TEXAS A&M ENGINEERING EXPERIMENT STATION

Impact of ARL's Open Campus Initiative on Texas A&M

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The Texas A&M University System

11 universities

7 state agencies

120,000 students

Major strengths in
engineering and applied sciences

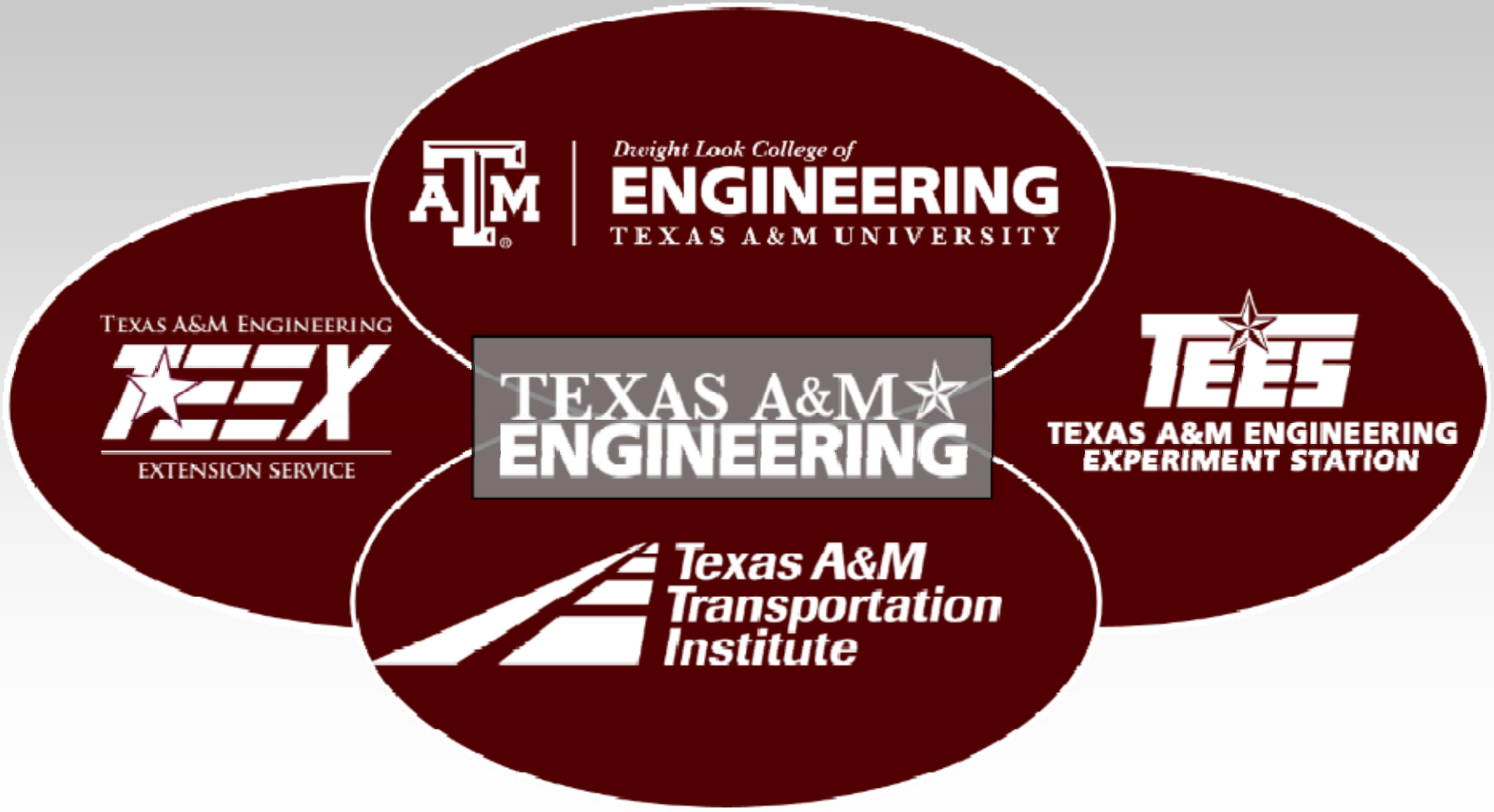
$3.3 billion annual budget

22 million people served

28,000 faculty and staff

Texas A&M University is one of the largest Land Grant Institutions with a strong military history and traditions

