	Current Number of Workers 2006	Projected Number of Workers 2016	% Change to 2016	Average Annual Openings	 Environmental Engineering Technicians SOC # 17-3025	
Regional	1550	1900	22.60%	65		
Texas	21,126	26,362	24.6%	935		
Education/ Training Time	**Is License Required?**	**Wage Rate $/Hr. 2008 Regionally**	**Percent Female**	**Average Age**	**Job Turnover**	**Why Most Job Openings Occur**
Associate Degree	**No**	$20.75	29.9%	40.4	Average	**Growth**

JOB DESCRIPTION

Apply theory and principles of environmental engineering to modify, test, and operate equipment and devices used in the prevention, control, and remediation of environmental pollution, including waste treatment and site remediation. May assist in the development of environmental pollution remediation devices under direction of engineer. ***Possible Green Job with enhanced skills.***

WHERE DO WORKERS FIND JOBS?

Architectural, Engineering, and Related Services
Remediation and Other Waste Management Services
Management, Scientific, and Technical Consulting Services
Electric Power Generation, Transmission and Distribution
Petroleum and Coal Products Manufacturing
Oil and Gas Extraction
Agriculture, Construction, and Mining Machinery Manufacturing
Other Specialty Trade Contractors
Scientific Research and Development Services

RELATED COLLEGE PROGRAMS

CIP 150505 Solar Energy Technology/Technician
CIP 150507 Environmental Engineering Technology/Environmental Technology

IMPORTANT KNOWLEDGE

ARTS AND HUMANITIES
* English Language
BUSINESS AND MANAGEMENT
* Customer and Personal Service
ENGINEERING AND TECHNOLOGY
* Building and Construction
* Engineering and Technology
* Mechanical
MATHEMATICS AND SCIENCE
* Mathematics

IMPORTANT SKILLS

CONTENT
* Active Listening
* Mathematics
* Reading Comprehension
* Science
* Writing
PROCESS
* Active Learning
RESOURCE MANAGEMENT SKILLS
* Time Management
SOCIAL SKILLS
* Coordination

IMPORTANT ABILITIES

IDEA GENERATION AND REASONING ABILITIES
* Deductive Reasoning
* Inductive Reasoning
* Information Ordering
* Problem Sensitivity
VERBAL ABILITIES
* Oral Comprehension
* Written Comprehension
VISUAL ABILITIES
* Near Vision

NATURE OF THE WORK: Environmental Engineering Technicians

Engineering technicians use the principles and theories of science, engineering, and mathematics to solve technical problems in research and development, manufacturing, sales, construction, inspection, and maintenance. Their work is more limited in scope and application-oriented than that of scientists and engineers. Many engineering technicians assist engineers and scientists, especially in research and development. Others work in quality control, inspecting products and processes, conducting tests, or collecting data. In manufacturing, they may assist in product design, development, or production.

Engineering technicians who work in research and development build or set up equipment; prepare and conduct experiments; collect data; calculate or record results; and help engineers or scientists in other ways, such as making prototype versions of newly designed equipment. They also assist in design work, often using computer-aided design and drafting (CADD) equipment.

Most engineering technicians specialize, learning skills and working in the same disciplines as engineers. Occupational titles, therefore, tend to reflect engineering specialties.

Aerospace engineering and operations technicians construct, test, and maintain aircraft and space vehicles. They may calibrate test equipment and determine causes of equipment malfunctions. Using computer and communications systems, aerospace engineering and operations technicians often record and interpret test data.

Civil engineering technicians help civil engineers plan and build highways, buildings, bridges, dams, wastewater treatment systems, and other structures, as well as do related research. Some estimate construction costs and specify materials to be used, and some may even prepare drawings or perform land-surveying duties. Others may set up and monitor instruments used to study traffic conditions.

Electrical and electronics engineering technicians help design, develop, test, and manufacture electrical and electronic equipment such as communication equipment; radar, industrial, and medical monitoring or control devices; navigational equipment; and computers. They may work in product evaluation and testing, using measuring and diagnostic devices to adjust, test, and repair equipment.

Electromechanical engineering technicians combine fundamental principles of mechanical engineering technology with knowledge of electrical and electronic circuits to design, develop, test, and manufacture electrical and computer-controlled mechanical systems. Their work often overlaps that of both electrical and electronics engineering technicians and mechanical engineering technicians.

Environmental engineering technicians work closely with environmental engineers and scientists in developing methods and devices used in the prevention, control, or correction of environmental hazards. They inspect and maintain equipment related to air pollution and recycling. Some inspect water and wastewater treatment systems to ensure that pollution control requirements are met.

Industrial engineering technicians study the efficient use of personnel, materials, and machines in factories, stores, repair shops, and offices. They prepare layouts of machinery and equipment, plan the flow of work, make statistical studies, and analyze production costs.

Mechanical engineering technicians help engineers design, develop, test, and manufacture industrial machinery, consumer products, and other equipment. They may assist in product tests--for example, by setting up instrumentation for auto crash tests. They may make sketches and rough layouts, record and analyze data, make calculations and estimates, and report on their findings. When planning production, mechanical engineering technicians prepare layouts and drawings of the assembly process and of parts to be manufactured. They estimate labor costs, equipment life, and plant space. Some test and inspect machines and equipment or work with engineers to eliminate production problems.