



Electrical/Controls Engineer (Senior or Principal)

About Uni-Systems Engineering

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

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 Senior or 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 cutting-edge control systems, ensuring that our solutions exceed client expectations. You will also provide critical warranty support, field troubleshooting, and sustaining engineering, supporting world-class clients in Florida. This position requires a self-starter with excellent technical skills, leadership capabilities, and the ability to thrive in both independent and collaborative environments.

Responsibilities

- Lead the concept, design, and implementation of advanced electrical control systems, including PLCs, HMIs, VFDs, servo systems, and network architecture.
- Work closely with architects, contractors, consultants, and internal engineering teams during design reviews to provide project updates and ensure seamless integration of systems.
- Develop and execute prototype testing, system commissioning, and debugging for new assemblies and structures. Lead design reviews, including CDR, PDR, and FDR milestones.

- Provide high-level technical support for warranty and troubleshooting services for high-profile clients in Florida.
- Conduct inspections and tests of components at manufacturing facilities before shipment and oversee installation in the field.
- Prepare detailed design documentation and collaborate with field and purchasing teams to ensure high-quality components and systems.
- Stay updated on advancements in controls hardware and software, integrating new technologies to improve system performance.
- Provide technical expertise to support the development of proposals and marketing initiatives.

Job Requirements

Minimum Qualifications

- B.S. Degree from an ABET accredited institution in Electrical Engineering, Systems Engineering, Computer Engineering.
- 5+ years of experience with a B.S. or 3+ years with an M.S. in a related engineering field.
- Proven experience with PLCs, HMIs, VFDs, servo systems, and motor controllers.
- Strong knowledge of Rockwell Studio 5000 controls hardware and software.
- Ability to read and interpret electrical schematics and create detailed design documentation.
- Comprehensive understanding of control system architecture design and functional safety.
- Experience in system commissioning, troubleshooting, and customer support.
- Familiarity with the National Electrical Code (NEC).
- Strong problem-solving skills, logical thinking, and a commitment to innovation.
- Excellent time management and communication skills.
- Must be a U.S. citizen or a U.S. permanent resident (current Green Card holder).
- Ability to travel up to 20%, primarily to our Minneapolis corporate office.

Preferred Qualifications

- M.S. Degree in related field.
- Florida E.I.T or P.E. registration.
- 2+ years' working in the Amusement or Entertainment industry.
- Proficiency with AutoCAD, Eplan or other related drafting software.
- Comprehensive understanding of 3-phase motors and facility power systems.
- Experience managing risks associated with unprecedented custom designs.
- Experience in reporting on the status of projects, technical analysis, compliance to standards, issues resolution, and stakeholder communication.
- Familiarity with amusement and automation industry standards, including ASTM F2291.
- Enjoys field work and getting hands dirty

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!