## Enrollment

**Fall 2013**

<table>
<thead>
<tr>
<th>Undergraduate Students</th>
<th>709</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Students</td>
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<tr>
<td>Master's</td>
<td>36</td>
</tr>
<tr>
<td>Ph.D.</td>
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</tr>
</tbody>
</table>

## Quality Indicators

**Total Faculty** | 27  
Professors       | 17  
Associate Professors | 8  
Assistant Professors | 2  

**U.S. News & World Report Rankings**

### Rankings Among Public Institutions
- **8 Undergraduate**
- **7 Graduate**

### Endowed Chair Holders
- 4

### Endowed Professorship Holders
- 3

### Development Professorship Holders
- 2

### Distinguished Professors
- 3

### National Academy of Engineering Members
- 3

## Centers and Laboratories

**Aerospace Vehicle Systems Institute (TEES)**
- NASA URETI Texas Institute for Intelligent Bio-Nano Materials and Structures (TiIMS)
- National Hypersonic Science Center in Laminar-Turbulent Transition (TEES)
- Oran W. Nicks Low-Speed Wind Tunnel Propulsion Laboratory
- Space Engineering Research Center (TEES)
- Texas A&M National Aerothermochemistry Laboratory
- Actively Controlled Expansion Hypersonic Tunnel
- Ames Supersonic Tunnel
- Mach 7 Shock Tunnel
- NASA Langley Mach 6 Quiet Tunnel
- Supersonic Pilot Tunnel
- Texas Institute for Intelligent Materials and Structures (TEES)
- Wave Propagation Laboratory

**AggieSat Lab Student Satellite Program**

**Center for Autonomous Robotic and UAV Systems**

**Center for Mechanics of Composites**

**Consortium for Autonomous Space Systems**

**Damping Laboratory**

**Electroactive Materials Robotics Laboratory**

**Electromechanical Characterization Laboratory**

**Flight Mechanics Laboratory**

**Flight Research Laboratory**

**Flight Simulation Laboratory**

**General Materials Laboratory**

**Klebanoff/Saric Unsteady/Quiet Wind Tunnel**

**Laser Diagnostics for Combustion and Propulsion**

**Materials and Testing Laboratory**

## Research Areas

listed on reverse side
Research Areas

Aerodynamics and Fluid Mechanics
- Active Flow Control
- Aerodynamics
- Aerothermochemistry
- Combustion
- Compressible, Hypersonic and Plasma
- Turbulence Theory, Modeling and Experiments
- Flight Measurements of Air Quality
- Gas Dynamics
- High-Speed Aerodynamics and Heat Transfer
- Kinetic Theory-Based CFD
- Laser Diagnostics
- Micro and Nanosatellite Design
- Novel Flow Diagnostics Instrumentation Development
- Responsive Space Missions
- Roughness
- Turbomachinery
- Turbulent Flames
- UAV and RPV Development and Flight Test
- Wind-Flight Experiments and CFD in Boundary Layer Stability and Transition, Laminar Flow Control and Low-Reynolds-Number Aerodynamics

Dynamics and Controls
- Aeroelasticity
- Analytical Dynamics
- Autonomous Intelligent Control
- Autonomous Systems
- Cooperative Methods for Urban Search and Rescue (USAR)
- Design of In-Space Imaging Systems
- Fault Tolerant Adaptive Control
- Formation Flying
- Intelligent Cockpit Systems and Displays
- Mission Analysis
- Morphing Air and Space Vehicle
- Navigation Sensors
- Networked Control Systems
- Nonlinear Dynamics
- Orbit and Attitude Estimation
- Realtime/Anytime Path Planning
- Systems with Delay
- Trajectory Optimization
- Vision-based Navigation Systems

Materials and Structures
- Active Materials
- Composite Materials and Structures
- Computational Materials Science
- Computational Mechanics and Simulation
- Damage Mechanics
- Damping
- Discrete Dislocation Plasticity
- Dynamic Fracture
- Electric and Dielectric Polymers and Polymer
- Ferroelectric Materials
- Fracture Mechanics
- MEMS and NEMS
- Multifunctional Materials
- Nanomaterials (Particles, Wires and Tubes)
- Nondestructive Testing and Evaluation Polymers
Enrollment Fall 2013
Texas A&M Data and Research Services

