

MORGAN STATE UNIVERSITY

JOB SPECIFICATON



HVAC MECHANIC III

Class Code: 6970
Pay Range: 14

FLSA Code: N/E (Non-Exempt)

JOB SUMMARY

Under general supervision, installs, services, repairs, and operates a variety of large, complex commercial and industrial heating, ventilation and air conditioning (HVAC) systems, including large regional heating and cooling facilities serving 10 -15 campus buildings. Mechanics at this level are responsible for maintaining all components, subcomponents, and aspects of HVAC equipment, including reciprocating, screw, centrifugal and absorption chiller plants. Mechanics at this level work on HVAC equipment ranging up to the largest available from manufacturers in buildings ranging in size up to 500,000 gross square feet (GSF).

PRIMARY DUTIES

1. Installs and repairs HVAC equipment such as centrifugal, reciprocating, and screw compressors, hydronic pumps, natural and propane gas burners, and central station air handler fans of forward curve, vane axial and backward incline design.
2. Diagnoses, repairs and maintains low pressure steam piping equipment, vessels and valves.
3. Installs, diagnoses, and repairs all facets of temperature control systems to maximize system performance.
4. Diagnoses, repairs and maintains variable speed drive devices and power electronic devices. Programs Direct Digital Controllers (DDC).
5. Diagnoses airside and hydronic deficiencies from field observations.
6. Performs indoor air quality (IAQ) analysis of facilities making necessary modifications to correct deficiencies.

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7. Supervises contractors and performs warranty notification for assigned projects. Provides guidance and training in the HVAC trade to other maintenance personnel.
8. May direct the work of other mechanics in the fabrication, installation, testing and servicing of HVAC systems.
9. Performs all the duties of HVAC Mechanic II.
10. Interprets technical data, manufacturer and supplier information. Recommends equipment selections. Develops analysis of system operation based on mechanical drawings and specifications.

Note:

The intent of this list of primary duties is to provide a representative summary of the major duties and responsibilities of this job. Incumbents perform other related duties assigned. Specific duties and responsibilities may vary based upon departmental needs.

MINIMUM QUALIFICATIONS

EDUCATION: High School Diploma or GED.

EXPERIENCE:

Eight years progressively responsible experience in any combination of air conditioning, refrigeration, temperature control, steam distribution, or heating trades.

REQUIRED KNOWLEDGE/SKILLS/ABILITIES

Comprehensive knowledge of the principles of air conditioning and refrigeration; of the practices and techniques used in the installation, repair and maintenance of HVAC equipment and systems; of refrigerant types, environmental impact, and gas reclamation procedures and equipment. Thorough knowledge of OSHA regulations related to the refrigeration trade; of National Electric Code; of basic mathematics including area, volume, and weights and the practical application of fractions, percentages, ratios, and proportions. Thorough knowledge of plumbing, steam fitting, and the electrical trades as they pertain to HVAC systems. Skill in the installation, repair and maintenance of commercial or industrial HVAC equipment and systems; in the use and maintenance of tools and equipment of the trade; in welding, brazing, soldering, and silfoss; in reading and interpreting blueprints, schematics, drawings, specifications, and contract documents; in the use of dial indicators, venire calipers, and depth micrometers; in using computers to diagnose HVAC system problems. Ability to read and explain manufacturer recommendations regarding scheduled and preventive maintenance, servicing and

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operation; to prepare written reports; to communicate effectively both orally and in writing; to provide direction and training to mechanics and other maintenance personnel in the HVAC trade; to program computers for HVAC system operations; to estimate costs of installing HVAC systems up to 100 tons; to work in, on, around, over and under fixed equipment and machinery; to work at heights up to 35 feet; to manipulate heavy equipment, tools and supplies and/or exert force up to 50 lbs.; to concurrently manipulate multiple controls on machinery and equipment; to work in hazardous or irritating environments, confined spaces, and adverse weather or temperature conditions; to wear and work in personal protective equipment.

OTHER:

Except for qualifications established by law, additional related experience and formal education in which one has gained the knowledge, skills, and abilities required for full performance of the work of the job class may be substituted for the education or experience requirement on a year-for-year basis with 30 college credits being equivalent to one year of experience.

CONDITIONS OF EMPLOYMENT

Candidates selected for employment may be subject to medical inquiries and/or medical examinations to determine ability to perform the job. Employees assigned to work with CFC refrigerants must maintain valid certification in accordance with federal law. Valid Maryland Non-commercial Class C or equivalent driver's license may be required. Candidates selected for employment may be required to be trained to work with asbestos.