

**Job Description for
Electrical Engineer**

The Electrical Engineer reports directly to the Engineering manager.

Responsibilities/Duties:

(Responsibilities include, but are not limited to the following)

Design and Development:

- Conduct electrical system design and analysis.
- Develop and design product to meet contract requirements.
- Conduct research into the feasibility, design, operation and performance of electrical generation and distribution networks, electrical machinery and components and electronic communications, instrumentation and control systems, equipment, and components.
- Ensure compliance of design to all applicable codes.
- Conduct "Root Cause Analysis" of in field failures and develop designs and strategies for correction.
- Design electrical circuits, systems and equipment.
- Prepare and review design documentation including drawings, specifications, and reports using the appropriate tools.
- Initiate design improvements and new design ideas.
- Provide technical expertise in design reviews and for various projects.
- Perform and check standard engineering calculations and detail design work.

Project Management:

- Develop scheduling for electrical design components of various projects and for electrical design initiatives.
- Lead electrical design reviews and participate in project meetings.
- Prepare material cost and timing estimates, reports and design specifications for electrical and electronic systems and equipment.
- Prepare reports and presentations for various projects.
- Address and resolve design and scheduling issues in a timely and efficient manner.
- Supervise and inspect the installation, modification, testing and operation of electrical and electronic systems and equipment.
- Develop maintenance and operating standards for electrical systems and equipment.
- Investigate electrical or electronic failures.
- Evaluate tenders for construction or maintenance.
- Provide Client support for electrical design issues.
- Liaise with Production to ensure design meets manufacturing capabilities.
- Provide technical guidance and supervision to electrical technicians/draftspeople.
- Organize subcontractors where required.
- Assist with the preparation of proposals.

Other duties:

- Initiate technical resourcing, assist Human Resources to conduct interviews, and make hiring recommendations.

- Ensure proper documentation of all work, products and relevant activities.
- Create and foster teamwork in department
- Develop and maintain interdepartmental relations.
- Travel as required.

Job Specification for Electrical Engineer

Experience:

- Bachelor of Electrical Engineering.
- Five years experience in electrical engineering position.
- Professional Engineer of Ontario.
- Proficient with Autodesk® software design tools, including AutoCAD, AutoCAD electrical and Inventor.
- Able to read and interpret engineering drawings and specifications.
- Excellent technical knowledge of electro-mechanical systems.
- Hands on knowledge of product and process design.
- Experienced with Standard MIL-STD 461
- Experienced with vehicles' electrical systems
- Experienced with industrial electrical control processes and equipments

Characteristics:

- Excellent oral and written communication skills
- Excellent organizational, planning and scheduling skills
- Excellent interpersonal skills and ability to work as part of a team
- Excellent analytical and problem-solving skills
- Able to work with minimal supervision
- Detail oriented
- Proactive thinker