Undergraduate Students 372
Graduate Students 87

Quality Indicators
Total Faculty 34
Professors 20
Associate Professors 9
Assistant Professors 5

Centers and Laboratories
Bioenergy Testing and Analysis Laboratory
Biological Engineering Sensor Technologies
Bioseparations Laboratory
Center for Agricultural Air Quality Engineering and Science
Cotton Engineering Laboratory

U.S. News & World Report Rankings
Rankings Among Public Institutions
2 Undergraduate
2 Graduate

Endowed Chair Holders 2
Endowed Professorship Holders 1

Research Areas
Agricultural Air Quality
Animal Waste Management
Biofuels
Biological Process Systems
Biosensors
Bioseparations
Containment Fate and Transport
Controlled Environment Agriculture
Cotton Processing
Environmental and Natural Resources
Food Process Engineering
GIS and Remote Sensing
Grain Harvest, Storage and Processing
Hydrologic Engineering and Science
Irrigation
Machine Systems
Modeling Ecological/Water Systems
Nanotechnology in Food and Biological Systems
Precision Agriculture
Water Quality
**Enrollment** Fall 2013

Texas A&M Data and Research Services

<table>
<thead>
<tr>
<th>Undergraduate Students</th>
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<tr>
<td>Graduate Students</td>
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<table>
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<tr>
<td>Professors</td>
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<tr>
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<td>Assistant Professors</td>
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<table>
<thead>
<tr>
<th>Quality Indicators</th>
<th>U.S. News &amp; World Report Ranking</th>
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<tbody>
<tr>
<td>Total Faculty</td>
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<td>Assistant Professors</td>
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<tr>
<td>Rankings Among Public Institutions</td>
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| Endowed Professorship Holders | 2 |

**Centers and Laboratories**

- Biomaterials Testing Laboratory
- Biomechanical Environments Laboratory
- Biomedical Micro/Nanoscale Devices Laboratory
- Cardiac Biomechanics Laboratory
- Cellular Biomechanics Laboratory
- Center for Remote Health Technology
- Continuum Biomechanics Laboratory
- Medical Device Systems Safety Laboratory
- Molecular Biomechanics Laboratory
- National Center for Therapeutics Manufacturing
- Optical Biosensing Laboratory
- Optical Imaging Laboratory
- Rehabilitation Engineering Laboratory
- Soft Tissue Biomechanics Laboratory
- Tissue Microscopy Laboratory

**Research Areas**

- Biomaterials
- Biomechanics
- Biomedical Electronics and Instrumentation
- Biomedical Imaging
- Biomedical Optics
- Biomedical Signal Processing
- Biophotonics
- Cardiac, Vascular and Cellular Mechanics
- Computational Mechanics
- Computer Simulation of Biomolecules
- Magnetic Resonance Imaging
- Nano and Micro Biosensing and Imaging
- Polymer Colloids and Hydrogels
- Tissue Engineering
Research Areas

Biomedical and Biomolecular
- Tissue Engineering
- Biofuel Production, Including Biohydrogen
- Biomaterials
- Biosensing
- Cellular Engineering
- Conversion of Biomass
- Drug Delivery
- Metabolic Engineering
- Micro-encapsulation
- Protein Engineering
- Systems Engineering

Complex Fluids
- Hydrogels
- Crystallization and Deposition
- Light Scattering
- Molecular Level Simulation
- Particle Technology and Colloidal Science
- Polymer Adsorption and Adhesion
- Rheological Properties

Computational Chemical Engineering
- Ab Initio Calculations
- Atomistic Modeling
- Density Functional Theory
- Materials Modeling
- Nanotechnology
- Reaction Mechanisms and Rates
- Thermodynamic Property Prediction

Environmental
- Absorptive Separations
- Bioremediation
- Catalytic and Advanced Oxidation
- Integrated Biorefineries
- Organic Synthesis
- Physical/Chemical Separation Techniques
- Solvent Replacement
- Supercritical Fluid Solvents
- Wastewater Clean-Up

