

Jurisdiction: City of Ithaca
Jurisdictional Class: Competitive
Adopted: 02/11/87
Revised: 10/15/91, 05/19/97, 04/06/05, 09/15/10, 09/07/22

ENGINEERING TECHNICIAN

DISTINGUISHING FEATURES OF THE CLASS: The work involves responsibility for coordinating the various aspects of engineering projects to ensure that all specifications are met, all applicable regulations and codes are adhered to, and that projects are properly completed on a timely, cost effective basis. The incumbent works in the field, performing technical engineering work in connection with on-going inspections of job sites, as well as in the office developing cost estimates, schematics, preliminary project drawings and project specifications. The incumbent also acts as a liaison with contractors, consultants, public utilities, and property owners regarding projects. This position differs from that of an Assistant Civil Engineer by virtue of the fact that an Engineering Technician performs technical work rather than professional engineering tasks. The work is performed under direct supervision of a higher level Engineer in accordance with standard engineering principles, practices and techniques. Does related work as required.

TYPICAL WORK ACTIVITIES:

Assists the Superintendent of Public Works or other project manager by meeting with consulting Engineers and contractors to gather information regarding construction projects;

Prepares and/or reviews preliminary design specifications, drawings, cost estimates and schedules prior to and during projects;

Conducts field surveys and inspects projects for conformance with specifications, correct use of materials, local and state codes and ordinances and completion schedules;

Queries a computer data base and retrieves data for use in engineering projects and water/wastewater installations;

Operates optical and satellite-based survey equipment, gathers survey information and creates maps or other documents;

Contacts a variety of public and private agencies or employees to obtain and relay information relative to construction and/or survey projects including building code information;

Creates and maintains a variety of records and reports relative to the work;

Operates a personal computer and utilizes a variety of software relative to the work performed including word processing, spreadsheet and database software;

Maintains contact with public officials, consultants, contractors, public utilities and property owners to anticipate potential field problems and develop solutions to avoid delays and cost overruns;

Performs a variety of physical activity including entering confined spaces, climbing ladders and using and carrying tools and materials such as shovels, picks and survey stakes;

Utilizes a variety of standard office equipment including a fax machine and photocopier;

Operates a vehicle in the performance of duties;

May perform computer aided drafting work;

May serve as the lead person in a survey crew;

May have contacts with the general public and explain basic information relative to construction and/or survey projects.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES, PERSONAL CHARACTERISTICS:

Good knowledge of surveying practices, techniques, tasks, equipment and terminology; good knowledge of modern engineering practices and techniques; working knowledge of the common practices, tools, equipment, terminology and safety precautions associated with construction projects and/or installations to water and wastewater systems; working knowledge of federal, state and local rules and regulations relative to construction projects and installations to water and wastewater systems; skill in operating optical and satellite-based surveying instruments and equipment; ability to operate optical and satellite-based surveying instruments and equipment; ability to lead a survey crew; ability to operate a personal computer and utilize common office software programs including word processing, spreadsheets and databases; ability to organize and maintain accurate records and files; ability to analyze and organize data and prepare records and reports; ability to understand and interpret complex oral instructions and/or written directions; ability to establish and maintain effective working relationships with others; ability to communicate effectively both orally and in writing; ability to successfully work with and serve a diverse local community; physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS: Either:

- (a) Possession of an Associate's degree in construction technology, engineering technology or related field; or
- (b) Graduation from high school or possession of a high school equivalency diploma and two (2) years of full-time paid experience, or its part-time paid equivalent, performing technical engineering tasks such as design, drafting, surveying or inspecting highways, buildings or bridges; or
- (c) An equivalent combination of training and experience as defined by the limits of (a) and (b).

Note: College degrees must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education and/or U.S. Secretary of Education. If an applicant's degree was awarded by an educational institution outside the United States and its territories, the applicant must provide independent verification of equivalency. A list of acceptable companies who provide this service can be found at <https://www.cs.ny.gov/jobseeker/degrees.cfm>. Applicants are responsible for payment of the required evaluation fee.

SPECIAL REQUIREMENT: Possession of a valid New York State Class D driver license or a valid driver license equivalent to a New York State Class D driver license at the time of appointment and maintenance of said license for the duration of employment.