

BOARD OF REGENTS STATE OF IOWA

REGENT MERIT SYSTEM

Class Title: Environmental Systems Mechanic III

Class Code: 5093

Pay Grade: 216

GENERAL CLASS DESCRIPTION:

Performs skilled work in the area of installation, repair, alteration, replacement and maintenance of components of environmental systems such as refrigeration, temperature control, chillers, heating (all fuel types) systems to include other support systems and emerging technology equipment. Utilizes computerized control systems to collect, analyze and modify mechanical system performance to ensure system reliability and system optimization.

CHARACTERISTIC DUTIES AND RESPONSIBILITIES:

1. Performs all duties listed under Environmental Systems Mechanic I and II.
2. Operates, inspects, maintains and repairs chillers, chilled water equipment and systems to include associated auxiliary equipment such as air compressors, air dryers, pumps, chiller tube bundles, heat exchangers, and other emerging technology equipment and systems.
3. Perform leak tests, transfer refrigerants, charge machines and otherwise handle Freon refrigerants according to EPA regulations.
4. Conducts a variety of audible, visual and mechanical tests, uses computerized building environmental automation systems, records and service reports and other tools to diagnose and recommend system modifications to improve equipment and system performance.
5. Modifies building automation systems that control heating and cooling systems.
6. Provides functional guidance and training to apprentices, replacements, students and other personnel as required.
7. Investigates methods and equipment to be used in computerized building environmental automation systems and makes recommendations to engineers.
8. Other duties as assigned by appropriate department or administrative personnel.

The tasks listed under the heading of Characteristic Duties and Responsibilities are examples of the variety and general nature of duties performed by employees in positions allocated in the class. The list is descriptive only and should be used for no other purpose. It is not intended that any position include every duty listed nor is it intended that related duties cannot be required.

KNOWLEDGE, SKILL, AND ABILITIES:

1. Knowledge, skills and abilities listed under ESM I and ESM II classifications.
2. Knowledge of the principles of operations, methods, materials, and tools utilized in the installation, troubleshooting, maintenance, calibration and repair of environmental systems. Skill and ability to utilize data to make recommendations and modifications to improve and optimize system performance.
3. Knowledge of computerized building environmental automation systems and ability to collect, analyze and modify system performance through the systems.
4. Ability to operate, inspect, maintain, and repair chilled water systems
5. Ability to operate, inspect, maintain, and repair variable frequency drives
6. Ability to collect data and provide technical recommendations consistent with institutional energy goals.
7. Ability to work in all types of environmental conditions or in areas where there is exposure to excessive noise, dirt, and fumes and at elevated heights from ladders, scaffolds, or hydraulic lifts.
8. Ability to work independently during normal work hours and after hours.

MINIMUM ELIGIBILITY REQUIREMENTS:

1. Eight years of experience in computerized building environmental automation systems, refrigeration or air conditioning work, including apprenticeship, with two years of experience in evaluating and recommending system optimization changes, or two years of experience in evaluating and recommending system optimization changes and meets the minimum eligibility requirements of ESM II; and
2. Has refrigeration certificate of at least type 2.
3. May need to possess a valid driver's license and meet University's Fleet Safety Program.
4. Journeyman license required
5. Prefer 2 years of college/trade school