Materials
- Complex Multicomponent Systems
- Electronic Materials
- Graphene
- Materials Processing
- Membrane Separations
- Polymer Properties
- Reaction Kinetics
- Rheology
- Solution Thermodynamics
- Structure Processing
- Thermodynamics
- Thin Films

Microelectronics
- Biochips
- Electrical Discharge Machining Process
- Electrode Erosion
- Mechanism of Plasma Processes
- Nano Electronics
- Novel Devices
- Particle Transport
- Plasma Phase Chemistry
- Semiconductor Devices
- Surface Reactions
- Thin Film Technologies
- Thin Film Transistors
- ULSIC

Microfluidics
- Controlled Emulsification
- Colloidal Self-Assembling

Nanotechnology

Process Safety
- Abnormal Situation Management
- Accident Database (Development and Analysis)
- Aerosol Generation and Modeling

- Alarm Management
- Bioprocess Control
- Calorimetry, Reactive Chemicals and Computational Chemistry
- Computational Fluid Dynamics Modeling
- Development of Analytical and Computational Tools
- Fires and Explosions
- Improve Process Design Software
- Inherently Safer Design and Technology
- LNG Design and Safety
- Metrics for Safety Systems
- Quantitative Risk Assessment
- Reliability and Availability
- Relief Systems Analysis
- Subsea Engineering
- Vapor Dispersion Modeling

Process Systems Engineering
- Process Design and Synthesis
- Process Integration
- Process Modeling, Operation and Control
- Process Optimization

Reaction Engineering
- Catalysis
- Determination of Kinetics
- Reactor Design and Configuration

Thermodynamics
- Correlations
- Equations of State
- Measurements
  - Densities
  - Phase Behavior
Enrollment  Fall 2013
Texas A&M Data and Research Services

### Undergraduate Students 1,037

<table>
<thead>
<tr>
<th>Graduate Students</th>
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<tbody>
<tr>
<td>Master's</td>
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#### Quality Indicators

<table>
<thead>
<tr>
<th>Total Faculty</th>
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<tr>
<td>Professors</td>
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<td>Associate Professors</td>
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</tr>
<tr>
<td>Assistant Professors</td>
<td>8</td>
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</tbody>
</table>

#### U.S. News & World Report Rankings

- Rankings Among Public Institutions
  - Undergraduate: 8
  - Graduate: 9

#### Centers & Laboratories

- **Association of American Railroads Affiliated Laboratory (TTI)**
- **Center for Dredging Studies (TEES)**
- **Center for Infrastructure Engineering (TEES)**
- **Center for Ports & Waterways (TTI)**
- **Center for Sustainable Water Systems (TEES)**
- **Center for Transportation Safety (TTI)**
- **Center on Tolling Research (TTI)**
- **Haynes Coastal Engineering Laboratory (TEES)**
- **International Center for Aggregates Research (TTI)**
- **National Geotechnical Experimentation Site**
- **Offshore Technology Research Center (TEES)**
- **Southwest Region University Transportation Center (TTI)**
- **TransLink™ Research Center & Laboratory (TTI)**
- **University Transportation Center for Mobility (TTI)**

#### Coastal & Ocean Engineering Laboratories

- **Dredging Laboratory**
- **Ocean Engineering Laboratory**
- **Materials & Pavement Laboratories**

#### Advanced Characterization of Infrastructure Materials Laboratory

- **Highway Materials Laboratory (TTI)**
- **Materials of Construction Laboratory**
- **Materials Science Laboratory**

#### Construction, Geotechnical & Structural Engineering Laboratories

- **Construction Materials Laboratory**
- **Electrochemistry Laboratory**
- **Geotechnical Graduate Laboratory**
- **Geotechnical Research Laboratory**
- **Geotechnical Undergraduate Laboratory**
- **High-Bay Structural & Materials Testing Laboratory**

#### Environmental & Water Resources Engineering Laboratories

- **Biological Processes Laboratory**
- **Chemical Processes Laboratory**
- **Environmental Laboratory**

**Research Areas** listed on reverse side
Research Areas

Coastal Engineering
- Beach Nourishment
- Coastal Processes
- Coastal Structures
- Dredging
- Environmental Fluid Dynamics
- Storm Surges & Risks

