

JUNIOR ENGINEER (MECHANICAL)

DISTINGUISHING FEATURES OF THE CLASS: Under supervision, incumbents perform entry-level mechanical engineering and complex technical work. Incumbents conduct inspections, prepare simple designs, calculate data, prepare cost estimates, project updates and daily work records. Incumbents may be assigned regularly to any type of mechanical engineering work, i.e., buildings, roads, parks, sewers, structures, etc., for regular assignment or training. The incumbent may work independently on less complex and routine projects and under direct supervision on more difficult tasks. As the incumbents skill and knowledge increases, less direction is received. Each level engineer, in this title series, takes part in the production of details, plans, specifications, etc. The difference between the Junior Engineer and Assistant Engineer is in the amount of experience, judgment and independent action required. Advancement depends on the attainment of higher level skills and on the regular assignment to jobs requiring those skills. Supervision is not a responsibility; however guidance and direction may be given to a small number of non-professional employees. Does related work as required.

EXAMPLES OF WORK: (Illustrative Only)

Reviews and assists in reviewing plans, specifications, and estimates for mechanical sections of engineering contracts;

Prepares and assists in the preparation of plans, cost estimates, specifications for heating, air conditioning, plumbing, electrical and elevator installations in buildings;

Prepares mechanical design details;

Conducts and assists in field inspections of mechanical installations for conformance to specifications and makes final inspections and capacity tests;

Surveys existing buildings to ascertain feasibility of proposed innovations;

Prepares and assists in the preparation of reports and recommendations;

Computes and checks estimates;

Uses computer applications or other automated systems such as spreadsheets, word processing, calendar, e-mail and database software in performing work assignments;

May perform other incidental tasks, as needed.

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Good knowledge of the principles and practices of mechanical engineering problems involved in the design, utilization and installation of mechanical equipment; good knowledge of computer assisted design, CAD; familiarity with the design and analysis of structures; ability to perform mathematical computations applied to engineering problems; ability to get along well with others; ability to effectively use computer applications such as spreadsheets, word processing, e-mail and database software; ability to read, write, speak, understand and communicate in English sufficiently to perform the essential tasks of the position;

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: (con't)

accuracy; reliability; resourcefulness; good judgment; physical condition commensurate with the demands of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: Either (a) a Bachelor's Degree* in Mechanical Engineering; or (b) a Bachelors Degree* in Mechanical Technology and one year of work experience where the primary function of the position was in engineering.

*SPECIAL NOTE: Education beyond the secondary must be from an institution accredited or recognized by the Board of Regents of the New York State Education Department as a post-secondary, granting institution.

SPECIAL REQUIREMENT: Depending on work assignment, must meet standards of OSHA regulation 1910.134 Respiratory Protection, and will be required to meet Federal, State and local standards with respect to health and safety.

NOTE: Unless otherwise noted, only experience gained after attaining the minimum education level indicated in the minimum qualifications will be considered in evaluating experience.

West. Co.
J. C.: Competitive
DBB7

Job Class Code: C0579
Job Group: IX