

Job Description

Job Title:	Design Technologist, Electrical
Department:	Plant Operations
Reports To:	Manager, Electrical Engineering
Jobs Reporting:	None
Salary Grade:	USG 9
Effective Date:	September 2019

Primary Purpose

Reporting to the Manager, Electrical Engineering within Plant Operations, the Design Technologist, Electrical is responsible for electrical design and drafting, collaboratively determining and meeting University client requirements for cost effective, energy efficient electrical distribution and systems for the University campus infrastructure.

Responsibilities will align with the Plant Operations goal of contributing towards providing a safe and accessible, invitingly clean and comfortable, functionally-enriched and well-maintained campus environment through service excellence.

Key Accountabilities

Technical Design and Project Coordination

Provides engineering design and technical support in the analysis, design, and procurement of new electrical installations, renovations and retrofits to existing facilities. Contributes through the development and review of conceptual, schematic and detailed designs in the electrical discipline under senior engineer supervision, ensuring work is designed to meet applicable quality standards, code, regulatory, University and client requirements.

- Surveys existing site conditions, takes measurements and/or records existing information related to equipment specifications and systems
- Applies fundamentals and engineering tools to design normal and emergency power distribution, communication, life safety, lighting, instrumentation, and building controls systems
- Coordinates directly with engineers and technologists as part of an integrated multidisciplinary project team at all stages, from concept design to final commissioning
- Prepares in a timely manner clear electrical drawings, specifications and all necessary contract documentation for requests for quotations, bids, contract awards, and change orders
- Maintains proficiency in the use of current versions of Computer Aided Design and Drafting (CADD) software used in the department
- Completes design and CADD drafting for projects where Owner is acting as consultant on internal projects
- Performs as Owner's representative when periodically meeting Contractors during bid periods, when resolving problems during construction and performing general conformance reviews
- Reviews shop drawings prepared/submitted by contractor to ensure compliance with University requirements, standards and the performance set out in the design documents
- At the completion of a project, oversees and coordinates the updating of relevant CADD record drawings
- Supports the continuous improvement of, and adherence to campus standards for design, equipment, fixtures, etc.

Job Description

- Collaborates with Plant Operations Maintenance Department in resolving operating and maintenance issues and in the improvement of energy efficiency to reduce operating costs and support campus sustainability objectives and goals
- Undertakes feasibility studies, analysis and reports as directed by supervisor staff
- Inputs time in Plant Operations electronic timesheet reporting system on a daily basis

Other

- Performs other related duties and responsibilities as assigned and supports departmental initiatives

**All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.*

Required Qualifications

Education

- Engineering Degree or Engineering Technologist/Technician (P.Eng, B.Eng, B.ASc. or CET)
- The incumbent will be a graduate of a recognized University or College two or three year program in electrical engineering technology

Experience

- The incumbent will have minimum 5 years electrical design experience in power distribution, lighting, fire alarm, emergency power supply and telecommunication systems
- Physical plant design experience will be considered an asset

Knowledge/Skills/Abilities

- Must be familiar with applicable electrical codes and building codes, including but not limited to: OESC, CSA, OBC
- Demonstrated ability to apply working knowledge of applicable design codes and standards related to electrical design; power distribution, lighting, fire alarm, emergency power supply and telecommunication systems
- Basic understanding of other building design disciplines' systems, enabling multi-discipline coordination
- Good understanding of drawing conventions and standards
- Ability to produce quality deliverables and to monitor project tasks
- Strong analytic, oral, and written communication skills
- Experience in institutional projects is preferred
- Excellent conflict resolution skills
- Excellent communication and interpersonal skills, with a deep commitment to customer service, proven innovative approach to problem solving and an aptitude towards service excellence and responsiveness
- Must be flexible and adaptable to changing requirements, and responsive to client needs
- Intermediate proficiency utilizing the latest version of the following programs: AutoCAD, MS Word, MS Excel, MS Outlook

Nature and Scope

- **Contacts:** This position comes in contact with a wide variety of internal and external people at all levels of responsibility. Must maintain excellent relationships with all of these people. This requires excellent personal and communication skills.

Job Description



-
- **Level of Responsibility:** Accountable to department Manager and Director, Design and Construction Services for successful implementation and completion of projects. The position has no direct supervision of others.
 - **Decision-Making Authority:** Decisions made with guidance from senior staff.
 - **Physical and Sensory Demands:** Minimal physical demands primarily operating within an office environment. Project site visits as required, wearing personal protective equipment.
 - **Working Environment:** Team environment in an office based setting, and involving collaboration with all business and operating units within the department and across the University. Regular working hours, with some evening/weekend work required.