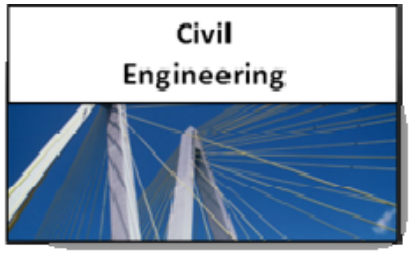
Texas A&M Engineering

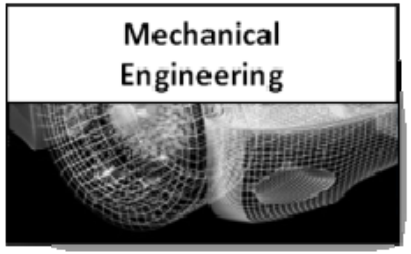


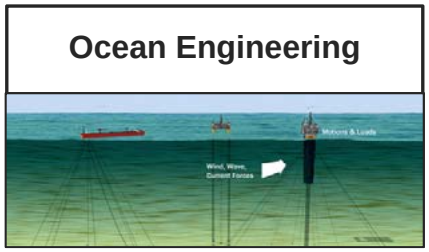
Dwight Look College of Engineering - *Departments*

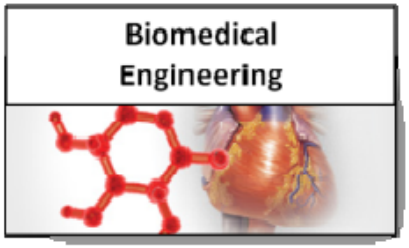
14

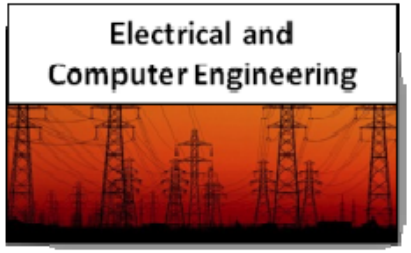
Engineering Divisions

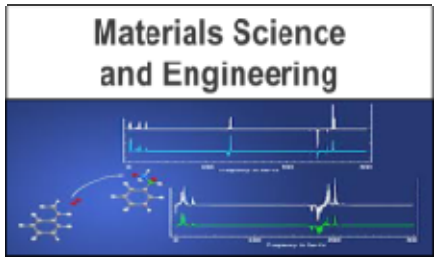


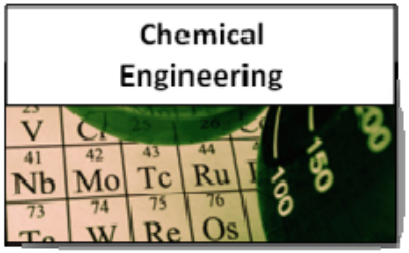






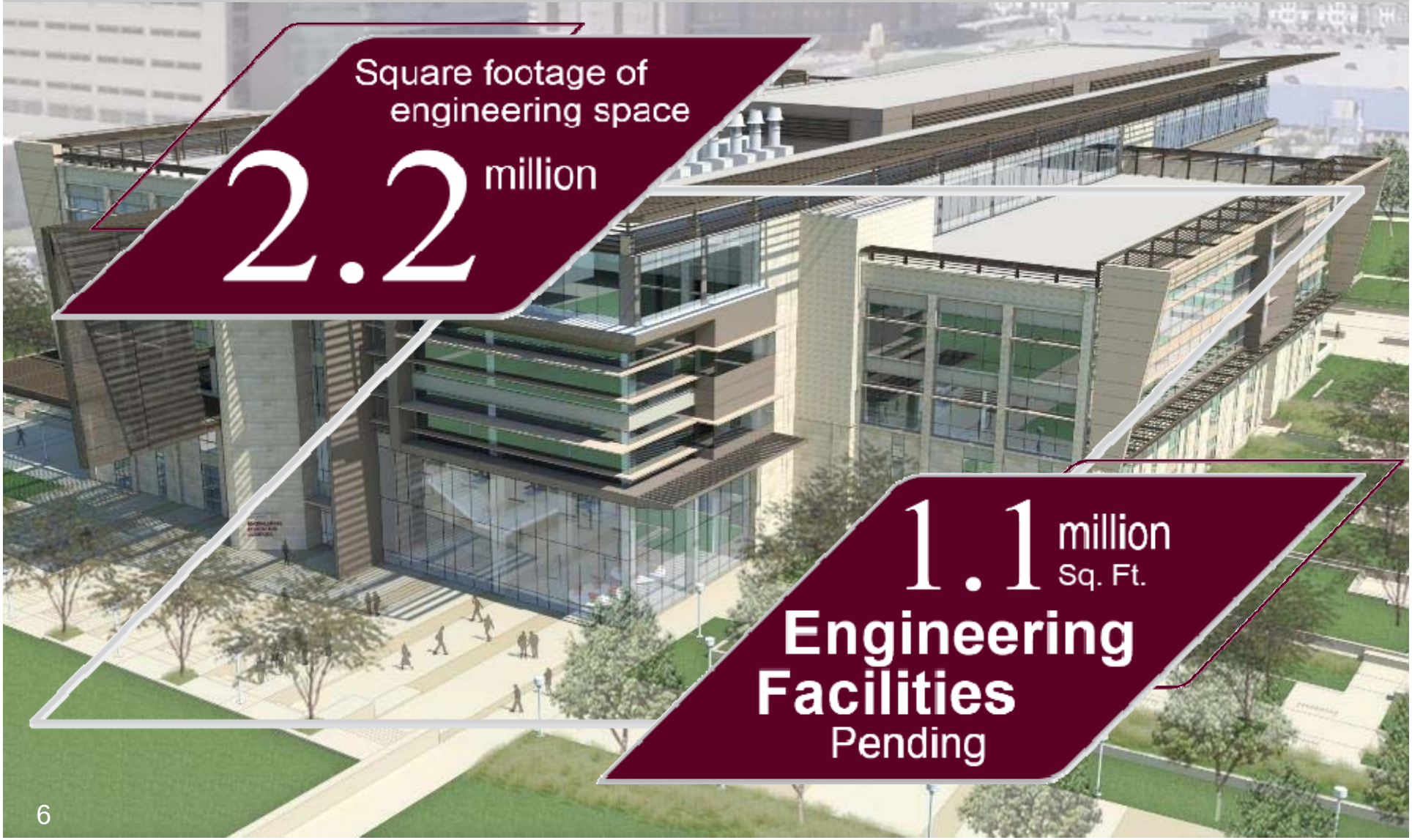






National & International Reputation

Engineering Facilities



Texas A&M Engineering Experiment Station (TEES)

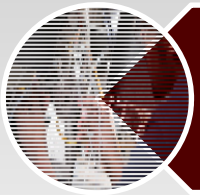
- 100 years of developing innovative engineering solutions through research, workforce development and technology leadership
- Leader in transformational engineering
- Helps government and industry partners deliver innovative technology solutions

Research Focus Areas

Energy Systems and Services

Materials and Manufacturing

Healthcare



Infrastructure

Information Systems and Sensors

National Security and Safety

Engineering Education

ARL Open Campus Model

- **The ARL Open Campus model is recreating an ecosystem between government laboratories, business and academia**

- **This model will enable Texas A&M researchers and students to freely interact with some of the best researchers to address tough challenges and to enhance the educational experience for those pursuing a career in a STEM related field**

- **<u>Target</u>: Joint projects; joint research; joint students; joint appointments**

Relevance of Texas A&M Engineering

- Strong materials research thrust across most engineering and science disciplines with focus on computational materials and materials for extreme environments
- Increasing investments in manufacturing – continuous; hybrid; smart; modular; cyber - manufacturing
