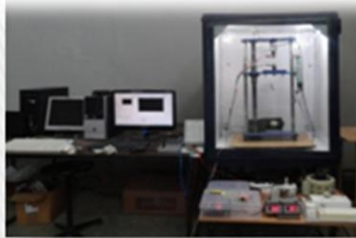
Faculty and Scholars involved in active research are empowering their research skills in the following domain specific areas like

- Renewable Energy
- Metal Castings
- Welding
- Composite material
- Nano Materials
- Photovoltaic Thermal Heat pumps
- Heat Pump desalination
- Solar Air Heater
- Vertical axis Wind Turbine
- Vibration control/NiTiInol alloys
- Environmental Management
- Internal Combustion Engines

Academic Research Laboratory



RESEARCH FACILITIES



**Computer Interfaced
Temperature Control UTM**



Evaporator Cooler



**Experimental setup for
Vibration Testing**



Regenerative Solar Still



**PCM Insulated Hot Water
Storage Tank**



**Forced Convection Solar
Dryer**



**Forced Convection Solar Air
Heater Using Packed Bed
Absorber Plate**



Solar Assisted Heat Pump