

Class Code:.....0734
Position#: (PSA) (E) ..8810
Developed by:.....PD
Reviewed by:.....SG
Approved by:.....LK
Date:.....2/99; 7/13

UNIVERSITY OF RHODE ISLAND
Position Description

TITLE: Mechanical Engineer
DIVISION: Administration & Finance (Capital Projects)
REPORTS TO: Director, Capital Projects
GRADE: 15
SUPERVISES: As assigned

BASIC FUNCTION:

Oversee the design, installation, and commissioning of the heating, refrigeration, ventilating, air conditioning (HVAC) and other mechanical systems throughout the University.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

Serve as project manager for the design, installation and commissioning of mechanical systems.

Develop standard requirements for work by design consultants and review the work for satisfactory performance.

Perform engineering design work, planning, analysis, and studies of mechanical systems.

Provide technical and professional support to University architects, Campus Planning and Design staff, Facilities Services staff, and Capital Projects project manager(s) in the HVAC, energy and utility areas.

Assist operations and maintenance divisions with trouble shooting equipment and with preventive maintenance programming.

Manage large and complex projects, and maintain the budget(s) and schedule(s) for the assigned projects.

Select, recommend and develop design standards for the University's mechanical systems.

Select engineering alternatives to be investigated, and compare the alternatives. Make engineering decisions or review and approve proposed decisions prior to their implementation, including consideration of alternatives.

Direct production of plans, reports, proposals, qualification statements, interview presentations, and other products for delivery to clients.

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Perform quality control audits to minimize errors and omissions.

Responsible for executing engineering documents prepared by himself/herself or for those prepared under his/her supervision.

Periodically visit project site(s) to observe materials and completed work to ensure their general compliance with plans, specifications and design concepts.

Apply specialized engineering knowledge and practical experience to the analysis and design of relevant complex projects.

Exercise good engineering judgment in making adaptations and modifications to standard engineering practice.

OTHER DUTIES AND RESPONSIBILITIES:

Communicate effectively through writing, graphics and public speaking.

Continually review professional journals and Federal and State design and code standards.

Maintain contacts with the vendors and designers in order to stay current with the construction products and technology.

LICENSES, TOOLS AND EQUIPMENT:

Personal computers, printers; word processing, database management, and spreadsheet software; computer-aided design software.

ENVIRONMENTAL CONDITIONS:

This position is not substantially exposed to adverse environmental conditions.

QUALIFICATIONS:

REQUIRED: Bachelor's degree in mechanical engineering; a minimum of 5 years' cumulative experience which includes the design and project management of HVAC systems, as well as their installation, operation, inspection, supervision, and maintenance; demonstrated thorough knowledge of the operation, maintenance and inspection of fan coils, air handling units, air and water-cooled chillers, absorption chillers, cooling towers, heating boilers, pumps, HVAC controls (pneumatic and DDC), motor controls, and auxiliary equipment; demonstrated working knowledge of the practices, methods, procedures and techniques used in the efficient and economical operation of heating, cooling, and ventilating equipment; demonstrated ability to maintain essential records and files of the relevant equipment, materials, and outside services; demonstrated knowledge of word processing, database management, spreadsheet, and computer-aided design and project management software; demonstrated ability to work with diverse groups. Must have and maintain, or be able to secure within 6 months and maintain, a Rhode Island Professional Engineers License (P.E.).

ALL REQUIREMENTS ARE SUBJECT TO POSSIBLE MODIFICATION TO REASONABLY ACCOMMODATE INDIVIDUALS WITH DISABILITIES.