

TRANSPORTATION ENGINEERING TECHNICIAN ENROLLEE 1

NATURE OF WORK

Under general supervision, performs intermediate level technical work in one or more functions associated with the construction, maintenance and operation of highways and their attendant facilities and structures. The employee is enrolled in a program of work and training which leads to certification as a Transportation Engineering Technician-Associate by the Transportation Technician/Technologist Board of Advisors at BridgeValley Community and Technical College. Performs related work as required.

EXAMPLES OF WORK:

Inspects and records pavement constructed or earthwork performed.
Performs final measurement of work performed by contractors with cost extensions.
Performs design drafting of an intersection of two-lane highway.
Performs design drafting of a concrete median barrier.
Performs distillation tests on bituminous materials.
Analyzes soils for particle size.
Analyzes the plan for equipment for a signalized intersection to determine power requirements and operating cost.
Conducts field investigations to determine adequacy of traffic signing and pavement markings.
Identifies and stakes right-of-way limits.
Surveys to determine location of as-built items for posting on plans.
Responds to citizen inquiries by visiting road sites and reporting conditions to district engineers or other responsible parties.
Inspects drainage structures for proper operation and/or damage.
Inspects roadways for characterizes such as width, length, drainage, base type, etc.
Conducts vegetation surveys to observe and note growth of weeds, shrubbery, and trees that might constitute a safety hazard.

KNOWLEDGE, SKILLS AND ABILITIES:

Knowledge of standard sampling and field testing of materials.
Knowledge of federal, state and American Association of State Highway Transportation Officials(AASHTO) load and clearance factors applicable to pavements and structures.
Knowledge of OSHA and other safety requirements.
Knowledge of procedures required to coordinate work with utility companies and government agencies on electrical device layout and installation.
Knowledge of traffic safety requirements at and around work sites.
Knowledge of principles of drainage as it relates to road base and surface.
Knowledge of road construction materials.
Ability to compute and record areas, volumes, and cost estimates on highway construction projects.

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TRANSPORTATION ENGINEERING TECHNICIAN ENROLLEE 1 (CONT'D)

KNOWLEDGE, SKILLS, AND ABILITIES: (Cont'd)

Ability to verify the completeness of highway materials tests for purposes required under federal, state, local, and AASHTO procedures.

Ability to perform and interpret construction surveys as related to location of traffic control devices.

Ability to read, understand and explain plans and specifications of normal complexity.

Ability to bend and stoop, and to climb steep terrain.

Ability to operate a non-commercial motor vehicle.

MINIMUM QUALIFICATIONS:

TRAINING: Graduation from a standard four-year high school or the equivalent.

SUBSTITUTION: Additional experience as described below may be substituted for the required training on a year-for-year basis.

EXPERIENCE: Two years of full-time or equivalent part-time paid technical experience associated with the design, development, or management of construction or renovation projects which involve the application of engineering principles from one of the traditional engineering disciplines.

SUBSTITUTION: An Associate Degree from a regionally accredited college or university in engineering, engineering technology or related fields may be substituted for the required experience.

ESTABLISHED: 10/21/93

TITLE CHANGED: 04/14/08

REVISED: 06/18/98, 01/15/99, 04/14/08, 7/27/09, 08/21/2014

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