**BOARD OF REGENTS**

**STATE OF IOWA**

**REGENT MERIT SYSTEM**

**Class Title: Engineering Technician I Class Code: 3541**

 **Pay Grade: 413**

**GENERAL CLASS DESCRIPTION:**

Prepares construction/maintenance project designs, programs, and cost estimates. Inspects materials, equipment, and workmanship used, assuring conformance to plans and specifications.

**CHARACTERISTIC DUTIES AND RESPONSIBILITIES:**

1. Prepares cost estimates for building construction, maintenance, and alteration projects.
2. Recommends modifications in design/maintenance criteria and specifications.
3. Prepares design working drawings, sketches, and drafts for remodeling, repairs, or new building construction projects, including heating, ventilation, air conditioning, plumbing, and electrical components.
4. Designs, programs, installs and commissions automation systems.
5. Prepares specifications for public bid projects.
6. Prepares and initiates orders for materials and/or equipment.
7. Interprets blueprints and specifications and discusses deviations to insure compliance with institution, local, state, and federal building codes and regulations.
8. Inspects materials and workmanship used in construction or repairs for conformance to specifications and plans.
9. Prepares design and as-built drawings, specifications, estimates, maintenance procedures, and reports.
10. Observes work in progress to insure that procedures followed conform to specifications or master program plan.
11. Prepares periodic and completion reports for projects.
12. Conducts performance tests of mechanical, electrical or plumbing systems.

**KNOWLEDGE, SKILLS, AND ABILITIES:**

1. Ability to follow written and oral instructions.
2. Knowledge of technical drafting or engineering practices, procedures and reference sources.
3. Ability to communicate effectively with staff, students and the public.
4. Ability to identify and evaluate technical problems when conducting performance testing procedures.
5. Skill in operating technical equipment related to specified trade area.
6. Skill in utilizing computer software for uses such as design, scheduling, planning and or data management.
7. Ability to perform preventive maintenance and repairs on technical equipment.
8. Ability to estimate labor and material costs, and to prepare, initiate and obtain quotes and orders for project materials and equipment.

**MINIMUM ELIGIBILITY REQUIREMENTS:**

1. Two years post high school education in a related technical field including carpentry, plumbing, electrical, and/or heating, ventilating, and air conditioning, and
2. Two years related experience, which includes regular participation in activities such as project planning, designing, ensuring code compliance, estimating project costs, investigating problems, recommending actions or similar tasks, or
3. An equivalent combination of training and experience totaling four years.

H:(hr/classdes) 3541 **REVISION EFFECTIVE: July 1, 2003**