

# SEMINOLE COUNTY PUBLIC SCHOOLS, FLORIDA

## Position/Job Description

### ENGINEER, Controls and Building Automation System

#### QUALIFICATIONS

- Bachelor's Degree in Mechanical Engineering, Electrical Engineering, or Engineering Technology and a minimum four (4) years industry related technical field experience working with HVAC systems, DDC systems, software control systems, and device calibration; **OR** Technical degree in HVAC, Computer Science, Industrial Automation or related field and a minimum six (6) years industry related technical field experience working with HVAC systems, DDC systems, software control systems, and device calibration.
- Must have familiarity with hardware and software used to monitor and control industrial systems to include programmable logic controllers, analog and digital instrumentation as well as experience with Building Automation and Control Networking Protocol (BACNet) and Modbus inter-operable standard network protocol.
- Valid Florida driver's license.

#### KNOWLEDGE, SKILLS, ABILITIES

- Strong and in-depth knowledge and understanding in design building of automation solutions for institutional facilities.
- Effective skills in oral and written communications.
- Possess excellent interpersonal skills, problem solving skills, and strong construction and troubleshooting skills.
- Ability to balance and prioritize multiple tasks and requests.
- Knowledge of state and local codes.
- Knowledge of computer applications as related to job functions.

#### SUPERVISION

**REPORTS TO** Coordinator HVAC Operations  
**SUPERVISES** Assigned Personnel

#### POSITION GOAL

*To provide program oversight in the operation and maintenance of all building automation systems to maximize efficiency and minimize costs.*

#### PERFORMANCE RESPONSIBILITIES

1. \*Oversee, control, administer, repair, and modify as needed the district's Building Automation System(s) (BAS).
2. \*Manage planning, documentation, and installation of building mechanical and electrical systems and equipment; controls systems for software and architecture; and BAS controls devices.
3. \*Manage the daily operation of temperature control systems.
4. \*Perform quality assurance and peer review of controls and BAS related engineering documents.
5. \*Inspect specialized systems to ensure operation of equipment is within design capabilities and achieves operational conditions.
6. \*Perform preventative and corrective maintenance.
7. \*Calibrate, test, and repair sensors and actuators.
8. \*Perform diagnostic tests of BAS and HVAC of new and existing BAS.
9. \*Perform BAS controls system software programming and configuration.
10. \*Manage resources required to program and configure the integration between multiple vendors and proprietary software.
11. \*Program DDC modules to meet exact sequence of operation.
12. \*Coordinate work of vendors, contractors, and OEM representatives performing system maintenance.
13. \*Provide technical support and guidance to HVAC staff members.
14. Perform other duties as assigned by the Coordinator HVAC Operations.

\*Denotes essential job function/ADA

## EQUIPMENT / MATERIALS

Standard Office Equipment, Commercial HVAC Diagnostic & Repair Tools, Hand and Power Tools.

## PHYSICAL REQUIREMENTS

**Medium Work** Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.

## PHYSICAL ACTIVITIES

<b>Sitting</b>	Resting with the body supported by the buttocks or thighs.
<b>Standing</b>	Assuming an upright position on the feet particularly for sustained periods of time.
<b>Walking</b>	Moving about on foot to accomplish tasks, particularly for long distances.
<b>Climbing</b>	Ascending or descending ladders, stairs, scaffolding, ramps, poles, etc. Using feet and legs and/or hands and arms.
<b>Balancing</b>	Maintaining body equilibrium to prevent falling when walking, standing or crouching on narrow, slippery or moving surfaces.
<b>Bending</b>	Lowering the body forward from the waist.
<b>Stooping</b>	Bending body downward and forward by bending spine at the waist through the use of the lower extremities and back muscles.
<b>Kneeling</b>	Bending legs at knee to come to a rest on knee or knees.
<b>Crouching</b>	Bending the body downward and forward by bending leg and spine.
<b>Crawling</b>	Moving about on hands and knees or hands and feet.
<b>Twisting</b>	Moving body from the waist using a turning motion.
<b>Reaching</b>	Extending hand(s) and arm(s) in any direction.
<b>Pushing</b>	Using upper extremities to press against something with steady force order to thrust forward, downward or outward exerting up to 20 pounds of force.
<b>Pulling</b>	Using upper extremities to drag, haul or tug objects in a sustained motion exerting up to 20 pounds of force.
<b>Lifting</b>	Raising objects from a lower to a higher position or moving objects horizontally from position to position through the use of the upper extremities and back muscles exerting up to 20 pounds of force.
<b>Finger Dexterity</b>	Picking, pinching, typing or otherwise working primarily with fingers rather than with the whole hand or arm.
<b>Grasping</b>	Applying pressure to an object with the fingers and palm.
<b>Feeling</b>	Perceiving attributes of objects, such as size, shape, temperature or texture by touching with the skin, particularly that of fingertips.
<b>Repetitive Motions</b>	Substantial and continuous movements of the wrists, hands, and/or fingers.
<b>Talking</b>	Expressing or exchanging ideas by means of the spoken word. Those activities in which detailed or important spoken instructions must be conveyed accurately, loudly or quickly.
<b>Hearing Acuity</b>	The ability to perceive speech and other environmental sounds at normal loudness levels.
<b>Visual Acuity</b>	The power to see at a level which allows reading of numbers and text, operation of equipment, inspection of machines, etc.

## WORKING CONDITIONS

<b>Indoors &amp; Outdoors</b>	The worker is subject to both environmental conditions. Activities occur inside and outside.
<b>Cold</b>	The worker is subject to extreme cold. Temperatures are below 32 degrees for periods of more than one hour.
<b>Heat</b>	The worker is subject to extreme heat. Temperatures are above 100 degrees for periods of more than one hour.
<b>Noise</b>	The worker is subject to noise. There is sufficient noise to cause the worker to shout in order to be heard above the ambient noise level.
<b>Vibration</b>	The worker is subject to vibration. There is exposure to oscillating movement of the extremities of the whole body.
<b>Hazards</b>	The worker is subject to hazards. This includes a variety of physical conditions, such as proximity to moving mechanical parts, electrical current, working on scaffolding and high places, and exposure to high heat or chemicals.
<b>Atmospheric Conditions</b>	The worker is subject to atmospheric conditions. One or more of the following conditions affect the respiratory system or the skin, fumes, odors, mists, gasses or poor ventilation.

<b>TERMS OF EMPLOYMENT</b>
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**PAY GRADE****AO-10-F \$67,673 - \$103,807**

District Salary Schedule  
Months 12  
Annual Days 258  
Weekly Hours 37.5  
Annual Hours 1935

**POSITION CODES**

PeopleSoft Position	TBD
Personnel Category	14
EEO-5 Line	44
Function	7900
Job Code	2123
Survey Code	79037

**FLSA**

Applicable  
 Not applicable

Previous Board Approval

**BOARD APPROVED****March 8, 2022**

ADA Information Provided by Kim Dove  
Position Description Prepared by Kim Dove