

# Job Description – Electrical Design Engineer

**Revision:** October 25, 2021

Job Status: Full Time, Exempt

Position Name: Electrical Design Engineer

#### **Education**

Bachelor Degree in Electrical or Computer Engineering from an ABET-accredited university, pursuing professional registration is desirable.

### **Experience**

Zero (0) to five (5) years of experience in processing, packaging and manufacturing production systems and/or significant electrical design or programming. Candidate must be knowledgeable of or able to quickly learn electrical power, automation and information systems and their capabilities and limitations. Candidate must be computer literate. Computer aided design (CAD) and process and packaging experience is desirable.

#### **Duties**

This position reports administratively to an Engineering Manager and is functionally assigned to a Project Manager. The Electrical Design Engineer will be responsible for executing the project design ensuring it is technically sound and meets project specifications and requirements.

In addition to the above, the Electrical Design Engineer's duties will include but are not limited to:

- Adherence to the National Electrical Code (NEC)
- Develop and implement design standards and calculations
- Develop equipment specifications, Issue For Bid (IFB) and Issue For Construction (IFC) packages
- Development of equipment requirements and specifications, maintain schedules, and ensure cost efficiency
- Coordinate project teams and construction crews and ensure all drawings are updated at completion of project
- Providing plant and equipment electrical power, automation and information system design
- Controller programming (HMI, PLC, etc.)
- Preparing feasibility studies and equipment comparisons
- Develop & implement an acceptance test plan for the equipment at vendor's facility and for the installed system at customer's facility
- On-site installation & start-up support
- Develop personal technical skills as well as those of co-workers

## **Characteristics**

The Electrical Design Engineer must have good personal habits, work well with others, be technically conscientious, be able to stay on task and complete work on schedule, be able to work independently as well as on a team, and promote the principles and professionalism of Polytron.