

BSD Solutions Ltd

Commercial Building HVAC Controls Systems Designer

SUMMARY of DUTIES:

As a Controls System Designer you will be involved in the design and implementation of Digital Control Systems for small, medium and large Commercial buildings. The three elements of this position are listed below. At this time we are looking for an individual to assist primarily with programming and graphical interface configurations.

- Hardware System Design - This involves applying control products in an overall hardware design to meet the requirements of the project plans and specifications. This also includes parts selection, parts ordering, producing detailed controls wiring diagrams and creating electrical wiring schematics. A good understanding of Commercial building HVAC systems, building electrical systems and AutoCad programming are required.
- Software Programming - This involves preparing application programs to meet the performance requirements as set by the project plans and specification and the hardware design. This process requires the use of custom application software and requires a good understanding of commercial building HVAC systems. Some PLC programming experience is required.
- Graphical Interface Configuration - This involves the creation of a custom Graphical User Interface (GUI) that is based on the Hardware and Software Program designs and meets all project specification requirements. Part of this process includes the development and preparation of system graphics for review and approval by the client and/or Engineer. Experience with graphical software and some knowledge of HVAC system is required.

ESSENTIAL RESPONSIBILITIES:

Project Scope

- Confirms an understanding of work to be completed with the immediate supervisor.
- Confirms an understanding of hour allowed for each task.

Project Planning:

- Reviews the plan project plan with immediate supervisor.

Project Monitoring and Control:

- Completes timesheets and reports completion percentage and all tasks on a weekly basis.
- Identifies any known areas of cost overruns to the team manager.

Project Application Design Process

- Communicate with Technicians and Electricians in the field, making sure everyone is working in coordination.
- Independently learns new technical systems and tools.
- Researches solutions to technical questions, problems and requests.
- Prepares work submittals for review and approval by clients/consultants.
- Corresponds with consulting engineers, equipment vendors and others firms in an effort to get all issues clarified prior to commencement of work onsite.

Performs other duties as assigned by the immediate supervisor or senior management.

SUPERVISORY RESPONSIBILITIES:

No supervisory responsibilities required.

PERFORMANCE STANDARDS:

- Completion of all tasks
- Low to no error rate
- Extremely knowledgeable about new products and services available in the industry

QUALIFICATION REQUIREMENTS:

To perform this position successfully, an individual must be able to perform each of the essential duties satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE:

- College or Technical School certificate in Electronics or Mechanics
- Minimum of two years of experience
- Must have sound computer skills, AutoCAD
- Must have electrical and mechanical HVAC applications

LANGUAGE SKILLS:

- Ability to read and write correspondence in English
- Ability to communicate effectively

MATHEMATICAL SKILLS:

- Ability to frequently carry out basic numeric calculations

REASONING ABILITY:

- Ability to use judgment and reasoning to solve practical problems and deal with situations where basic standardization exists and in situations involving sufficient information

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this position.

- While performing the duties of this position, the employee is continually required to talk and hear and to use their hands to finger, handle, or feel. The employee frequently sits and sometimes stands and/or walks and reaches with hands or arms but is rarely required to stoop, climb or balance.
- The employee is sometimes required to lift and/or move up to 50 pounds. Diverse vision requirements are needed, including close, distance, colour, adjust/ focus, depth perception and peripheral vision.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this position.

- This position is normally effected by environmental conditions. While working on a job site, this position has exposure to:
 - Works near moving mechanical parts
 - Fumes or airborne particles
 - Outdoor weather conditions
- The noise level in the work environment is moderate.

MENTAL DEMANDS:

The mental characteristics necessary to competently perform this position include the need to continuously be alert, precise and accurate, have the ability to concentrate with meticulous attention to detail and the ability to prioritize work and work independently. Frequently this position needs to be resourceful, multi-tasking, capable of confidentiality, problem-solving and to demonstrate strong interpersonal and customer service skills.