

ENGINEERING TECHNICIAN

Nature of Work

Under general supervision, performs technical work at the full-performance level assisting engineers or related professionals in a variety of engineering services. Work involves the evaluation of air and water pollution, and surface mining permit applications or modifications to such permits; conducting laboratory and field tests; performing engineering calculations and design; and preparing reports. Work may be performed in difficult terrain under adverse weather conditions. Travel is required. Performs related work as required.

Distinguishing Characteristics

Applies technical procedures within rules, regulations and operating procedures of the specialty area of assignment. Work is reviewed by higher level engineering interns or engineers. May specialize in a particular area of emphasis within the area of assignment.

Examples of Work

- Assists engineers and related professionals by collecting air and water samples for laboratory analysis.
- Conducts laboratory or field tests to determine chemical properties of materials.
- Sets up and operates field test equipment used in monitoring air and water quality.
- Conducts field inspections of project sites, surface mines or utility construction sites to observe conditions, operations procedures and maintenance practices.
- Assists in the compilation of data on air and water quality permit applications.
- Writes technical reports on observations from field inspection and laboratory analyses.
- Performs engineering calculations and designs under supervision.
- Conducts inventory of equipment at utilities; computes life-cycle for depreciation values.
- Evaluates applications and permits to determine compliance with applicable engineering standards and departmental regulations.
- Reviews geological maps and engineering designs to determine environmental effects of proposed projects.

Knowledge, Skills and Abilities

- Knowledge of the basic principles of engineering.
- Knowledge of the chemical properties of related materials and substances.
- Knowledge of technical math.

ENGINEERING TECHNICIAN (Cont'd)

Knowledge, Skills and Abilities (cont'd)

Knowledge of laboratory testing equipment and procedures.
Ability to conduct field and laboratory tests to determine the chemical and physical properties of materials.
Ability to comprehend laws, regulations and technical manuals.
Ability to maintain effective working relationships with professional associates, government officials and the public.

Minimum Training and Experience Requirements

TRAINING Successful completion of an associate degree in Engineering Technology from an accredited college or university.

SUBSTITUTION (1) Full-time or equivalent part-time paid experience as an engineering technician may substitute for the required training at the rate of two years of experience for one year of training.

(2) Graduation from an accredited four-year college or university with a degree in engineering, chemistry, physics, mathematics, biology, geology or environmental science may substitute for the required training.

(3) Certification as an Associate Engineering Technician by the Institute for Certification of Engineering Technician (ICET) may substitute for the required training.

Established: 9/16/92

Effective: 9/16/92

9950

ENGINEERING TECHNICIAN

AREAS OF ASSIGNMENT

Agricultural Engineering

Architectural Engineering

Chemical Engineering

Civil Engineering

Electrical Engineering

Environmental Engineering

Industrial Engineering

Mechanical Engineering

Mining Engineering

Petroleum Engineering

Photogrammetric Engineering

Public Health Engineering

Sanitary Engineering

Structural Engineering

Transportation Engineering