

DESCRIPTION: Under immediate supervision, performs entry-level professional engineering assignments in one of the engineering disciplines, under the direct control, supervision, and review of a professionally licensed engineer. Assists other engineers in project location, development, design, construction, and/or other engineering functions and programs. Assignments provide learning opportunities to apply engineering principles and acquire an understanding of federal and state rules and regulations, and the employing agency's engineering standards and procedures; performs related work as assigned.

DISTINGUISHING CHARACTERISTICS: (A position is assigned to this class based on the scope and level of work performed as outlined below.)

This is the first classification level of the professional Engineer class series. Positions at this level are assigned specific tasks or portions of a project based on the complexity of the work and the level of experience, training, and proficiency possessed by the incumbents. Typically the incumbents have little or no practical engineering experience at entry, and have not passed the Fundamentals of Engineering (FE/EIT) Examination. Positions may be assigned to one or more of a variety of work functions including serving as a lead or crew chief of field based surveying or inspection activities, or a reviewer of preliminary project plans, specifications, estimates, and permits, or a researcher for engineering project or product feasibility or risk assessments, and/or an analyzer of statistical engineering data/evaluations.

At the second professional Engineer classification level, incumbents are expected to perform a variety of engineering tasks on more technically complex projects and assignments. Work is performed at the second level with greater independence under the guidance of a higher-level engineer and is reviewed for accuracy and conformance of the final product to engineering principles and employing agency policies and practices. Work requires the application of engineering principles and practices, but not possession of a professional engineer license, at both levels.

EXAMPLES OF WORK: (A position may not be assigned all the duties listed, nor do the examples include all the duties that may be assigned.)

Participates in construction projects and performs engineering tasks to learn the practical application and evaluation of engineering and construction principles and to develop a working knowledge of state and federal standards, specifications, policies, and procedures.

Participates in design projects and performs design tasks to design, check designs, and learn design procedures; performs project design drafting work, draws cross-sections, and prepares initial design plans; assists on individual project designs by gathering and assembling data; assists in preparing plans and checking design plans; reviews plans; calculates quantities of material and cost estimates.

Performs technical engineering tasks; serves as a survey party member or party chief, or construction inspector; verifies survey data; reviews source documentation; participates in on-site reviews; assists in the performance of field work in construction and maintenance engineering projects.

Oversees the activities of technical engineering, other technical support workers, and/or contractors, as needed, to ensure accuracy and completion of surveying, inspection, or other construction or design work performed.

KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED: (These are needed to perform the work assigned.)

Knowledge of: engineering theories, principles, and practices as they relate to engineering, design, and construction; design standards, specifications, and procedures required by the employing agency; basic practices and terminology of computer operation and computer aided design and drafting applications; mathematical concepts and formulae; general surveying and materials testing practices.

Ability to: read, interpret, and evaluate engineering plans and specifications; organize, analyze, and evaluate available information and draw reasonable conclusions; communicate information clearly and concisely with agency employees, contractors, and other construction workers; operate survey, drafting, and computer equipment used in the preparation of engineering design plans; learn and acquire the knowledge and experience relative to various certifications required by the work assigned and the employing agency.

MINIMUM QUALIFICATIONS: (Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.)

Bachelor's degree in engineering.

OR

Registration as a Professional Engineer (P.E. license).

SPECIAL NOTES:

Some positions in this class require possession of a valid driver's license or the ability to provide independent transportation.

Supplemental pre-employment educational and work history may be required for specific positions assigned to this class. Possession of an Engineering-in-Training certificate is not required. Some positions may require incumbents to obtain an EIT certificate within one year of hire.

Bachelor's degrees outside of the United States must be ABET accredited at the time of application. Applicants with a Master's Degree in Engineering from an ABET accredited institution within the United States will be considered for some positions.

State agencies are responsible to evaluate each of their positions to determine their individual overtime eligibility status as required by the Fair Labor Standards Act (FLSA).