



Training Program for Commercial Building Equipment Technicians

TEEX/TEES COLLABORATION SPONSORED BY U.S. DEPARTMENT OF ENERGY



ENERGY EFFICIENCY CERTIFICATION FOR COMMERCIAL BUILDING TECHNICIANS

This program will train building equipment technicians to implement concepts, applications, and techniques to optimize energy performance in new and existing commercial buildings.

TOPICS

INTRODUCTION TO ENERGY EFFICIENT BUILDINGS

- Identify positive outcomes of energy reduction programs.
- Define energy efficient buildings.
- Identify applicable codes and guidance documents.

SAFETY

- Identify unsafe conditions.
- Employ safe work practices.
- Explain permitting requirements.
- Recognize proper hazardous materials and waste management.

ENERGY EFFICIENCY SURVEY

- Identify existing building systems.
- Determine building as-built conditions.
- Determine compliance with relevant energy-efficiency guidelines, standards, and regulations.

DEVELOP ENERGY-EFFICIENCY ACTION PLAN

- Collect options for energy efficiency measures.
- Perform preliminary cost/benefit analysis.

IMPLEMENT ENERGY-EFFICIENCY ACTION PLAN

- Develop plan of how to implement individual measures.
- Explain necessary modifications and repair.
- Maintain building plans.
- Determine energy savings.
- Maintain building operating systems.
- Perform periodic assessment.
- Develop methods to continuously improve energy efficiency.



TEXAS A&M ENGINEERING



TEXAS A&M ENGINEERING



EXTENSION SERVICE

TEXAS CENTER FOR APPLIED TECHNOLOGY

There are many problems that require the careful and proper integration of applied technologies to find solutions. The Texas Center for Applied Technology (TCAT) was created to focus on these specific problems and to develop effective and efficient solutions. TCAT's core competency is the innovative application of existing technologies and advanced research to solve complex real-world problems.

TCAT's primary objective is to apply and test technologies to address targeted problems and engage basic research as required. TCAT has employees in a variety of locations with the ability to perform research that cuts across multiple technologies, disciplines, and cultures. The Center's employees are knowledgeable regarding customers' requirements and are ready to respond effectively to provide the best value for the customers' needs including expertise in technology insertion, technology assessments, and test and evaluation.

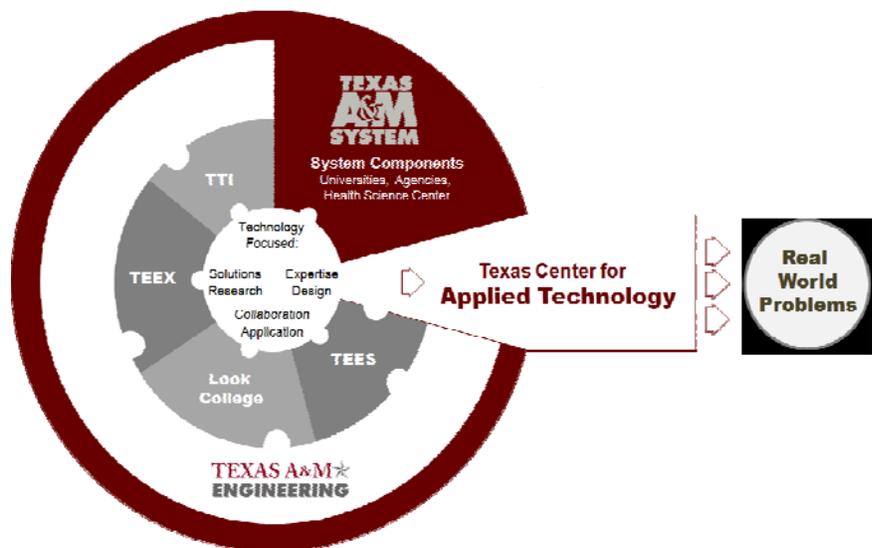
TCAT is part of the Texas A&M Engineering Experiment Station (TEES), a member of The Texas A&M University System. The A&M System is one of the largest and most comprehensive systems of higher education in the United States. Through a statewide network of eleven university campuses, seven state agencies, and a comprehensive health science center, the A&M System educates more than 120,000 students on its university campuses, conducts more than \$780 million in research, and reaches another 22 million people through service each year. TEES is an engineering research agency for the state of Texas and conducts over \$147 million in research annually. Because of the Center's position within the Texas A&M Engineering program, TCAT's expertise can easily be extended by rounding out its team with world class faculty researchers, as appropriate. TCAT is in an excellent position for collaboration not only with The Texas A&M University System components and their customers but with other universities, institutions, centers, and industry.

TCAT'S CORE COMPETENCIES

Energy Sustainability ★ Environmental Sustainability
Manufacturing & Systems Engineering ★ Information Technology ★ Modeling & Simulation
Technology Insertion ★ Test & Evaluation

TEXAS A&M ENGINEERING

Texas A&M Engineering consists of the Dwight Look College of Engineering, and three engineering agencies, including TEES: Texas A&M Transportation Institute (TTI) conducts research and professional education in all modes of transportation. The Texas A&M Engineering Extension Service (TEEX) works to develop a highly skilled and educated workforce and enhances public safety through training, continuing education, and technical assistance.



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