# Controls Engineer

## Job Description:

Our client has a Controls Engineer position open in Orlando, FL. This position is responsible for electrical/controls engineering on large-scale projects. Project requirements involve control system design from scratch (hardware/software/network), electrical panel design and power calculations, risk assessment, component selection and configuration, control system programming, and control system installation/commissioning.

## Responsibilities:

- Responsible for system design from blank sheet of paper to create concept of electrical/control components based on project requirements.
- Experience doing design via drafting software (AutoCAD preferred)
- Provide input, and system modification as needed, for system integration with other project disciplines
- Able to interface with facility design to optimize panel location minimizing voltage drop and designing a more efficient system hardware layout
- Manage vendor scope to verify safety, functionality, and all contract requirements are satisfied
- Ensures design complies with any local or government agency design/implementation codes in addition to client codes/standards
- Project technical risk assessment document generation and mitigation implementation
- Design and analysis for safety-critical parts within a control system
- Designing redundant mitigations in system to increase safety and reliability
- Designing systems with complex motion and integration from automated systems
- Develops documents of system configuration and design. Documents include
- Description of operation, Detailed control system design description, panel assembly drawings and schematics, termination drawings, network layout, system implementation/acceptance test plans, system routine maintenance/job plans
- Able to perform the following system design calculations/analysis: Short circuit protection, harmonics, noise reduction/cancellation, power consumption, load flow, short circuit protection, protective relay/circuit design, ground fault monitoring, safety system implementation (SIL/PL rating knowledge is preferred)
- Knowledge of ride system design for attractions involving guests is preferred
- Capable of working “off” shifts as needed during installation/commissioning to support project

## Qualifications:

- Bachelor’s degree in electrical engineering. (Other disciplines may be acceptable if work experience is directly related to electrical engineering.
- 5+ years of electrical/controls experience required.
- Experience working with hardware/software from one of the major industrial manufacturers (i.e. Allen-Bradly, Siemens, etc.).
- Experience with ethernet-based distributed remote I/O systems.

- Experienced working in a multi-disciplined environment and interfacing with engineers, designers, and drafters.
- Experience in ASTM standards, attractions industry, and safety engineering preferred.
- Must be organized, technically competent, and have effective oral and written communications skills.
- Proficient with MS Windows Office suite

## Key Competencies:

- Knowledge of contract documents and specifications.
- Ability to collect field data and accurately record findings.
- Ability to perform system design functions. Planning, Customer Focused, Timely Decision Making, Informing, Organizing, Priority Setting, and Problem Solving.

## Travel Requirements:

- Ability to travel up to 30% worst case (10% was the average with last couple of years of projects).

## Physical Demands:

- Seeing, color perception, hearing, listening, clear speech, dexterity in hands, driving, lifting, climbing, ability to mount and dismount equipment, pushing, and pulling.

## Working Conditions:

- Expected to be onsite 5 days a week
- Standard office environment, and diverse industrial/construction environments.