- Increasing investments in energy; smart grid; cybersecurity; big data; food-energy-water nexus; cyberphysical systems

Relevance of Texas A&M Engineering

- **TEES - helped establish one of the few FAA test sites for UAVs for the U.S. in Texas**
- **TEEX - Disaster City – excellent test facility for robotics, autonomous vehicles in difficult terrains**
- **TTI – major research center in transportation for autonomous vehicles; driver safety; human/machine interactions**

- **Texas outreach – large, diverse population; large innovation base for the defense industry; large Army presence (Fort Hood, San Antonio, Corpus Christi, Texarkana)**

Recent Interactions

- ARL director and senior management from open ARL campus visited Texas A&M Engineering in February of 2015
  - About 50 engineering faculty interacted with ARL directors
  - Extensive discussions on possible research collaborations
- TEES sponsored engineering faculty for extended visits to ARL open campus
- Joint collaborative research agreements on multiple projects in addition to existing research collaborations directly with ARL and ARO
- Visits from ARL scientists are taking place associated with conferences, short courses and seminars
- ARL representative on the TEES Advisory Board

Army Research Laboratory – Texas A&M Engineering Partnership

- Texas A&M Engineering is dedicated to building and nurturing partnerships for the benefit of the Texas, the nation and the world
- The Army seeks to capture the imagination of creative engineering minds as they develop their dreams and decide on their professional careers
- Partnerships between government laboratories like ARL and universities like Texas A&M, enables collaboration between some of the country's best research institutions, and opens doors wider for significant discovery and innovation that is mutually beneficial


Think Big.
Think Preeminence.
Together.