



# Computer Aided Design (CAD) Technician

Job Specification  
Classification: Competitive  
Series: Engineering Support  
Level: 3 of 3

**DISTINGUISHING FEATURES OF THE CLASS:** This is the senior level of the Engineering Support series and is responsible for civil drafting work with the aid of a computer and special software. Responsibilities may include field inspections to determine work to be done, being in charge of projects in the field or office. Supervision may be exercised over engineering technicians of lesser rank. The incumbent does related work as required.

**EXAMPLES OF WORK ACTIVITIES:** (Illustrative only)

- Serves as a lead to staff to include assigning and monitoring work and providing direction.
- Provides CAD-related technical support for engineering personnel; assists in graphing new technologies and methods. Performs design and drafting of various assigned projects.
- Performs field inspections of construction projects; checks for conformity of project to specs, responds to concerns and conflicts in plans and scheduling, and makes changes to plans based on field conditions as needed.
- Calculates and estimates construction materials, sizes, and total volumes and areas needed for projects.
- Maintains and updates assessment maps based on property deed information.
- Responds to and resolves inquiries and complaints from property owners, contractors, and/or other staff related to construction projects, drainage issues, or other procedure-related problems. Refers more difficult problems to higher-level staff for resolution.
- Conducts topographical surveys for various construction projects; decides what items are important to locate and most efficient method of locating them.

**FULL PERFORMANCE KNOWLEDGE, SKILLS, AND ABILITIES:**

Knowledge of:

- Advanced CAD drafting and design terminology, methods, practices, and techniques;
- Surveying practices and principles;
- Practices and procedures relating to assigned design and construction projects;
- Engineering, drafting, and estimating terminology, methods, practices, and techniques;
- Construction materials and calculations for total usage in assigned projects;
- Computers and related software applications;
- Applicable Federal, State, and local laws, rules, regulations, codes, and/or statutes;
- Engineering plans, specifications, and drawings;
- Mathematical principles;
- Safety principles and practices.

Ability to:

- Monitor work and provide direction;
- Produce various graphic and technical materials;
- Inspect a variety of engineering project sites;
- Use a computer and related software applications;
- Perform mathematical calculations;

**FULL PERFORMANCE KNOWLEDGE, SKILLS, AND ABILITIES:** (continued)

Ability to: (continued)

- Read and interpret plans, specifications, and blueprints;
- Maintain accurate records;
- Prepare a variety of forms, business correspondence, and reports;
- Use and maintain engineering computers, drafting instruments and equipment;
- Prepare estimates of various construction projects;
- Communicate using interpersonal skills as applied to interaction with coworkers, supervisor, the general public, etc. sufficient to exchange or convey information and to receive work direction.

Physical condition commensurate with the demands of the position.

**MINIMUM QUALIFICATIONS:** Either

- (A) Graduation from a regionally accredited college or university or one accredited by the NYS Board of Regents to grant degrees with a Bachelors' Degree or higher in Civil Engineering or closely related engineering field and two (2) years of experience in drafting, surveying or assisting in engineering type projects; or
- (B) Associates' Degree in Civil Engineering or closely related engineering field and four (4) years of experience in drafting, surveying or assisting in engineering type projects; or
- (C) Graduation from an accredited technical school certified in computer aided drafting and seven (7) years experience in drafting, surveying or assisting in engineering type projects.

Licensing Requirements: Valid NYS driver's license.

**SPECIAL NECESSARY REQUIREMENT:**

None required.

**Classification history:**

Revised: 3/27/2001; 12/6/2004; 3/20/2012