Construction Engineering & Management
- Construction Materials
- Construction Planning & Field Operations
- Process Modeling
- Project Development & Financing
- Project Management
- Risk Management & Decision Analysis
- Stochastic Simulation

Environmental Engineering
- Air Pollution Contaminant Transport
- Hazardous Wastes/Remediation
- Risk Assessment
- Water/Wastewater

Geotechnical Engineering
- Constitutive Modeling
- Earthquake Susceptible Soils
- Expansive Soils
- Instrumentation, Health Monitoring & Assessment
- Scour
- Soil Mechanics
- Soil-Structure Interaction

Infrastructure Management & Security
- Condition Assessment
- Infrastructure Security
- Infrastructure & Transportation Asset Management
- Pavement Management
- Performance Modeling & Prediction

Materials Engineering
- Asphal tic & Concrete Pavements
- Construction Materials
- Corrosion Within Structures
- Fracture & Damage Mechanics
- Mechanical Properties & Transport in Concrete Materials
- Micromechanics & Microstructure Characterization
- Nondestructive Testing
- Pavement Evaluation
- Recycled Materials

Ocean Engineering
- Computational Fluid Dynamics
- Dynamics of Offshore Structures
- Fluid-Structure Interaction
- Mooring Systems
- Multiphase Flow
- Naval Architecture
- Nonlinear Hydrodynamics
- Ocean Wave Dynamics

Structural Engineering
- Building, Transportation & Offshore Structures
- Damage Detection
- Engineering Risk Analysis
- Fatigue & Fracture
- Preservation of Historic Structures
- Seismic & Wind Performance
- Smart Materials & Structures
- Structural Reliability
- Vibrations, Sensing & Control

Transportation Engineering
- Geometric Design
- Intelligent Transportation Systems
- Planning
- Scheduling Algorithms
- Traffic Control Devices
- Transit Systems
- Transportation Economics
- Transportation Operations
- Transportation Safety
- Transportation Systems Modeling

Water Resources Engineering
- Hydraulics
- Hydrology
- Remote Sensing
- Sustainability
- Systems Analysis
- Water Resources Planning & Management
Enrollment Fall 2013
Texas A&M Data and Research Services

<table>
<thead>
<tr>
<th>Undergraduate Students</th>
<th>Graduate Students</th>
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<tr>
<td>916</td>
<td>313</td>
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<tr>
<td>Master’s</td>
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<td>Ph.D.</td>
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Quality Indicators
- Total Faculty: 36
  - Professors: 17
  - Associate Professors: 16
  - Assistant Professors: 3

U.S. News & World Report Rankings
- Rankings Among Public Institutions
  - Computer Engineering: 11 Undergraduate
  - Computer Engineering: 13 Graduate
  - Computer Science: 22 Graduate

Endowed Chair Holders: 1
Endowed Professorship Holders: 4
Distinguished Professors: 1
National Academy of Engineering Members: 1

Centers and Laboratories
- AI Robotics Labs
- Algorithmics: Theory and Applications
- Brain Networks Laboratory
- Center for Information Assurance and Security
- Center for Robot-Assisted Search and Rescue
- Center for the Study of Digital Libraries
- Distributed AI Robotics Lab
- Distributed Computing Group
- Electronic Design Automation Lab
- Embedded Systems and Codesign Lab
- Evolutionary Bioinformatics Lab
- Geometry and Graphics Group
- Graphics and Animation Lab
- Graphics Research Group
- High Performance Computing Laboratory
- Hypermedia Research Laboratory
- infolab: Web & Distributed Information Management
- Information Innovation Lab
- Information Management
- Interface Ecology Laboratory
- Internet Research Lab
- Laboratory for Embedded & Networked Sensor Systems
- NetBot Laboratory
- Parasol Lab
- Perception, Sensing and Instrumentation Lab
- Performance Analysis of Parallel Applications Lab
- Quantum Computing Lab
- Real-Time Distributed System
- Real-Time Systems Group
- Secure Communication and Computer Systems
- Lab Sketch Recognition Lab
- Texas Architecture and Compiler Optimization

Research Areas

Core Research Areas
- Human-Centered Systems
- Intelligent Systems Software
- Software Systems
- Theoretical Foundations

