

ILLINOIS DEPARTMENT OF CENTRAL MANAGEMENT SERVICES  
CLASS SPECIFICATION

ENGINEERING TECHNICIAN III

POSITION CODE: 13733  
Effective: 6-16-76

DISTINGUISHING FEATURES OF WORK:

Under direction, performs assignments that are nonroutine and require a variety of guides, references and precedents; performs site surveys for construction projects; prepares project designs and drafts; performs technical and specialized complex investigations and inspections; may act as supervisor for a surveying party or small construction project; recommends procedures and methods.

ILLUSTRATIVE EXAMPLES OF WORK:

1. Designs and drafts plans and specifications from surveying, rough sketches and notes from which workable drawings for construction projects can be made.
2. Performs field surveys to establish lines, grades, horizontal and vertical alignments from which construction drawings, specifications and bidding documents can be made.
3. Prepares comprehensive and specialized complex technical engineering reports, memoranda, letters, recommendations and drafts orders concerning evaluations, construction programs, operation standards, safety requirements and service standards.
4. Investigates specialized complex incidents or accidents to improve the operation and maintenance functions of companies providing services within the State.
5. Investigates involved cases on the safety of working conditions to eliminate or alleviate any hazardous conditions that may exist; prepares written reports of the investigations.
6. Writes, evaluates and analyzes specifications, construction practices and procedures to ensure compliance with the guidelines, projects and bids; describes the characteristics of the materials involved and the workmanship desired.

## ENGINEERING TECHNICIAN III (Continued)

7. Provides general technical assistance; may be responsible for a surveying party or be responsible for a small repair, maintenance or construction project; recommends procedures and methods.
8. Performs other duties as required or assigned which are reasonably within the scope of duties enumerated above.

### DESIRABLE REQUIREMENTS:

#### Education and Experience

Requires knowledge, skill and mental development equivalent to completion of two years of college with coursework in engineering.  
Requires three years of professional technical experience in engineering.

#### Knowledges, Skills and Abilities

Requires extensive knowledge of the principles and practices of engineering.

Requires extensive knowledge of mathematics which includes geometry, college algebra and trigonometry.

Requires extensive knowledge of the utilization of materials, planning and composition, and construction techniques.

Requires extensive knowledge of engineering measuring devices, instruments, laboratory and sampling equipment.

Requires ability to make and maintain records of technical computations.

Requires ability to recognize and report errors, inconsistencies and other deficiencies in technical data.

Requires ability to communicate effectively both orally and in writing.

Requires ability to establish and maintain satisfactory working relationships with public and private officials.

Requires ability to use engineering equipment, instruments and devices.