Uni-Systems Engineering, Inc.

6105 Trenton Lane North Minneapolis, MN 55442





Electrical Designer

**Must be a U.S. citizen or a U.S. permanent resident (current Green Card holder) .

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

We're seeking an experienced Electrical Designer to produce electrical drawings and documentation, specify and source control components, support assembly and testing, and participate in field installation and commissioning. You will work closely with project managers, construction managers, and the mechanical and structural design teams to deliver shop-ready drawings and reliable field systems. This role requires strong hands-on electrical skills, clear documentation, and the ability to support installation and troubleshooting onsite.

- Produce electrical schematics, wiring diagrams, single-line diagrams, panel and layout drawings, termination and junction drawings, and cable schedules using AutoCAD (or equivalent).
- Create and maintain accurate electrical BOMs, connector lists, and procurement documentation.
- Document part specifications, source parts and components, and write purchase orders; coordinate lead times with vendors.
- Assemble and test electrical assemblies in-house and at subcontractor sites; perform wiring checks and FAT support.
- Perform quality control inspections and support shop verification activities.
- Install and test power, control, LAN, and fiber-optic cabling onsite; perform terminations and onsite electrical commissioning.
- Provide telephone and on-site support for existing installations, troubleshooting, and field modifications.
- Coordinate with Mechanical and Structural teams on component placement, routing, and field interfaces.
- Drive continuous improvement by recommending and implementing enhancements to quality, assembly, function, cost, and maintenance.

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(763) 536-1407 uni-engineer.com

Perform additional tasks as requested by management.

Job Requirements

- Must be a U.S. citizen or a U.S. permanent resident (current Green Card holder) .
- AA/AAS degree in Automated Systems preferred and/or a licensed Electrician.
- 5+ years' experience in Electrical Design and/or installation
- Strong electrical industrial experience a plus
- Low Voltage installer experience a plus
- Operational knowledge of electrical control systems, including PLCs, VFDs, and industrial networks.
- 2-D CAD skills (AutoCAD/ePlan).
- Skilled at industrial control installations, including cable and wire terminations.
- Analytical and troubleshooting skills.
- Proficient at using analysis and design software that is relevant to the business.
- Familiarity with relevant codes (N.E.C., etc.).
- Communicates effectively with management, employees, vendors, and customers.
- Self-directed; demonstrates initiative, accuracy, and professionalism in producing quality work.
- Results-oriented; oven ability to organize, plan, and prioritize work to meet deadlines.
- 20% domestic and foreign travel, during installation and commissioning of projects and maintenance or repair.

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