Multidisciplinary Systems
- Bioinformatics
- Brain Networks
- Computational Science and Engineering
- Digital Humanities
- Emergency Informatics
- Security
Enrollment
Fall 2013
Texas A&M Data and Research Services

Undergraduate Students 1,131
Graduate Students 623
  Master's 293
  Ph.D. 330

Quality Indicators
Total Faculty 67
  Professors 34
  Associate Professors 25
  Assistant Professors 8

U.S. News & World Report Rankings
  Rankings Among Public Institutions
  Computer Engineering 11 Undergraduate
  Electrical Engineering 8 Undergraduate
  Computer Engineering 13 Graduate
  Electrical Engineering 11 Graduate

Endowed Chair Holders 7
Endowed Professorship Holders 11
Distinguished Professors 1
National Academy of Engineering Members 2

Centers and Laboratories
Analog and Mixed-Signal Center (TEES)
Control Engineering Laboratory
Digital Signal Processing Laboratory
Downed Conductor Test Facility
Electric Machines and Power Laboratory
Electromagnetics and Microwave Laboratory
Electronics Laboratory
Electro-optics Laboratory
Fuel Cell Power Systems Laboratory
Functional Thin Film Laboratory
Genomic Signal Processing Laboratory
Magnetic Resonance Systems Laboratory
Multimedia Laboratory
Multimedia Communication and Networking Laboratory
NanoBio Systems Laboratory

Nanofabrication Cleanroom Facility
Power Electronics Laboratory
Power Electronics and Motor Drives Laboratory
Power Engineering Laboratory
Power Quality Laboratory
Power System Automation Laboratory
Power System Control and Protection Laboratory
Semiconductor Laboratory Sensing, Imaging and Communications Systems Laboratory
Sensing, Imaging and Communication Systems Laboratory
Smoke Detector Test Facility
Ultrasound Imaging Laboratory
VLSI Laboratory
Wireless Communications Laboratory

Research Areas listed on reverse side
Research Areas

Analog and Mixed Signals
- Active and Passive Filter Design
- Biomedical Applications
- Broadband Communications
- Data Converters
- High-Speed Electronic Systems
- Integrated Circuit Design
- Low-Noise Front-End Electronics
- Low-Voltage Low-Power Electronics
- Millimeter-Wave Integrated System Design
- Power Management
- RF IC and System Design

Biomedical Imaging and Genomic Signal Processing
- Bioinformatics and Computational Biology
- BioMEMs and Lab-on-a Chip
- Biosensing and Bioanalysis Systems
- Dynamic Imaging, Thermal Imaging and Magnetic Resonance Microscopy
- Genomic Signal Processing
- Image Analysis Techniques and Algorithms
- Magnetic Resonance Imaging and Spectroscopy
- Morphological Analysis
- Optical Tomographic Imaging Techniques
- Sensor Arrays in Medical Imaging
- Ultrasound and Elasticity Imaging

Computer Engineering
- Computer Networks and Internet
- Computer Systems
- Digital VLSI Design and Test
- Electronic Design Automation
- Fault Tolerance, Security and Reliability
- Mobile Wireless Networking
- Multimedia Infrastructure
- Network Coding
- Network Security and Reliability
- Storage Systems

Control Systems
- Homomorphic Digital Filtering
- Linear Multivariable Control Systems
- Nonlinear Control Systems
- Robust Control and Adaptive Control

Electric Power and Power Electronics
- Alternative Energy Systems
- Condition Monitoring and Fault Diagnostics of Electric Machines
- DSP-Based Power Electronic Systems
- Dynamic Analysis
- Electric Ship Power and Power Electronics Systems
- Electromechanical Energy Storage Systems
- Monitoring, Control and Protection
- Novel Electric Motors and Generators for Special Applications
- Power Converters for Windmills and Hybrid Vehicles
- Power Electronics and Motor Drives
- Reliability Evaluation
- Switching Power Supplies

Electromagnetics and Microwaves
- Antennas
- CMOS RFIC and Systems
- Electromagnetic Theory
- Electromagnetic Wave Propagation
- Guided-Wave Structures
- Microstrip Antennas
- Microwave Solid-state Circuits and Devices
- Microwave Systems
- Millimeter-Wave Circuits
- Sensing and Imaging
- Surface Penetrating Radar

