Exempt  Non Exempt  Primary  Secondary

**Position Title:** Electrical Engineer Senior Professional **Job Code:** PAE-E50966

**Company Conformance Statement**

In the performance of their respective tasks and duties all employees are expected to conform to the following:

* Perform quality work within deadlines with or without direct supervision.
* Interact professionally with other employees, customers, and suppliers.
* Work independently while understanding the necessity for communicating and coordinating work efforts with other employees and organizations.

Employees are required to:

* Comply with all applicable safety- and health-related rules, regulations, and procedures;
* Work safely themselves and help their teammates work safely;
* Assist supervisors and managers in identifying and mitigating potentially hazardous conditions; and
* Help the organization maintain a safe and healthy workplace.

**Purpose of the position**

Will perform assigned electrical engineering duties as a LeNgineer employee onsite at the NASA Johnson Space Center. Plans, designs, develops, modifies and evaluates power generation and distribution, electrical controls, components, mechanisms, materials, circuitry, equipment or processes Understanding of alarm philosophy documentation. Ability to generate and present various reports. Develop, implement, and maintain alarm rationalization plans. Strong fundamental knowledge of control and electrical system design and its application in designs including specification of vision, power, sensor, inspections, and communication systems

**Principal Responsibilities of the Position**

* Design, upgrade, troubleshoot, electronic and electrical control systems, software, equipment, etc. in accordance with government policies, procedures, industry regulations, capable of designing and troubleshooting complex electrical functions while working independently.
* Ability to diagnose facilities equipment involving checking voltages, bad components, gauges, as well as making software adjustments
* Working from electrical schematics, diagnose, and isolate electrical and electronics issues in a timely manner
* Knowledge of Programmable Logic Controls (PLCs), HMI Programming, digital and analog sensors; Knowledge of VFDs, Generator Controls and their interfaces
* Experience with low/medium/high voltage equipment
* High voltage equipment and components (switch gear, load centers, contactors, motors, breakers, fuses)
* Low voltage components and requirements (controls, sensors, shielded wiring)
* Must have working knowledge of motors control centers and distribution controls systems
* Ability to Multi-Task in a fast pace dynamic environment
* Provide support to engineering design and maintenance department on projects involving modifications to control systems. This includes review of design for open architecture and standardization of controls.
* Conducts validation, verification and qualification testing. Conducts error testing of systems and circuit designs.
* Provides product support as appropriate by isolating faults and resolving design issues.
* Ensures electrical designs comply with product specifications. Verifies designs are implemented with accurate consideration for power management, systems interfaces, etc.
* Ensures designs incorporate approval agencies and electrical safety standards. Participates in reviews with various governing agencies for code compliance.
* Reviews vendor capability to support product development and recommends product specifications and component selection. Monitors the activities of subcontracted technical services.

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**Education and Experience Requirements**

* B.S. degree in Electrical Engineering with a strong Controls & Instrumentation background
* Five or more years of engineering experience or product design and development Experience working with engineering processes and procedures
* Experience working with drawings standards including tolerances and detail drawings
* Instrumentation, and Supervisory Control and Data Acquisition systems (SCADA) preferred
* Experience working with department's overall business objectives and goals
* Professional Engineering License in the State of Texas. PE license from other state is acceptable at the time of start but a Texas License must be obtained within the agreement period.
* Experience with National Electrical Code (NEC)

**Requirements**

* Must be a U.S. Citizen (*Permanent Resident may be accepted*) in order to obtain required NASA badge.
* Must be able to provide a certified Birth Certificate (with state seal), Passport, or INS Citizenship documents on date of hire (candidate will be sent home if this paperwork is not provided upon arrival on date of hire).
* Must have the ability to communicate the English language, both verbally and written, in an effective manner.
* Must have, and maintain, a valid Texas driver’s license.
* Must be able to pass a Pre-Employment background check and drug screen test.
* Clean, neat, and professional personal appearance.
* Will insure quality and completeness of work in a safe and timely manner as well as insuring areas worked are clean, neat and ready for customers needs when complete.

**Special Knowledge and Skills Required**

* Skills in computer assisted design (CAD) software such as Pro/Engineer, SolidWorks, and MicroStation, etc.
* Strong human relations skills to select, develop, mentor, discipline and reward employees
* Strong interpersonal skills to establish/maintain customer and vendor relationships
* Strong organizational and time management skills
* Strong analytical and problem solving skills
* Strong comprehension skills for understanding needs and developing and applying solutions
* Strong communication skills
* Ability to manage staff and work as part of a business development team
* Ability to troubleshoot technical problems either on-site or remotely
* Ability to work productively across diverse customer sites, with different levels of technical focus
* Ability to manage large or multiple projects.

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**Physical Requirements**

* Dexterity to operate office equipment as required by the position.

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**Preferences**

* Prior knowledge of NASA site, experienced with working on government installations preferred.

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