GENERAL DESCRIPTION

Performs entry-level to routine (journey-level) engineering work. Work involves conducting inspections, fieldwork, data collection and validation, and materials research and testing; planning and design functions; construction or fabrication work; and assessment and modeling work. Works under moderate supervision, with limited latitude for the use of initiative and independent judgment.

EXAMPLES OF WORK PERFORMED

Performs engineering or environmental assessments, modeling, and monitoring.

Prepares plans, specifications, estimates, reports, and related documents for compliance with laws and standards; and makes recommendations for improvements.

Conducts engineering fieldwork, such as surveying, inspecting, drafting, and design.

Conducts material research and testing activities.

Collects and samples field data for engineering and environmental projects, and analyzes and validates data.

Compiles, reviews, and validates ambient air and water quality data.

Assists with preparing correspondence and technical reports.

May assist in performing inspections.

May assist with performing detailed design work on structures, roads, equipment, and machinery.

May assist with inspecting the work of contractors and operators for compliance with laws and specifications.

May assist with evaluating data and conducting research to analyze environmental issues.

May assist with the development of new or refined techniques, procedures, processes, and/or scientific methods.
May assist in the planning, construction, or fabrication of structures, supports, or housings to accommodate specialized equipment.

May assist in the preparation of cost and quantity estimates for engineering projects, project specifications, and written reports.

Performs related work as assigned.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Experience in engineering work. Graduation from an accredited four-year college or university with major coursework in engineering, natural resources, mathematics, or a related field is generally preferred. Experience and education may be substituted for one another.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of engineering and data analysis techniques and theories.

Skill in the use of computers and computer-aided design equipment and in the use and maintenance of scientific instruments.

Ability to apply engineering concepts, to conduct inspections, to perform maintenance activities, to perform design work, to perform construction or fabrication work, to operate specialized equipment, to organize and analyze data, and to communicate effectively.