

Electrical Designer

The electrical designer will undertake the design of electrical systems for railway vehicles. These include traction systems, controls, lighting and communication as well as on auxiliary systems, power generators, audio and video systems and others.

Under the responsibility of the electrical engineer and in tandem with the mechanical design team, the electrical designer will perform the following tasks:

- Design electrical circuits for railway vehicles or design additions or modifications to existing electrical circuits or systems.
- Select and size electrical components such as conductors, circuit breakers and conduits in conformance with applicable regulations and railway industry standards.
- Generate the list of materials for the manufacturing or modification of electrical systems.
- Design installation of electrical components on railway vehicles including electrical cabinet arrangement as well as cable and conduit routings and attachments.
- Produce electrical schematics and manufacturing and/or installation drawings of electrical systems or components.
- Provide shop technical support and validation of electrical systems.

Skills and Experience:

- DEC or bachelor's degree in electrical design.
- Good knowledge of an electrical design software such as AutoCAD Electrical, ePLAN Electrical or other.
- Familiar with a 3D modeling software such as Inventor, Solidworks or other.
- Bilingual, English and French.
- Experience in the railway or transportation industry is an advantage.
- Knowledge of the Electrical Code of Quebec or of Canada, and knowledge of FRA, APTA, AAR, SAE, IEEE or Transport Canada standards are of interest.

Required Qualities:

1. Effective communicator and ability to work as part of a team.
2. Interest in acquiring and applying new techniques and knowledge.