

Job Code: . 100562  
Position#: (PTAA) (NE)  
Developed by:.....JS  
Reviewed by:....LK/SG  
Approved by:.....LK  
Date:10/12;10/17;9/18;2/20

**UNIVERSITY OF RHODE ISLAND**  
**Position Description**

**TITLE:** Technician, Environmental Management Controls Systems (EMCS)  
**DIVISION:** Administration & Finance (Facilities Services)  
**REPORTS TO:** Technician II, EMCS  
**GRADE:** 10  
**SUPERVISES:** SMTs and others as assigned; tradesmen and technicians

**BASIC FUNCTION:**

Program, maintain, and repair the University's Environmental Management Control Systems (EMCS) and associated heating, ventilation and air conditioning (HVAC) systems and equipment. Perform quality assurance inspections and EMCS programming for Facilities Management to insure compliance with design specifications, contract documents, building codes, and LEED specifications. Work with design engineers on building designs to insure the constructability and operability of building EMCS and HVAC systems.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

Program, maintain and repair EMCS and HVAC systems and equipment.

Modify EMCS programming.

Coordinate with staff from appropriate shops to maximize efficiency and performance in systems coordinated and managed by the building EMCS to include HVAC, lights, water heaters, fume hoods, research equipment, and other computerized building management systems. Insure equipment meets design specifications and customer expectations.

Troubleshoot digital, electric and pneumatic control systems to determine causes of failures, and perform the required repairs as soon as possible. Request assistance from the appropriate contractors, as necessary, in order to accomplish more extensive repairs. Assist in the development of the bid specifications, and in the management of these contracts, as needed.

Evaluate and troubleshoot nonfunctional building systems managed by EMCS to determine if the problems are control or hardware issues, and initiate the required repairs.

Assist HVAC personnel and other technicians on the correct operation of EMCS equipment.

Analyze the emergency management control systems and compare to the latest technology. Assist with the design and upgrades needed to keep the systems both current and operating correctly.

**OTHER DUTIES AND RESPONSIBILITIES:**

Monitor and inspect construction projects at the direction of the Manager.

Review contract plans and specifications.

Review EMCS programming and modifications with EMCS Manager.

Coordinate with Campus Planning and Design and with the Office of Capital Projects to insure plans and specifications are in compliance with URI design standards.

Perform other duties as required.

**LICENSES, TOOLS AND EQUIPMENT:**

Computers, printers; word processing, spreadsheet and database software; electronic diagnostic equipment; hand tools; tools of the trade; office equipment (e.g., fax, phone, calculator); motor vehicle; safety equipment. May use cell phones and radios to communicate with others. Valid driver's license.

**ENVIRONMENTAL CONDITIONS:**

While this position is not substantially exposed to adverse environmental conditions, outdoor work involves exposure to all weather/climate conditions and temperatures; exposure to high voltage current, noxious chemicals, high-pressure systems, moving parts and asbestos. May work in small, cramped areas. Work may involve lifting and carrying objects weighing as much as 75 pounds up to 50 yards as a regular part of the job. Climbing, stooping, bending, reaching, walking and sitting for extended periods of time may be required.

**QUALIFICATIONS:**

**REQUIRED:** Any one of the five following credentials: 1) High school diploma with a minimum of five years' experience as an energy management controls systems technician, OR, 2) High school diploma, licensure as a refrigeration technician or licensure as an electrician, a minimum of five years' experience on energy management control systems equipment, and completion of a recognized training program with certification in the field, OR, 3) Associate's degree in an engineering field or a computer science field, with five years of experience in the analysis, troubleshooting, and repair of heating, ventilation, lighting, and building systems with Energy Management Controls, OR, 4) Master Electrician License, OR, 5) Master HVAC License; Demonstrated knowledge of digital and electrical controls; Demonstrated knowledge of pneumatic controls; Demonstrated knowledge of heating and cooling systems; Demonstrated knowledge of air-conditioning systems; Demonstrated knowledge of engineering and construction techniques; Demonstrated knowledge of computer controlled energy management systems; Demonstrated strong interpersonal and verbal communication skills; Demonstrated proficiency in written communication skills; and, Demonstrated ability to work with diverse groups/populations. Must have a valid driver's license.

**PREFERRED:** Associate's degree; Rhode Island State Refrigeration license; Certification in EMCS from a recognized training institution; Demonstrated knowledge of co-generation and thermal storage; and, Demonstrated experience in

a university or campus setting working on large systems with centralized control systems.

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