

Electrical & Instrumentation (E&I) Designer

The E&I Designer prepares 2D/3D deliverables related to electrical and instrumentation project needs. These include, but are not limited to, power distribution layouts, grounding, lighting and instrument plans, loop diagrams, and installation details. The development of deliverables requires knowledge of industry codes and standards, as well as expertise in CAD techniques and design procedures. Designers work collectively with other engineering and design disciplines to create comprehensive E&I drawing packages for construction using various design software and support tools. This position will be located in our Woodlands, Texas or Tyler, Texas office.

Essential Duties & Responsibilities

- Create electrical construction drawings
- Prepare electrical designs for industrial projects
- Apply electrical design knowledge and be abreast of industry codes, standards, and best practices
- Prepare block diagrams, control/rack room layouts, cable routes, instrument location plans, DCS, SIS, FGS, and MMS system loop drawings
- Adherence to Basis of Design and maintain check sheet for all instrument design & engineering deliverables
- Develop instrumentation drawings and documents including IO lists, instrument lists, installation details, instrument locations drawings, wiring diagrams, and loop sheets
- Develop E&I documents and deliverables in conformance with project specifications, scope of work, design parameters, codes, and industry practices
- Develop electrical drawings and documents including one-line drawings, power plans, hazard classification maps, cable routing (cable tray/raceways), cable and conduit schedules, grounding, and lighting plans
- Review P&IDs
- Incorporate laser scan data and survey data into 3D model to identify interferences between new and existing structures
- Develop 3D models and other deliverables that support and maintain multi-discipline communications and requirements

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Qualifications & Experience

- 5-10 years of related experience
- Field experience preferred
- Design/Drafting Certificate (trades certificate / diploma) or a minimum of 5 years of related job experience
- AutoCAD Plant 3D (intermediate)
- Elecdes Design Suite (intermediate)
- Navisworks (intermediate)
- Microsoft Office Suite (intermediate)
- Adobe Acrobat PDF Editor (intermediate)
- PIP Process Industry Practices and Design Standards (intermediate)
- National Electrical Code (NEC) (intermediate)
- National Fire Protection Association (NFPA) (intermediate)
- International Electrotechnical Commission (IEC) (intermediate)
- High school diploma

Working for KP Engineering

As a wholly-owned subsidiary of The Shaw Group, KP Engineering is an Equal Opportunity Employer and does not discriminate on the basis of race or ethnicity, religion, gender, national origin, age, veteran disability or genetic information or any other reason prohibited by law in employment. Each of our employees receives:

- Generous health benefits
- Competitive compensation
- 401K and matching
- Ongoing professional training and development
- Opportunity to participate in community service
- Mobility/flexibility
- Commitment to work-life balance
- Exclusive team-building opportunities

This position description reflects management's assignment of essential functions, and nothing in this herein restricts management's right to assign or reassign duties and responsibilities to this position at any time.

Apply Today

Please email your resume to <u>Careers-US@TheShawGrp.com</u> to be considered for this opportunity.