



Electrical/Controls Engineer (Principal or Senior Principal)

***U.S. citizenship or U.S. permanent resident status required**

About Uni-Systems Engineering

Uni-Systems Engineering is a premier provider of custom mechanization for iconic structures and attractions that create unforgettable experiences. We partner with engineers, architects, and construction managers to mitigate risk and deliver functionally integrated, reliable structures. Our team of mechanical, structural, and electrical engineers deliver custom, project-specific solutions to complex and unprecedented engineering challenges. With expertise spanning industries such as Aerospace, Amusement and Entertainment, Stadiums and Ballparks, Telescope Observatories, and Custom Cranes, we bring engineering excellence to every project.

Visit our website (www.uni-engineer.com) to learn more.

Job Summary

Uni-Systems Engineering is expanding with a second location in the Orlando, FL metro area. We are seeking a highly motivated and talented Principal or Senior Principal-level Electrical Controls Engineer to join our team in Orlando. This is a unique opportunity to play a key role in shaping the success of our Florida office and working on high-profile projects in Amusement, Entertainment, and Aerospace industries.

In this role, you will lead the design, integration, and commissioning of advanced control systems, delivering solutions that exceed client expectations. You'll serve as a technical leader, mentoring junior engineers and working directly with customers and company leadership. Success in this position requires strong technical expertise, proven project leadership skills, and the ability to work effectively both independently and as part of a team.

Responsibilities

- Provide strategic leadership and technical oversight for the design, integration, and commissioning of complex controls systems across high-value projects.
- Mentor a team of controls engineers, fostering technical excellence, professional growth, and collaboration.
- Collaborate closely with project managers, mechanical and electrical engineering teams, and clients to ensure seamless controls integration and system performance that meets or exceeds requirements.
- Serve as the primary controls engineering point of contact for key clients, driving technical discussions, design reviews, and troubleshooting during all project phases.
- Establish and enforce best practices, standards, and processes for controls system architecture, programming, testing, and commissioning.
- Manage risk identification and mitigation strategies specific to controls engineering scope.

- Oversee prototype development, system validation, and field commissioning activities, ensuring quality and reliability of delivered controls solutions.
- Stay abreast of emerging controls technologies, software platforms, and industry trends, proactively integrating innovations to enhance system capabilities and project efficiency.
- Support business development efforts by contributing technical insights for proposals, presentations, and client communications related to controls systems.

Job Requirements

Minimum Qualifications

- Bachelor's degree in Electrical Engineering, Systems Engineering, Computer Engineering, or related field from an ABET-accredited institution.
- 10+ years of progressive experience in controls engineering, with at least 5 years in a leadership or management role overseeing controls teams or projects.
- Proven track record leading the design, integration, and commissioning of complex control systems involving PLCs, HMIs, VFDs, servo systems, and motor controllers.
- Strong ability to independently interpret electrical schematics, develop comprehensive design documentation, and enforce engineering standards.
- Extensive technical expertise of control system architecture, functional safety, and relevant industry codes and standards (e.g., NEC, NFPA, IEC).
- Demonstrated success in project leadership, resource management, risk mitigation, and client relationship management.
- Develops technical solutions to complex problems that require the regular use of ingenuity and creativity.
- Experienced leader in driving innovation, process improvement, and adoption of emerging controls technologies.
- Exceptional communication and interpersonal skills, including experience presenting to senior leadership and customers.
- U.S. citizenship or permanent residency (Green Card holder) required.
- Willingness to travel up to 15%, primarily to corporate offices and client sites.

Preferred Qualifications

- Master's degree in Electrical Engineering, Controls Engineering, Systems Engineering, or related field.
- Professional Engineer (P.E.) registration, preferably Florida or other relevant states.
- 15+ years of experience working in the Amusement, Entertainment, or related industrial automation industries.
- Proficiency with Allen-Bradley controls hardware/software and other major PLC platforms (e.g., Siemens).
- Extensive experience with AutoCAD, EPLAN, or other electrical drafting/design software.

- Proven track record managing risks and delivering results on complex, unprecedented custom control system designs.
- Demonstrated ability to independently prepare and deliver comprehensive project reports covering technical analysis, compliance, issue resolution, and communication with diverse stakeholders.
- Well versed with relevant industry standards and codes, including ASTM F2291 (Amusement), IEC 61508 (Functional Safety), and NFPA standards.
- Willingness and enthusiasm for fieldwork, including hands-on commissioning, troubleshooting, and client support.
- Knowledgeable in other related engineering disciplines.
- Experience leading cross-functional teams and driving continuous improvement in engineering processes and project delivery.

Benefits of Employment

- Competitive salary and growth opportunities.
- Comprehensive benefits package including medical, dental, vision, life, and disability insurance.
- 401(k) plan with above-market company matching.
- Generous Paid Time Off (PTO) and Paid Company Holidays.
- HSA and FSA options.
- A collaborative culture built on integrity, respect, innovation, value and enterprise.

If you're passionate about solving complex engineering challenges and shaping innovative solutions, we encourage you to apply for this exciting opportunity at Uni-Systems Engineering!

Contact

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