Solid-state Electronics Photonics and Nano-Engineering
- Fiber Optics Devices
- Functional Thin Film Processing
- Integrated Optics
- Micro Electromechanical System (MEMS)
- Nanolithography
- Nanotechnology
- Noise in Electronic Systems
- Optical Communication
- Optical Filters
- Quantum Optics

Telecommunications and Signal Processing
- Advanced Channel Coding Techniques
- Data Compression
- Digital Communications Systems
- Digital Signal Processing
- Estimation and Detection Theory
- Information Security
- Information Theory
- Multirate Signal Processing
- Sensor Networks
- Time-frequency Analysis
- Wireless Networks
- Wireless Systems
**Undergraduate Students** | 1,087 |
---|---|
**Graduate Students** | 65 |
**Total Faculty** | 23 |
  **Professors** | 9 |
  **Associate Professors** | 11 |
  **Assistant Professors** | 3 |
**Endowed Chair Holders** | 1 |
**Endowed Professorship Holders** | 3 |

**Quality Indicators**

- **Enrollment**
  - Fall 2013
  - Undergraduate Students: 1,087
  - Graduate Students: 65

- **Enrollment**
  - Undergraduate Students: 1,087
  - Graduate Students: 65

**Centers and Laboratories**

- Computer-Integrated Manufacturing Laboratory
- DXP Pump Laboratory
- Embedded Systems Laboratory
- Fluid Power Laboratory
- Global Supply Chain Systems Laboratory
- Instrumentation and Power Systems Laboratory
- Local and Metropolitan Area Networks Laboratory
- Micro and Nano Manufacturing Laboratory
- Mobile Integrated Solutions Laboratory
- Multimedia and Cloud Computing Laboratory
- Non-Destructive Testing and Evaluation Laboratory
- Product Innovation Cellar
- Radiation Hardness Testing Laboratory
- Radio Frequency Identification in Distribution Laboratory
- R.C. Womack Fluid Power Laboratory
- RFID/Sensor Laboratory
- Rockwell Automation Laboratory
- Thomas and Joan Read Center for Distribution Research and Education (TEES)
- TI Mixed-Signal Test Laboratory

**Research Areas** listed on reverse side
Research Areas

Automation
- Automation, Robotics and System Integration
- Engineering Education and Cognition
- Hybrid Imaging and Thermal Profiling for Product/Process Characterization
- Nanotechnology
- Smart Design Environments for Reconfigurable Manufacturing Systems

Electronics
- Advanced Environmental Monitoring Systems
- Computational Intelligence
- Control Systems
- Embedded Computer Systems
- Embedded Software Development
- Medical Devices
- Product Design and Prototyping
- Radiation Hardness Testing
- Real-Time Software Systems
- RFID/Sensor Integration and Networks
- Robotics and Smart Vehicles
- Semiconductor Device Testing
- Smart Vehicles
- Software Development
- Virtual Instrumentation

Industrial Distribution
- Competitive Advantage
- Customer Relationship Management
- Distribution Forecasting
- Distributor Profitability
- Distributor Information Management
- Industrial Marketing
- Industrial Sales
- Inventory Management
- Integrated Supply
- Lean Distribution
- Logistics and Transportation
- Manufacturing and Distribution Benchmarking
- Operational Excellence
- Quality
- Strategic and Global Sourcing
- Supplier Relationship Management
- Supply Chain Management
- Value Chain Analysis

Manufacturing Processes and Materials
- Advanced Materials
- Asset Management
- Design and Development of Advanced Materials Processing Technologies
- Distribution Best Practices
- Enterprise Performance Management
- K-12 Outreach
- Materials Joining
- Materials Selection and Economics
- Metallurgical Effects of Manufacturing Processes
- Micro/Nano Manufacturing
- Non-Destructive Testing and Evaluation
- Warehouse Design and Optimization

Manufacturing Systems
- Cost Modeling and Analysis
- Global Manufacturing
- Manufacturing Systems Cost Modeling and Analysis
- Robust Planning and Optimization

Structural Analysis
- Assessment of In-Situ Structural Systems Using Field Measurements

