



Uni-Systems Engineering, Inc.

6105 Trenton Lane North
Minneapolis, MN 55442

(763) 536-1407
uni-engineer.com

Mechanical Engineer (Senior or Principal) -Orlando, FL

*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 Senior or Principal-level Mechanical 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 while working primarily on high-profile projects in the Amusement, Entertainment, and Aerospace industries.

In this role, you will provide engineering leadership, design, and analysis of complex mechanical systems for our clients. You will collaborate closely with internal teams and external stakeholders to ensure project success, delivering innovative solutions on time and within budget. This position requires a self-starter with exceptional technical expertise, strong leadership abilities, and a passion for hands-on fieldwork and collaborative design processes.

Responsibilities

- Design and develop complex machinery, including gearing, actuators, wheels, weldments, bearings, and related assemblies.
- Perform engineering calculations and analyses to support the design and development of mechanical systems.
- Serve as Project Engineer, managing design, implementation, and coordination across multidisciplinary teams.
- Develop design concepts and oversee their transformation into detailed engineering documentation.
- Lead design reviews and collaborate with contractors, architects, consultants, and clients to ensure alignment and resolve technical challenges.
- Maintain regular communication with clients to manage expectations and ensure project objectives are met.
- Prepare and manage design schedules and budgets, ensuring timely and cost-effective project delivery.

- Provide documentation and support for purchasing, fabrication, and commissioning activities.
- Travel to project sites for commissioning and field troubleshooting, ensuring seamless system integration.

Job Requirements

Minimum Qualifications

- B.S. Degree from an ABET-accredited institution in Mechanical, Structural, or Aerospace Engineering
- E.I.T. credential with plans to pursue the P.E. exam
- 5+ years of experience with a B.S. degree, or 3+ years with an M.S. degree, in a related engineering field
- Experience with design and analysis of mechanical equipment
- Strong desire to solve mechanical problems, from bearings to actuator sizing, with a system-level focus
- Excellent time management and communication skills
- U.S. citizenship or U.S. permanent resident status (current Green Card holder)
- Ability to work remotely initially, with a transition to in-person at the Orlando, FL office in Q3 2025
- Willingness to travel up to 20%, primarily to our Minneapolis corporate office

Preferred Qualifications

- M.S. Degree in Mechanical, Structural, Aerospace, or a related engineering discipline.
- Florida P.E. license
- 2+ years of experience in the Amusement or Entertainment industry, or related fields.
- Proficiency in CAD and FEA tools, including SolidWorks, SolidWorks Simulation, and Ansys.
- Strong expertise in GD&T (Geometric Dimensioning and Tolerancing).
- Practical experience with motors, actuators, gearing, hydraulics, and related mechanical systems.
- Hands-on knowledge of fabrication techniques and machine shop processes.
- Demonstrated experience with FEA analysis and hand calculations for structural and mechanical components.
- Familiarity with relevant industry standards, including ASTM F2291, AISC, and AWS.
- Awareness of control and electrical systems and their integration with mechanical components.
- Proven ability to collaborate effectively with multidisciplinary teams across diverse geographic locations.

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



Senior Electrical/Controls Engineer

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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HR Manager

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