



Department of Mechanical Engineering

Research and Development @ ME

About Research

The Department of Mechanical Engineering places strong emphasis on Research and Development (R&D) to promote innovation, critical thinking and problem-solving skills among faculty and students. The department strives to create a vibrant research ecosystem that complements teaching–learning processes and addresses industrial as well as societal needs. Faculty members and students are encouraged to undertake research projects, publish quality research papers, develop innovative products and engage in consultancy and collaborative research activities.

Research Vision

To establish a sustainable and impactful research culture that promotes innovation, interdisciplinary research and technological advancements in Mechanical Engineering for the benefit of industry and society.

Research Mission

- To promote quality research and innovation among faculty and students.
- To encourage publications in reputed national and international journals.
- To undertake industry-oriented and socially relevant research projects.
- To strengthen collaboration with industries, R&D organizations and academic institutions.
- To motivate faculty and students towards patents, funded research and consultancy.

Research Thrust Areas

The department focuses on the following thrust areas of research:

- Thermal Engineering and Heat Transfer
- Design Engineering and Product Development
- Materials Science, Composites and Advanced Materials
- Renewable Energy and Energy Systems
- Computational Fluid Dynamics (CFD) and Finite Element Analysis (FEA)

Research Centre and Recognition

The Department of Mechanical Engineering has been recognized as a **VTU-approved Research Centre since 2018**, offering opportunities for Ph.D. and research scholars. The department is



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authorized to guide doctoral and research programs under the affiliating university. Approved research supervisors actively mentor scholars in identified thrust areas, supported by well-equipped laboratories and advanced computational facilities.

Student Research Activities

Student research is an integral part of the academic culture of the department. Activities include:

- Mini, minor, and major project work
- Participation in funded student research projects
- Paper presentations in conferences and competitions
- Development of innovative prototypes and products

Research Policies and Support

The institution provides strong support for research activities through:

- Research promotion and incentive policies
- Financial assistance for publications and conferences
- Support for patent filing and consultancy