Telecommunications
- Data Communications
- Equipment Application
- Internet Telephony
- Networking
- Quality of Service
- Rural Communications and Telemedicine
- Transmission and Switching
- Wireless Communications and Software Defined Radio

Thermal Sciences
- Electrochemistry
- Energy Conservation
- Heat Transfer
- Thermal System Design
Enrollment Fall 2013

Texas A&M Data and Research Services

<table>
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<tr>
<th>Undergraduate Students</th>
<th>669</th>
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<tr>
<td>Master's</td>
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Quality Indicators

<table>
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<th>Total Faculty</th>
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U.S. News & World Report Rankings

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<tbody>
<tr>
<td>Undergraduate</td>
</tr>
<tr>
<td>Graduate</td>
</tr>
</tbody>
</table>

Endowed Chair Holders | 1 |
| Endowed Professorship Holders | 2 |

Centers and Laboratories

Advanced Metrology Laboratory
Computer Integrated Manufacturing Laboratory
Human Factors and Cognitive Systems Laboratory
Institute for Manufacturing Systems
Laboratory for Energy-Sustainable Operations
Logistics and Networked Systems Research Laboratory
Manufacturing Automation Laboratory
Modeling and Simulation Laboratory
Systems Modeling and Computational Optimization (SyMCo) Laboratory
Virtual Reality and Visualization Laboratory

Research Areas

Applied Probability and Risk Analysis
- Decision Making Under Uncertainty
- Individual Risk and Corporate Risk Preference
- Modeling of Probabilistic Dependence
- Probability Assessment
- Technology Assessment
- Optimal Replacement Analysis
- Maintenance Science
- System Reliability and Maintainability
- Queuing and Fluid-Flow Modeling
- Enterprise Risk Profiling

Human and Organizational Systems
- Cognition
- Human/Computer Interaction
- Knowledge Acquisition
- Virtual Environments
- Engineering and Project Management
- Teams and Corporations
- Health Care Delivery Systems
- Workforce agility
- Health Care treatment planning

Manufacturing Systems and Control
- Additive Manufacturing
- Facility Design and Capacity Planning
- Lean Manufacturing
- Material Handling
- Production Planning and Control
- Biomedical Manufacturing Modeling
- Nano Manufacturing Modeling and Control
- Renewable Energy Production Planning

Optimization
- Graph theory
- Intelligence Heuristics
- Linear, Nonlinear and Integer Programming
- Stochastic Optimization
- Network Design and Configuration
- Revenue Management

Supply Chain and Logistic Systems
- Closed Loop Supply Chain
- Coordination of Inventory, Scheduling and Transportation
- Multicommodity Flow Distribution Network Design
- Radio Frequency Identification
- Supply Chain Risk and Uncertainty
- Vendor Managed Inventory
- Warehousing, Transportation and Supply Contracting

System Informatics
- Machine Learning and Data Mining
- Production Economics Analysis
- Simulation and Computer Information System
- Sensor Surveillance System Analysis
- Quality Engineering — Monitoring and Diagnosis
- Situational Awareness Modeling
- Spatial Modeling and Optimization
## Enrollment

Fall 2013  
Texas A&M Data and Research Services

<table>
<thead>
<tr>
<th>Undergraduate Students</th>
<th>1,232</th>
</tr>
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<tr>
<td>Graduate Students</td>
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<td>Master’s</td>
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<td>Ph.D.</td>
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## Quality Indicators

<table>
<thead>
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<td>Assistant Professors</td>
<td>9</td>
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</tbody>
</table>

### U.S. News & World Report Rankings

<table>
<thead>
<tr>
<th>Rankings Among Public Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
</tr>
<tr>
<td>Graduate</td>
</tr>
</tbody>
</table>

### 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
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
# Dwight Look College of Engineering | FACTS

## Enrollment
Fall 2013
Texas A&M Data and Research Services

<table>
<thead>
<tr>
<th>Undergraduate Students</th>
<th>297</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Students</td>
<td>147</td>
</tr>
<tr>
<td>Master’s</td>
<td>67</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>80</td>
</tr>
</tbody>
</table>

## Quality Indicators

<table>
<thead>
<tr>
<th>Total Faculty</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professors</td>
<td>7</td>
</tr>
<tr>
<td>Associate Professors</td>
<td>8</td>
</tr>
<tr>
<td>Assistant Professors</td>
<td>2</td>
</tr>
</tbody>
</table>

