MECHANICAL ENGINEERING
TEXAS A&M UNIVERSITY

Enrollment Fall 2013
Texas A&M Data and Research Services

Undergraduate Students	**1,232**
Graduate Students	**414**
Master's	168
Ph.D.	246

Quality Indicators

Total Faculty	**46**
Professors	24
Associate Professors	13
Assistant Professors	9

***U.S. News & World Report* Rankings**
Rankings Among Public Institutions

8 Undergraduate
9 Graduate

Endowed Chair Holders	4
Endowed Professorship Holders	9
Development Professorship Holders	2
Distinguished Professors	3

Centers and Laboratories

Acoustics and Signal Processing Laboratory
Adaptive Soft Materials Laboratory
Advanced Computational Mechanics Laboratory
Advanced Engine Research Laboratory
Bio Chem Air Quality Laboratory
Biomaterials Laboratory
Coal and Biomass Energy Laboratory
Combustion and Reaction Characterization Laboratory
Computational and Biomechanics Laboratory
Computational Materials Science
Convective Heat Transfer Laboratory
Design Systems Laboratory
E3 (Engines, Emissions, and Energy)
Energy and Transport Sciences Laboratory
Fluids, Turbulence, and Fundamental Transport Laboratory
Gas Dynamics and Propulsion Laboratory
Hybrid Multifunctional Composites Group
Interface Group
Laboratory for High Temperature Materials
Multi-Phase Flows and Heat Transfer Laboratory
Nano-Energy Laboratory
Nanolayer and Thin Film Group
Nanomaterials Processing and Atomic Imaging Laboratory
NIML-Networked Intelligent Machines Laboratory
Plasma Engineering and Diagnostics Laboratory
Polymer Nano Composites Laboratory
Precision Mechatronics Laboratory
Shock Tube and Advanced Mixing Laboratory
Surface Science Laboratory
Thermo-Fluids Control Laboratory
Tribology Group
Tribology in Extreme Environments Laboratory
Tribology and Microtribodynamics Laboratory
Turbine Heat Transfer Laboratory
Turbine Performance and Flow Research Laboratory
Vibration Control and Electromechanics Lab

Research Areas listed on reverse side

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Research Areas

Combustion and Fuels
- Aerosol Measurements
- Alternative and Biofuels
- Coal, Biomass and Animal Waste Combustion
- Diesel Oxidation Catalysts
- Diesel Particulate Filters
- Emissions Catalysts
- Energy Engine Emission
- Exhaust Aftertreatment
- Fuel Cells
- Gasification
- Internal Combustion Engine Performance
- Pollutants Formation (NOx, Hg) and Control
- Selective Catalytic Reduction
- Thermodynamics and Energy Analysis of Engines
- Three-way Catalysts

Energy Systems
- Air-Conditioner Performance Evaluations
- Alternate Refrigerants
- Building Energy Management Systems
- Building Energy Monitoring and Analysis
- Defrost Cycle Improvements
- Dynamic Simulation of Energy Systems
- Electrochemical Energy Storage and Conversion
- Energy Analysis and Diagnostic Center (EADC)
- Fuel Cells and Batteries
- Ground Coupled Heat Pumps
- Heat and Mass Transfer in Attic Systems
- HVAC Control Systems
- Industrial Energy Assessment
- Industrial Energy Efficiency Improvements
- Infiltration Effect on Energy Use in Buildings
- Thermal Energy Storage Evaluations
- Thermoelectrics

Fluid Mechanics
- Aerodynamic Analog Laboratory
  - Aerosol Technology
  - Laser Anemometry
  - Tribology (Lubrication)
  - Tribochemistry
- Computational Fluid Mechanics

Heat Transfer
- Boiling/Condensation
- Conduction Heat Transfer
- Heat and Mass Transfer
- Turbine Heat Transfer
- Two-phase Heat Transfer

Innovation and Design
- Design for Manufacturability
- Design Methodology/Cognition Issues
- Origami Engineering Design
- Bio-inspired Design

Materials And Mechanics
- Advanced High Temperature Ceramics
- Advanced Multifunctional Composites
- Computational Mechanics
- Corrosion of Coated Systems
- Elastic Properties in Advanced Materials
- Friction and Wear of Materials
- Microtribodynamics
- Multilayer Thin Films and Nanomechanics
- Nature-inspired Materials, Devices and Systems
- Self-Assembled Monolayers
- Severe Plastic Deformation
- Solid Mechanics
- Structural and Functional Materials
- Superplasticity and Advanced Machining Techniques
- Surface and Interface Properties of Advanced Materials
- Synthesis and Characterization of Nanomaterials and Hybrid Materials
- Thermodynamics and Phase Stability
- Transformational Materials

Mechanical Systems and Controls
- Acoustics
- Controls
- Manufacturing
- Robotics
- Vehicle Dynamics
- Vibrations

Polymer Science and Engineering
- Engineering Properties of Polymers and Polymeric Composites
- Materials Synthesis
- Polymer Nanocomposites
- Polymer Processing

Turbomachinery
- Computational Fluid Mechanics
- Heat Transfer
- Performance Research
- Rotordynamics