



## DOT-ENGINEERING APPRENTICE, CIVIL

### Characteristics of Work

This is apprentice-level civil engineering work as part of a cooperative education work/study program. Employees perform increasingly difficult engineering assignments over a number of work periods which are coordinated with current academic course work and the level of expertise achieved during previous on-the-job training. During the final work period, employees are assigned work similar to that performed by an DOT-Engineer-In-Training, Civil. Assignments are coordinated by a Project Engineer; supervision is received from an Engineering Technician in charge of the project to which the employee is assigned.

### Examples of Work

**Examples of work performed in this classification include, but are not limited to, the following:**

Cuts brush at a survey site, carries and drives stakes, and holds rods and chains as a member of survey party to complete an assigned survey project.

Transcribes measurements and elevations from construction plans into field books for engineering technicians to use in monitoring the extent to which construction complies with plans.

Plots topographic measurements onto a set of draft plans using survey party field notes.

Calculates current totals of cost estimates to be paid to contractors for asphalt, gravel, dirt, and other construction materials.

Studies the activities of Engineering Technicians engaged in all phases of construction project inspection in order to acquire knowledge in the inspection of the clearing and grading of construction sites, composition of concrete and asphalt, highway paving, and bridge construction.

Performs related or similar duties as required or assigned.

### Essential Functions

**Additional essential functions may be identified and included by the hiring agency. The essential functions include, but are not limited to, the following:**

1. Assists Engineer in survey project.
2. Produces field notes using draft plans.

### Minimum Qualifications

These minimum qualifications have been agreed upon by Subject Matter Experts (SMEs) in this job class and are based upon a job analysis and the essential functions. However, if a candidate believes he/she is qualified for the job although he/she does not have the minimum qualifications set forth below, he/she may request special consideration through substitution of related education and experience, demonstrating the ability to perform the essential functions of the position. Any request to substitute related education or experience for minimum qualifications must be addressed to the State Personnel Board in writing, identifying the related education and experience which demonstrates the candidate's ability to perform all essential functions of the position.

**Physical Requirements:** These physical requirements are not exhaustive, and additional job related physical requirements may be added to these by individual agencies on an as needed basis. Corrective devices may be used to meet physical requirements. These are typical requirements; however, reasonable accommodations may be possible.

**Moderate Work:** May frequently exert force equivalent to lifting up to approximately 25 pounds and/or occasionally exert force equivalent to lifting up to approximately 50 pounds.

**Vision:** Requires the ability to perceive the nature of objects by the eye.

**Near Acuity:** Clarity of vision at 20 inches or less.

**Midrange:** Clarity of vision at distances of more than 20 inches and less than 20 feet.

**Far Acuity:** Clarity of vision at 20 feet or more.

**Depth Perception:** Three-dimensional vision. Ability to judge distance and space relationships so as to see objects where and as they actually are.

**Accommodation:** Ability to adjust focus.

**Color Vision:** Ability to identify colors.

**Speaking/Hearing:** Ability to give and receive information through speaking and listening skills.

**Motor Coordination:**

While performing the duties of this job, the incumbent is regularly required to use hands to finger, handle or feel objects, tools or controls; reach with hands and arms; climb or balance; and stoop, kneel, crouch, or bend. The incumbent is frequently required to sit; stand; and walk.

**Experience/Educational Requirements:**

**Education:**

Enrollment in a degree program at an accredited four-year college or university in Civil Engineering,

**AND**

**Education:**

Good standing in a recognized Cooperative Education Program as determined by the agency.

**Substitution Statement**

Above graduation from a standard four-year high school or equivalent (GED), related education, and related experience may be substituted on an equal basis.

**Interview Requirements**

Any candidate who is called to an agency for an interview must notify the interviewing agency in writing of any reasonable accommodation needed prior to the date of the interview.