**U.S. News & World Report Rankings**

- **Rankings Among Public Institutions**
  - 2 Undergraduate
  - 2 Graduate

- **Endowed Professorship Holders** | 2 |

## Centers and Laboratories

- **Accelerator Laboratory**
- **AGN-201M Nuclear Reactor Laboratory**
- **Center for Large-scale Scientific Simulations (CLASS)**
- **Fuel Cycle and Materials Laboratory (FCML)**
- **Institute for National Security, Education and Research (INSER)**
- **Interphase Transport Phenomena Laboratory (ITP)**
- **Laser Diagnostics Multiphase Flow Laboratory**
- **Micro-Beam Cell Irradiation Facility**
- **NASA Space Power Center**
- **Nuclear Heat Transfer Systems Laboratory**
- **Nuclear Power Institute (NPI)**
- **Nuclear Science Center (1MW Triga Reactor) (NSC)**
- **Nuclear Security Science and Policy Institute (NSSPI)**
- **Radiation Detection & Measurement Laboratory**
- **Tandem Accelerator Laboratory**

## Research Areas

- Energy and System Design Engineering
- Fuel Cycles and Materials
- Health Physics
- Medical Physics
- Radiation Transport
- Security, Safeguards, Nonproliferation and Policy
- Thermal Hydraulics and Reactor Safety
- Verification, Validation and Uncertainty
- Quantification in Multiphysics Simulations
Enrollment Fall 2013
Texas A&M Data and Research Services

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate Students</th>
<th>Graduate Students</th>
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<tbody>
<tr>
<td></td>
<td>812</td>
<td>378</td>
</tr>
<tr>
<td>Master's</td>
<td>260</td>
<td></td>
</tr>
<tr>
<td>Ph.D.</td>
<td>118</td>
<td></td>
</tr>
</tbody>
</table>

Quality Indicators

| Total Faculty          | 24 |
|                       |    |
| Professors            | 14 |
| Associate Professors  | 5  |
| Assistant Professors  | 5  |

U.S. News & World Report Rankings

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</tbody>
</table>

Endowed Chair Holders 6
Endowed Professorship Holders 3
Development Professorship Holders 4
National Academy of Engineering Members 1

Centers and Laboratories

- Acid Stimulation Laboratory
- Advanced Instruments Lab
- Anadarko Petrophysics Laboratory
- BP Laboratory for Field Studies
- Chevron Drilling and Completions Laboratory
- CO2 EOR Laboratory
- Crisman Institute for Petroleum Research
- Engineering Imaging Laboratory
- Evaluation of Oilfield Chemicals Laboratory
- Formation Damage Studies
- Fracture Conductivity Laboratory
- Global Petroleum Research Institute (GPRI) HP/HT Fluid Property Measurement Laboratory
- Matrix Acidizing Laboratory
- Model Calibration and Efficient Reservoir Imaging (MCERI)
- Multiphase Flow Loop Tower Lab
- Naturally Fractured Reservoir Lab
- Productivity Enhancement Lab
- Ramey Thermal Recovery Studies and Chemical Analysis Laboratory
- Reaction of Acids with Reservoir Rocks
- Rheology of Non-Newtonian Fluids
- Rock Preparation and Characterization Lab
- Tommie E. Lohman Fluid Measurement Laboratory

Research Areas

Center for Energy, Environment, and Transportation Innovation

- Energy
- Environmental and Water Issues
- Transportation Innovation

ChevronTexaco Center for Well Construction and Production

- Advanced Drilling Technology
- Advanced Production Technology
- Deep Gas Well Construction
- Well Construction
- Well Stimulation

Halliburton Center for Unconventional Resources

- Coalbed-Methane Reservoirs
- Heavy Oil Recovery
- Natural Gas Hydrate Reservoirs
- Resource Assessments and Uncertainty
- Shale Gas
- Tight Gas

Schlumberger Center for Reservoir Description and Dynamics

- Analysis of Reservoir Performance
- Enhanced Recovery
- Formation Evaluation
- Naturally Fractured Reservoirs
- Reservoir Simulation
- Reservoir Visualization