

STUDENT ENGINEERING SPECIALIST

3101

GENERAL DESCRIPTION OF CLASS

The STUDENT ENGINEERING SPECIALIST performs elementary, routine, field, office, or laboratory engineering technology-related work; does related work as required.

DISTINGUISHING FEATURES

The Student Engineering Specialist is a seasonal training level position, in the field of engineering, requiring a knowledge of basic college level mathematics and science sufficient to perform routine manual, field or office work involved in the investigation, location, or construction of projects. The employee is closely supervised and provided with on-the-job experience in transportation engineering work.

DUTIES AND RESPONSIBILITIES

1.Student Engineering Specialist. Typical tasks: acts as rodperson, chainperson, stakeperson, or axeperson with a field survey party in establishing line and grade and in clearing brush; checks construction materials for size, quantity and quality, maintains records of materials received and used, performs routine inspections; assists in conducting field studies, computing, and summarizing data; assists in various basic elements of laboratory and office work; performs simple drafting on plans, maps, charts and graphs; assists in sampling and testing of soils and pavements, operates testing equipment; assists in preparation and distribution of bidding documents and in filling of orders from contractors; assists in the computation and checking of bid quantities.

RELATIONSHIPS WITH OTHERS

Employees in this class have regular in-person contact with the public as a member of a survey crew and with contractors' employees on construction inspections and material testing assignments to gather and analyze information or samples of construction materials.

SUPERVISION RECEIVED

Employees in this classification work under the close supervision of an engineering supervisor who assigns the work in person or through leadworkers. Technical engineering instructions on procedures and methods are received from the party chief, senior level drafting or design personnel, construction project manager, or other engineering personnel depending on the assignment. State and professional procedure and method manuals are available for review as necessary. The degree of supervision and technical guidance varies by the nature of the assignment and the individual's previous training and experience. Close supervision and guidance is provided on new assignments until the individual has experience and demonstrates conformance to State or professional standards and procedures. Review of work may be during performance or upon completion. Final responsibility for quality and quantity of work rests with the supervisor.

GENERAL INFORMATION

Student Engineering Specialists may be assigned to either a field or office working unit and may at times be required to work in inclement weather, in close proximity to highway traffic, or on high structures.

KNOWLEDGE, SKILLS, AND ABILITIES (KSA)

Basic knowledge of the fundamentals of algebra, plane geometry, and trigonometry.

Basic knowledge of the fundamentals of engineering and/or surveying.

Skill in communicating in order to answer questions and gain information.

Ability to make simple reports and keep accurate records.

Ability to perform physical labor in all kinds of weather.

Ability to trace and letter engineering drawings neatly and accurately.

SPECIAL QUALIFICATIONS

Most positions require a valid driver's license and an acceptable driving record.

NOTE: The KNOWLEDGE and SKILLS are required for initial consideration. ABILITIES may be required for initial consideration, at any time during the selection process, or during a trial service period as a final stage of the selection process. Some duties performed by positions in this class may require different KSA's. No attempt is made to describe every KSA required for **all** positions in this class. Additional KSA requirements will be explained on the recruiting announcement.

Adopted 1/90

Revised

Examples of work are typical of duties assigned to this class. No attempt is made to describe every duty performed by all positions in this class.