Job Title: Tech II, Controls Systems Job Family: No Family

Job Code: ND17 Grade ST15 \$48,100 - \$81,800

FLSA status: Non-exempt

Job Summary

Solves complex problems related to the control systems that direct the operation of building heating, ventilation, air conditioning and equipment. Assesses building system performance against design parameters and implements necessary changes to ensure efficient and effective energy performance. Programs advanced control equipment and building automation systems to implement such changes. Responsible for digital, electronic, pneumatic, lighting and utility metering control systems.

Essential Functions

- 1. Assesses and troubleshoots the performance of complex building air condition, heating, ventilating, lighting, and related systems against designed operating parameters in terms of electrical, chilled/hot water and domestic water usage, energy efficiency and air quality. Monitors building system performance using the Johnson Controls Metasys and other building automation systems. Uses equipment to take flow and pressure measurements for air, water, and HVAC systems. Develops repair strategies for bringing these building systems back within the designed control parameters for improved performance. Identifies equipment that is not performing properly and initiates work orders/projects to repair or replace. Identifies equipment controls that are not operating properly and repairs, replaces, or reprograms the controllers to ensure optimal system performance. Installs, operates, repairs, calibrates, adjusts, replaces and monitors digital, electric, and/or pneumatic building control systems components and making necessary corrections to match building and occupant requirements for campus buildings.
- 2. Programs the software of digital building controls, at both the equipment and system level, including HVAC, utility meters, lighting, fume hoods, and laboratory systems, internet addressable thermostats and other Smart Building technologies, to make modifications and improvements to system performance; connect new equipment, components, and sensors into the building control system; implement scheduled operations for daily use, including normal and special scheduling for campus spaces; and update, troubleshoot, debug, monitor, and revise software for building control systems.
- 3. Works with campus and consulting engineers in the design of capital and repair/renovation projects to review building control systems designs to ensure that they are implementable, functional, and maintainable and they address critical building performance requirements or operational issues. Participates in the building commissioning process at the completion of a project to ensure that all building control systems are operation as designed and all equipment is functioning properly per the designed control sequences prior to University acceptance of the building.
- 4. May be responsible for meeting and maintaining training and certification requirements as outlined by the Auburn University Facilities Management Policy: "Training, Education, and Certification Requirements for Mechanical and Electrical Trades Personnel".
- May be required to serve in an on-call status and remain work-ready when scheduled for an on-call period or rotation. Work-ready status requires an employee to return to the worksite within forty-five minutes while being physically and mentally unimpaired and fit for duty, able to safely perform all essential job functions with no risk to self, coworkers, students, public, or property.

Supervisory Responsibility

May be responsible for training, assisting or assigning tasks to others. May provide input to performance reviews of other employees.

The above essential functions are representative of major duties of positions in this job classification. Specific duties and responsibilities may vary based upon departmental needs. Other duties may be assigned similar to the above consistent with the knowledge, skills and abilities required for the job. Not all of the duties may be assigned to a position.

Minimum Required Education and Experience

	Minimum	Focus of Education/Experience
Education	Some college; vocational or Associate's Degree	Associates Degree in Control Systems, Heating, Ventilating, or Air Conditioning (HVAC), Electrical, Digital Electronics, Energy Management or related degree is required.
Experience (yrs.)	13	Ten years' experience working in control systems. Three years of which must have been at the HVAC, Electrician, Plumber or Plant Operations Technician III level or equivalent. Must also have 3 years' experience working on control systems on the Auburn University Campus to ensure familiarity with campus

Substitutions allowed for Education:

When a candidate has the required experience, but lacks the required education, they may normally apply additional relevant experience toward the education requirement, at a rate of two (2) years relevant experience per year of required education.

Substitutions allowed for Experience:

Indicated experience is required; no substitutions allowed.

Minimum Required Knowledge

Knowledge of HVAC, electrical, plumbing, utility plant, or high voltage distribution systems at the HVAC, Electrician, Plumber, Plant Operations, or High Voltage Electrician skills at the Technician III level.

Knowledge of building automation systems, building systems control components, digital electronics, Direct Digital Control (DDC) systems and components, pneumatic control systems and components, control theory, and expertise in energy management systems.

Knowledge of how to program in the Johnson Control Metasys Energy Management System.

Knowledge of how to program in the energy management and building automation systems produced by other manufactures.

Skills:

Ability to program and modify control sequences for HVAC, Electrical, or Utility system control equipment.

Ability to program building control systems to implement scheduled operations for daily use, including routine and special scheduling for campus spaces.

Ability to solve complex HVAC/energy control problems.

Ability to install, operate, repair, troubleshoot, calibrate, adjust, replace and monitor electronic, electric and/or pneumatic building control systems for HVAC, lighting, fume hood and laboratory systems and utility metering; including adjusting complex HVAC systems and making necessary corrections to

match building and occupant requirements for campus buildings.

Ability to troubleshoot, debug, monitor, and revise software for building control systems including HVAC, utility meters, lighting, Internet addressable thermostats and other Smart Building technologies. Use equipment to take flow and pressure measurements for air and water HVAC systems.

Certification or Licensure Requirements

Valid Driver's License.

International Society of Automation (ISA) Certified in Controls Systems Technician Levels I & II, or approved equivalents per Auburn University Facilities Management Policy: "Training, Education & Certification Requirements for Mechanical and Electrical Trades Personnel".

The following certifications dependent on area of specialization or approved equivalents per Auburn University Facilities Management Policy: "Training, Education & Certification Requirements for Mechanical and Electrical Trades Personnel":

HVACR: Universal Refrigerant Card, North American Technician Excellence (NATE) HVAC Support Technician Certification, and HVAC Service Technician Certification.

Electrical: State of Alabama Electrician Journeyman's License (if license is registered in another state, Alabama license must be obtained in the first 6 months of employment) and Certification from the National Institute for Certification in Engineering Technologies (NICET) Fire Alarm Installation I.

Plumbing: Valid Journeyman's Plumber's License, National Inspection Testing Certification (NITC), and STAR Plumbing Mastery Certification.

Plant Operations: Universal Refrigerant Card and National Institute for the Uniform Licensing of Power Engineers (NIUPE) 4th Class Power Engineer Certification.

Physical Requirements/ADA

Frequent heavy or intense physical requirements, combined with exposure to a number of disagreeable elements, such as heat, cold, noise, dust, dirt, chemicals. Injury may require professional treatment or hospitalization. Constant precautions required.

Externally imposed deadlines; set and revised beyond one's control; interruptions influence priorities; difficult to anticipate nature or volume of work with certainty beyond a few days; meeting of deadlines and coordination of unrelated activities are key to position; may involve conflict-resolution or similar interactions involving emotional issues or stress on a regular basis.

Job frequently requires standing, walking, reaching, climbing or balancing, stooping/kneeling/crouching/crawling, hearing, handling objects with hands, and lifting up to 50 pounds.

Job occasionally requires sitting, talking, and lifting up to 100 pounds.

Vision requirements: Ability to see information in print and/or electronically.

Date: 8/9/2019