SANTA ROSA JUNIOR COLLEGE

TITLE	CLASSIFICATION	SALARY GRADE
HVAC AND CONTROLS TECHNICIAN	CLASSIFIED	GRADE: O
BOARD POLICY REFERENCE: 2012/2013 Classification Study		Board Approved:

JOB DESCRIPTION:

Under general supervision, perform master journey-level work in the repair, maintenance, service, modification, troubleshooting, inspection and monitoring of the operation of heating, ventilating, air conditioning and refrigeration equipment and associated plumbing, electrical, mechanical, EMS (Energy Management Control System) and control~~s~~ systems in keeping with District-wide sustainability initiatives; serves as lead worker to other classified staff in the area; and perform related work as required.

SCOPE:

Incumbents monitor and adjust the full range of heating, cooling, ventilation, and refrigeration equipment by means of an energy management system as well as hands-on work; write, modify, code, analyze, enhance and debug EMS computer control software programming and train others in the use of controls software programming; set up, troubleshoot, repair, test and calibrate electronic components for EMS computer control; troubleshoot, maintain, modify and repair heating, ventilating and air conditioning systems and equipment including DX (direct expansion) and hydronic systems, fans and fan motors, pumps and pump motors, electric and pneumatic controls, and associated safety, overcurrent and other equipment protection devices; respond to trouble calls.

KEY DUTIES AND RESPONSIBILITIES

Examples of key duties are interpreted as being descriptive and not restrictive in nature. Incumbents routinely perform approximately 80% of the duties below. The following duties are listed both as trade specific and shared responsibilities.

1. Troubleshoots, maintains, inspects, modifies and repairs heating, ventilation systems, air conditioning and refrigeration systems and equipment including boilers, air handlers, DX and hydronic systems and components, screw, reciprocating and absorption chillers, cooling towers, fans and fan motors, pumps and pump motors, electric controls and associated safety, overcurrent and other equipment protection devices.
2. Implements and facilitates the Energy Management System (EMS) and HVAC controls and Indoor Air Quality (IAQ); configures, analyzes, troubleshoots and enhances programs to balance energy management with comfort control; prepares documentation and control flow charts; monitors and adjusts computer based EMS program for proper HVAC comfort and energy management control.
3. Evaluates preliminary mechanical design plans and specs for remodels, upgrades or new construction and provides control “sequence of operation” for HVAC equipment to be incorporated into design plans and specs.
4. Monitors work done by outside contractors for adherence to state and federal Code Requirements and reports back to supervisor.
5. Assists in the writing of specifications for repairs and new construction.

Shared Responsibilities:

1. Maintains appropriate service and repair records.
2. Researches, purchases and inventories equipment parts, chemicals and supplies.
3. Responds to routine and emergency calls for repairs and service.
4. May train and direct the work of other classified staff in the area.
5. Assists and serves as back up to other Facilities employees.

EMPLOYMENT STANDARDS

ABILITY TO:
Think analytically and independently; troubleshoot, maintain, modify and repair heating, ventilation systems, air conditioning and refrigeration systems and equipment including Freon systems, electric fan and pump motors, electric controls and associated safety, overcurrent and other equipment protection devices; configure, analyze and troubleshoot EMS computer programs; perform heavy physical labor; read and comprehend plans and blueprints as appropriate to trade; train and direct the work of other classified staff in the area; follow and give oral and written instructions; maintain cooperative working relationships; demonstrate sensitivity to, and respect for a diverse population.

KNOWLEDGE OF:
Thorough knowledge of various energy management systems, heating, ventilation systems, air conditioning and refrigeration systems; use and maintenance of trade specific materials, tools, instrumentation, and equipment; applicable building and safety code requirements; methods and practices followed in the maintenance of tools, machinery, and equipment; basic computer software including e-mail and service request systems; safety precautions to be observed in the maintenance and installation of electronic and mechanical equipment.

Preferred:
Air and Hydronic Balancing, Boolean Logic and electronics knowledge.

MINIMUM QUALIFICATIONS:
Candidates/incumbents must meet the minimum qualifications as detailed below, or file for equivalency. Equivalency decisions are made on the basis of a combination of education and experience that would likely provide the required knowledge and abilities. If requesting consideration on the basis of equivalency, an Equivalency Application is required at the time of interest in a position (equivalency decisions are made by Human Resources, in coordination with the department where the vacancy exists, if needed.)

Education:
Graduation from high school, supplemented by completion of a Union, private (in-house), military, or trade school apprenticeship program that includes theory and on-the-job work.

Experience:
Four years journeyman experience working as an HVAC mechanic in a commercial, industrial or large facilities environment.

Preferred:
Associate's degree and energy audit and absorption and screw chiller experience.

LICENSE OR CERTIFICATE:
This classification requires an EPA Refrigerant Recovery Certification (refrigeration license preferred). Must possess a valid (Class C) California driver's license and an acceptable driving record.

SPECIAL REQUIREMENTS:
Must be able to perform physical activities, such as, but not limited to, lifting equipment (up to 50 lbs. unassisted), bending, standing, climbing or walking. Must be able to safely use manual tools and power equipment common in the construction trades. Must be able to handle hazardous materials safely and tolerate exposure to electrical hazards as well as environmental hazards such as mold~~s~~ and various solvents.