

## BUILDING AUTOMATION TECHNICIAN

### **DEFINITION**

Under general supervision, performs a variety of skilled and semi-skilled duties to perform installation, programming, inspection, testing, and repair of electronic building systems that ensures the efficient operation of heating, ventilation, and air conditioning (HVAC) controls and campus energy management system (EMS) to meet both comfort and energy conservation requirements; assists in the inspection and testing of centralized building fire alarm and notification systems, automated light controls, and other low voltage electrical and electronic devices and systems.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from the assigned managerial personnel.

### **CLASS CHARACTERISTICS**

This is a journey-level class responsible for performing skilled and semi-skilled duties related to the installation, programming, inspection, testing and repair of electrical and electronic building systems at College buildings and facilities required to ensure that all are maintained in a safe and effective working condition and provide the highest level of safety for College and public use. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. This classification is distinguished from other facilities maintenance classifications in that it specializes in building automation systems maintenance repair requiring additional skill and training.

### **EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only)**

1. Performs skilled and semi-skilled preventative and predictive maintenance, inspection, testing, repair, and installation of digital, electrical, and electronic control equipment related to air conditioning, fume hood, and exhaust systems.
2. Researches and implements ways to fully utilize and improve existing systems to assure the most efficient overall campus energy utilization; schedules HVAC according to building occupancy schedule.
3. Performs a daily review of the system, troubleshoots, and makes sure necessary changes are made in programming and calibration to ensure proper operation of controls and instrumentation; works with contractors to adjust set points and cycling equipment on/off as needed for project completion.
4. Identifies energy conservation measures (ECM's) throughout the campus by making visual inspections and identifying deficiencies.
5. Assists with troubleshooting and analysis to ensure maximum reliability and efficiency.
6. Monitors inventory levels of materials and equipment; orders, receives, and maintains inventory of materials and equipment as needed.
7. Records and maintains work and material records.
8. Observes safe work methods and makes appropriate use of related safety equipment as required.
9. Maintains work areas in a clean and orderly condition, including securing equipment at the close of the workday.

10. Provides needed information and demonstrations concerning how to perform certain work tasks to new employees.
11. Assists other College employees with various projects related to the college's energy management systems.
12. Supports and complies with federal and state laws, Board Policies, and Administrative Procedures.
13. Provides quality customer service when interacting with the public, vendors, students, and College staff, including individuals from minoritized groups.
14. Participates on committees, task forces, and special assignments, including, but not limited to Screening and Selection Committees and affiliated mandated trainings, as required. Prepares and delivers oral presentations related to assigned areas if needed.
15. Works directly with people from various ages, disabilities, socio-economic levels and ethnic groups.
16. Maintains regular attendance.
17. Performs other related duties as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

1. Principles, practices, methods, equipment, materials, and tools used in building automation operations.
2. Operation of HVAC controls and campus energy management system (EMS) to meet both comfort and conservation requirements.
3. Automated building management systems, energy conservation equipment, and related components. HVAC, lighting, systems and controls.
4. Applicable federal, state, and local laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
5. Occupational hazards and safety equipment and practices related to the work.
6. Standard office practices and procedures, including the use of standard office equipment, basic record-keeping, and arithmetic.
7. Safe work practices, including safe driving rules and practices.
8. English usage, spelling, vocabulary, grammar, and punctuation.
9. Techniques for providing a high level of customer service by effectively interacting with the public, vendors, students, and College staff, including individuals of various ages, disabilities, socio-economic levels and ethnic groups.

### **Skills & Abilities to:**

1. Perform a variety of complex technical tasks related to building automation installation, repair, and maintenance work.
2. Perform basic preventative maintenance of building automation equipment and systems.
3. Skillfully and safely operate a variety of light equipment and power and hand tools used in the building automation field.
4. Troubleshoot building automation problems.
5. Interpret, apply, explain, and ensure compliance with applicable federal, state, and local policies, procedures, laws, and regulations.
6. Understand and follow written and verbal directions, instructions, and safety rules and procedures.

7. Maintain accurate logs, records, and basic written records of work performed.
8. Operate modern office equipment, including computer equipment and software programs.
9. Read and interpret construction drawings, specifications, plans, manuals, diagrams, blueprints, and technical regulations.
10. Make accurate arithmetic calculations.
11. Operate a truck and observe legal and defensive driving practices.
12. Organize own work, set priorities, and meet critical time deadlines.
13. Communicate effectively through various methods.
14. Learn and apply emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
15. Understand scope of authority in making independent decisions.
16. Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures.
17. Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**Education and Experience:**

1. Equivalent to the completion of the twelfth (12<sup>th</sup>) grade; and
2. Two (2) full-time equivalent years of experience performing duties related to the installation and maintenance of HVAC controls, energy management systems, metering devices, instrumentation, and electronic and pneumatic process controls.

**Desirable Qualifications:**

A certification in building automation, HVAC control technology, and computer network management from an approved institution.

**Licenses and Certifications:**

The incumbent is required to drive to a variety of locations. This will require the incumbent to possess and maintain a valid California driver's license and proof of automobile insurance and maintain insurability under the College's vehicle insurance policy.

**PHYSICAL DEMANDS**

Must possess mobility to work in and around College buildings and facilities, to operate a motor vehicle and drive on surface streets; strength, stamina, and mobility to perform light to medium physical work, to work in confined spaces and around machines, to climb and descend ladders, and to operate varied hand and power tools and equipment; vision to read printed materials and a computer screen and hearing and speech to communicate in person and over the telephone or radio. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate above-mentioned tools and equipment. Positions in this classification bend, stoop, kneel, reach, and climb to perform work and inspect work sites. Incumbents must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds, or heavier weights with the use of proper equipment.

## **ENVIRONMENTAL ELEMENTS**

Incumbents work in and around buildings and facilities and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Incumbents may interact with staff and/or public and private representatives and contractors in interpreting and enforcing departmental policies and procedures.

Amended: 1/2026