Why Mechanical Engineering?

- One of the most versatile engineering fields
- Careers in designing, analyzing and maintaining systems in a wide range of industries
- Assist in finding solutions to pressing issues in energy, environment, disease, artificial intelligence and defense

Research Focus Areas

- Biomechanical Engineering
- Design for Manufacturing
- Dynamics, Controls, and Robotics
- Microsystems and Nanomaterials
- Fluid Mechanics and Aerodynamics
- Energy and Environment
- Mechanics of Solids, Structures, and Materials
- Solid Fuel Combustion

Contact

Ronda Ingle  
Business Manager  
ronda.ingle@ttu.edu  
806.834.6906

Siva Parameswaran  
Associate Program Chair  
siva.parameswaran@ttu.edu  
806.834.8255

Nurcan Bac  
Senior Associate Academic Dean  
nurcan.bac@ttu.edu  
806.834.5703

#8 Best Value Mechanical Engineering Program
B.S., M.S., & PhD Programs Accredited by ABET.
129 Hours Minimum for B.S.
Laboratories available for Undergraduates and Graduates

20:1 Student-Faculty Ratio
95% Job Placement Rate
$72,336 Average Annual Salary
Capstone Design
Carried out during senior year, the capstone design project is a culmination of student’s education and skills. Focused on innovation, students put their engineering skills to test by working on a novel design. During the year, the learn about new concepts in bioinspiration, lean start-up model, customer discovery, requirement engineering, and transdisciplinary design. They utilize departmental resources and often industrial support to design functional complete systems based on customer needs.

McDermott Advanced Manufacturing and Prototyping Facility
Focused hands-on learning is achieved through the technology in the McDermott facility focusing on:
- Additive Manufacturing
- 3D Printing on Metals, Plastic and other materials
- Traditional Manufacturing Technologies
- Advanced CNC Capabilities
Undergraduate students primarily use this lab for capstone design, manufacturing processes, and research.

Resources

Undergraduate Laboratories
- Thermal Fluids
- Materials Testing and Heat Testing
- McDermott Advanced Manufacturing and Prototyping Facility
- Finite Element Analysis
- Computational Fluid Dynamics
- Controls and Dynamics
- Combustion

Student Organizations
- American Society of Mechanical Engineers (ASME)
  - Junkyard Wars uniting industry leaders and students through design and competition.
- Formula SAE
  - Designs, manufactures, and races a formula one style race car.
- Pi Tau Sigma Honor Society
  - Combining academic achievements and community involvement.
- Raider Aerospace Society
  - Design and builds launch vehicles.
- And Many More

Academic Success
There are many free resources available to students to promote academic achievements:
- Supplemental Instruction
- University Tutoring Center
- Residence Hall Learning Communities
- Engineering Opportunities Center Tutoring Center
- Access to Professors for direct assistance