

**BOARD OF REGENTS  
STATE OF IOWA  
REGENT MERIT SYSTEM**

**Class Title:** Environmental Systems Mechanic I

**Class Code:** 5090

**Pay Grade:** 210

**GENERAL CLASS DESCRIPTION:**

Under direct supervision, performs skilled work in the area of installation, repair, alteration, replacement and maintenance of components of refrigeration, air conditioning and heating (all fuel types) equipment.

**CHARACTERISTIC DUTIES AND RESPONSIBILITIES:**

1. Installs and maintains air-moving, heating, cooling, humidification and filtering equipment and systems such as fans, heat pumps, gas unit heaters, forced air equipment, furnaces, radiant heating, condensers, compressors, pumps, fan coil units, rooftop package air conditioning units, computer room cooling units, etc.
2. Installs and maintains various styles and types of refrigeration equipment and systems.
3. Installs and maintains equipment related to heating and cooling, such as air compressors, air dryers and associated non-automated controls.
4. Tests and evaluates performance of air-moving, heating, cooling, humidification and filtering equipment such as fans, heat pumps, forced air, radiant heating, condensers, compressors, pumps, fan coil units, rooftop package air conditioning units, computer room cooling units, etc. using specialized equipment; repairs or replaces defective valves, thermostats and other parts.
5. Reads and interprets blueprints, schematics and other drawings, diagrams and specifications.
6. Prepares records and service reports.
7. Uses chain falls, hoists and chokers to safely lift large heavy components into position.
8. Provides guidance to apprentices and/or students as required.
9. 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.

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**KNOWLEDGE, SKILL, AND ABILITIES:**

1. Knowledge of the principles of operations, methods, materials and tools utilized in the installation, troubleshooting, maintenance, calibration and repair of air-moving, heating, cooling, humidification and filtering equipment and systems such as fans, heat pumps, gas unit heaters, forced air equipment, furnaces, radiant heating, condensers, compressors, pumps, fan coil units, rooftop package air conditioning units, computer room cooling units, etc.
2. Ability to properly braze refrigeration tubing and connections.
3. Knowledge of occupational hazards and safety precautions mandated by the Occupational Safety and Health Administration, National Fire Prevention Association, National Fire Code and the Environmental Protection Agency, etc.
4. Knowledge, skill and ability to evaluate equipment for either repair or replacement and determine the amount of time and materials necessary to accomplish the task with least downtime of equipment.
5. Ability to interpret blueprints, diagrams and equipment specifications.
6. Knowledge of proper bending and lifting techniques.
7. Skill in the proper use and care of hand and power tools and test equipment.
8. Ability to work in areas of high heat, dust and noise and in confined spaces or on a ladder.
9. Ability to work independently during the normal workday and in an on-call status.
10. Ability to communicate effectively orally and in writing.
11. 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.
12. Ability to work independently during normal work hours and after hours.

**MINIMUM ELIGIBILITY REQUIREMENTS:**

1. Four years of experience in refrigeration, heating or air conditioning work, including apprenticeship; and
2. Has refrigeration certificate of at least type 2.
3. Must possess a valid driver's license and meet University's Fleet Safety Program.