

FRESNO UNIFIED SCHOOL DISTRICT
Position Description

TITLE:	Technician, Energy Management	REPORTS TO:	Maintenance and Operations, Manager II
DEPARTMENT:	Maintenance & Operations	CLASSIFICATION:	Management
FLSA:	Non-Exempt	WORK YEAR:	12 Months
BOARD APPROVAL:	May 30, 2018	SALARY:	S-50/ Supervisory Salary Schedule

BASIC FUNCTION:

Under the direction of the Maintenance Manager II, provide maintenance, scheduling & repair of automation controllers, engineering & troubleshooting software programming of the District Automation Control System to ensure the operation of exterior lighting and HVAC equipment, providing a safe, comfortable learning and working environment for students and staff. Assess specific problems encountered in the field and determine an appropriate path to resolution utilizing familiarity with several areas of building automation engineering and protocols.

REPRESENTATIVE DUTIES: (Persons employed in this position may perform any combination of the essential functions shown below (E). This position description is not intended to be an exhaustive list of all duties, knowledge, or abilities associated with this classification, but is intended to accurately reflect the principal job elements.)

Evaluate the programming logic of control element devices to manipulate flows, energy, positions, speeds, and other variables in the creation or troubleshooting of mechanical equipment. *E*

Maintain and apply knowledge of basic signal circuit design (e.g., two-wire, four-wire, isolated inputs/outputs, loop or external powering, etc.). *E*

Maintain and apply knowledge of signal communications system architecture physical layers (e.g., RS-485 serial, Ethernet, wireless, paired conductors, fieldbus, industrial networks, etc.) and signal communications protocols (e.g. MSTP, Niagara R2, Ethernet/IP, Niagara N2, LonWorks, BACnet, etc.). *E*

Evaluate requirements and design of mechanical equipment to create building automation applications that will cause the equipment to function in the desired manner, facilitating utility savings in the implementation of energy management. *E*

Analyze system and user requirements, procedures, and problems to identify the system components and develop the design and functional master specification for the building automation system. *E*

Update and maintain facilities building system schedules for after school programs, staff meetings and weekend activities; receive requests for facility usage via daily phone and email requests. *E*

Maintain and apply knowledge of installation requirements (e.g., grounding, shielding, constructability, input/output termination, environmental, heat load calculations, power load requirements, purging, etc.). *E*

Establish standards, templates, and guidelines as applied to the automation system using the information gathered in the definition stage and considering human-factor effects in order to satisfy customer design criteria and preferences. *E*

Perform related duties as assigned.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: graduation from high school and completed college-level courses in computer systems, network, control or electrical engineering, HVAC or related field, and two years' experience in the electrical/electronics trades, or IT field. Certified in the Niagara AX Framework or the ability to obtain the certification within six months.

LICENSES AND OTHER REQUIREMENTS:

Valid California Driver's License.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Basic computer programming and spreadsheet applications.
Application programming using multiple protocols created in the Niagara AX Platform.
Control logic.
Electrical theory.
Basic PC hardware troubleshooting.
Interpersonal skills using tact, patience and courtesy.
Oral and written communication skills.
Correct English usage, grammar, spelling, punctuation and vocabulary.
Principles and practices of supervising, training, and providing work direction.
District organization, operations, policies, objectives and goals.

ABILITY TO:

Perform technical work in the operation, control and programming of the District Energy Management System.
Perform detailed analysis by converting the engineering and system design into purchase requisitions, interpreting drawings, panel designs, and installation details consistent with the specification and functional descriptions in order to provide detailed information for development and deployment of Building Automation Systems to District Facilities Project Manager and vendors.
Establish and maintain cooperative and effective working relationships with a diverse range of people.
Ensure the safe and efficient operation of the District Building Automation System to provide a safe, clean, and orderly learning and working environment.
Work independently with discretion and many interruptions.
Operate a vehicle.
Train, supervise, and evaluate district personnel.
Plan and organize work to meet schedules and time lines.
Observe legal and defensive driving practices.
Communicate, understand, and follow both oral and written directions effectively.
Communicate using patience and courtesy in a manner that reflects positively on the organization.
Assist in sustaining and monitoring the financial viability of the district.
Actively participate in meeting District goals and outcomes.
Apply integrity and trust in all situations.

WORKING CONDITIONS:

ENVIRONMENT:

Indoor and outdoor work environment; drive a vehicle to conduct work; exposure to adverse weather conditions. Constant interruptions; excessive intermittent noise; occasional contact with dissatisfied individuals; repetitive activities

PHYSICAL ABILITIES:

With reasonable accommodations, if necessary, walking, bending at the waist, kneeling, ladder climbing, working from heights, lifting up to 50 lbs., stooping, reaching overhead, above the shoulders and horizontally to perform field investigations and monitor performance; crawling under and over equipment to replace or troubleshoot controllers and building automation hardware; seeing to inspect work, read and write; writing, hearing and speaking to exchange information and/or make presentations; sitting or standing for extended periods of time; dexterity to operate computer and other office equipment.

HAZARDS:

Monitoring equipment performance at District site's roofs or in mechanical rooms.

Fresno Unified School District is an Equal Opportunity Employer and reasonable accommodations are made under the Americans with Disability Act as required by law.

E=Essential Functions