

## Controls and Automation Engineer

**Office Location:** Pittsburgh, PA and Wyomissing, PA

**Salary:** Commensurate with experience

### Job Description

RPA Engineering is seeking an experienced Controls and Automation Engineer with the ability to develop and communicate technical requirements in a highly collaborative environment. The Controls and Automation Engineer's main responsibility will be creating wiring diagrams, programming, starting/commissioning. The ideal candidate will be able to recognize issues, address them, and implement fixes quickly and effectively. The Controls and Automation Engineer will devise layouts and studies to determine the best and most efficient ways to solve engineering issues that may arise. This individual will perform tasks associated with electrical, electromechanical and programming design and commissioning of automated machinery, process instrumentation, plant support systems, plant data collection, industrial communication networks and operator user interface devices.

This individual will collaborate with cross-functional teams to ensure that controls fit within the design guidelines of the product as well. The individual will work with a talented team and contribute to each phase of the system development lifecycle.

### Company Benefits:

- Excellent work-life balance and flexible work week
- Hybrid work environment/ability to work from home
- Growth Opportunities within the Organization
- Paid overtime, time off and sick days

### Education/Experience:

- Four-year degree in related engineering field
- Highly versatile in all aspects of programmable logic controllers (PLCs) such as Rockwell and Siemens PLCs from concept development to start up and commissioning.
- Robotic programming & integration experience. Manufacturers include but not limited to Fanuc, Motoman, ABB, Adept, Universal Robots, etc.
- DCS and SCADA experience. Manufacturers include Emerson, ABB, GE
- User interface programming, including FactoryTalk ME/SE, WinCC, Wonderware
- Industrial Motion Controls using drive and servo systems.
- Preferred experience with Safety Automation Equipment (Rockwell GuardLogix, Siemens Safety PLC's)
- Preferred experience with Industrial Safety Systems (ISO 13849)
- Ability to communicate complex technology solutions to diverse teams namely, technical, business and management teams
- Complete understanding of PID loop uses and tuning.

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WYOMISSING, PA  
VALLEY FORGE, PA  
PITTSBURGH, PA  
RALEIGH, NC  
VENICE, FL



**Tasks, Responsibilities, & Utilized Skills:**

- Performs Programming Tasks including but not limited to PLC programming, HMI programming, VFD/servo programming, robot programming, historian programming and programming of instrumentation such as process meters.
- Utilize electrical and basic electronic knowledge of AC single phase & three phase circuits, DC sinking & sourcing circuits, digital control circuits and analog control circuits i.e. 4-20mA, 0-10V, & thermocouple mV signals.
- Utilize electromechanical knowledge of devices such as motors, solenoid valves, limit switches, encoders, relays etc. Become familiar with fluid power systems and its relationship with machine automation, support systems, and electrical & controls design.
- Assist in the electrical design of equipment or systems including PLC hardware selection, VFD/servo selection, relay & motor starter design & selection, process instrumentation design, control power design, safety circuit design, and interconnection circuit design and configuration.
- Assist in onsite commissioning of equipment and the execution of tasks such as troubleshooting and control loop tuning.
- Familiar with AutoCAD software and the creation and review of electrical and process documents such as schematics, I/O layouts, electrical distribution and Process and Instrumentation diagrams.
- Assist in general electrical design as needed while practicing accepted or required standards such as NEC or other NFPA requirements.
- Program PLCs and HMIs systems for new or modified equipment utilizing RSLogix 5, 500, 5000, FactoryTalk Studio software, Studio5000, ControlLogix and CompactLogix.
- Selection, configuration, and setup of automation technologies including distributed I/O (Rockwell, Siemens, GE, etc) and industrial fieldbuses (Profinet, Ethernet IP, MODBUS, etc.).
- Desire to participate in maintaining cutting edge knowledge in the field of technology specifically in PLC advancements highly innovative thinker, engaging in continuous improvement opportunities
- *Travel will be required for field investigations, customer meetings, and startup and commissioning activities*