

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼  
HUMAN RESOURCES ENTERPRISE

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**TRANSPORTATION STUDENT CO-OP**

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**DEFINITION**

Performs progressively responsible sub-professional transportation engineering duties as a participant in a cooperative training program; performs related work as required.

**The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.**

**WORK EXAMPLES**

Participates, on a limited basis, in highway construction and maintenance project quality assurance, highway and bridge design development, highway materials quality assurance, traffic planning and control functions, and associated operations to learn established technical engineering procedures and practices.

Inspects small to large highway construction projects such as structures (bridges and culverts), grading or paving (both asphalt and Portland concrete).

Performs engineering surveys by operating transits and levels; recording field notes; computing levels, grades, and elevations; schedules and directs the work of an engineering survey party as delegated.

Performs a variety of general to complex drafting tasks in the preparation of design plans, specifications, layouts, and sketches by interpreting preliminary information from survey notes, calculating geometrics, laying profile grades and making adjustments of grades, incorporating standard details into plan sets and calculating quantity estimates.

**COMPETENCIES REQUIRED**

Knowledge of engineering survey principles and terminology.

Knowledge of transportation engineering design/drafting principles, techniques and equipment.

Ability to read and interpret engineering plans and specifications.

Ability to follow written and oral instructions.

Ability to work cooperatively with others as part of a team.

Ability to read, write and speak the English language in order to express ideas effectively, report work status to superiors and communicate with others.

Ability to perform algebraic and trigonometric calculations.

Ability to meet customer needs in a consistently helpful and courteous manner.

Ability to apply personal ethical standards such as honesty, responsibility, and trustworthiness, required to be a productive employee.

Displays high standards of ethical conduct. Exhibits honesty and integrity. Refrains from theft-related, dishonest or unethical behavior.

Works and communicates with internal and external clients and customers to meet their needs in a polite, courteous, and cooperative manner. Committed to quality service.

Displays a high level of initiative, effort and commitment towards completing assignments efficiently. Works with minimal supervision. Demonstrates responsible behavior and attention to detail.

Responds appropriately to supervision. Makes an effort to follow policy and cooperate with supervisors.

Aligns behavior with the needs, priorities and goals of the organization.

Encourages and facilitates cooperation, pride, trust, and group identity. Fosters commitment and team spirit.

Expresses information to individuals or groups effectively, taking into account the audience and nature of the information. Listens to others and responds appropriately.

**EDUCATION, EXPERIENCE, AND SPECIAL QUALIFICATIONS**

Completion of at least two years in chemical, civil, construction, environmental, materials, mechanics, structural, or transportation engineering, or in an engineering management curriculum at an accredited four year college or university with eligibility for junior status upon return to school.

**NOTE:**

This classification may be used only for intermittent employment as defined in the Iowa Department of Administrative Services – Human Resources Enterprise rules, Chapter 8, Section 8.5.

Effective Date:     3/98     GRC