



Intermediate Electrical Design Engineer - Advanced Controls

Motor Coach Industries (MCI)

1475 Clarence Avenue, Winnipeg, MB

Electrical Engineering

Posting Date: February 27, 2024

Closing Date: March 15, 2024

MCI is North America's public and private market motor coach leader. Products include the luxury J-Series (an industry best-seller for over a decade), the workhorse D-Series, and the brand new zero-emission luxury and commuter coaches: the battery-electric J4500 CHARGE™ and MCI D45 CRT LE CHARGE™. MCI also provides maintenance, repair, 24-hour roadside assistance, parts, and technician training through the industry's only Automotive Service Excellence (ASE) accredited MCI Academy. Further information is available at www.mcicoach.com

POSITION SUMMARY

Accountable for completion of engineering design tasks and projects from concept to implementation in production. This will include all related design activities, calculations, communications, drawings, & bills of material. Reports to the Advanced Architecture Development Design Manager.

WHAT YOU WILL DO:

- Executes and completes Engineering design tasks and project assignments in support of prototyping/testing & product development activities per AAD product development processes.
- Coordinates own tasks to ensure deadlines are met per project schedule and applicable lead times. Includes maintaining task status, task progress and communicating risks to task scope change.
- Creation of Engineering designs that meet customer specifications, Technical Summaries, other contract documents and any applicable standards or industry best practices. Ensures designs meet performance, buildability, design efficiency and align with outlined design philosophy.
- Performs Engineering calculations and analysis to ensure compliance with design criteria and all applicable standards and regulations.
- Completes controlled testing of components and system to meet contractual obligations, vendor requirements (SAA), ensure product reliability, performance and verify component fit.
- Completes Engineering drawings and release documents in accordance with engineering procedures.
- Provides engineering support to Production, Quality Assurance, Customer Service Support and other departments as directed by ADD Management.
- Interacts with vendors and customers on design related issues. Provides, where required, Supplier Application Approval requests for new component system installations or applications.
- Checks Engineering Documents, Instructions to Service, Shop Floor Instructions and other documents as authorized.
- Participates in required project design reviews and any applicable FMEA and Hazard Analysis exercises.

WHAT YOU NEED TO BE SUCCESSFUL:

- APEGM Certified Engineer with 5-10 years of experience

- Proficient in designing, implementing and optimizing multiplexing systems for heavy-duty electric vehicles, adept at integrating advanced control systems, CAN bus networks, and sensor interfacing.
- Extensive experience in developing fault-tolerant multiplexing architectures, ensuring seamless communication between various vehicle subsystems, and compliance with stringent automotive standards such as SAE J1939, ISO 11898, ISO 26262, and ISO 21434.
- Demonstrated expertise in effectively managing high-voltage power distribution, battery management systems, and integration of electric drivetrains within multiplexed vehicle architectures, showcasing a deep understanding of EV-specific challenges and solutions within heavy-duty vehicle environments.
- Experience managing design projects.
- Experience using Matlab, Python, Java, C/C++, CAN Architecture, Ladder Logic MS Office Suite as an asset.

Travel up to 10% may be required

WHY JOIN OUR TEAM:

- Part of a team leading the world's electrification of mass mobility
- Competitive Wages.
- A continuous learning environment.
- Ability to advance your career with a growing company.
- Employee social committee organizes numerous events throughout the year, including summer barbecues, holiday festivities, sporting events and tournaments, and much more.
- Ongoing employee development through a variety of in-house training initiatives along with tuition subsidies for courses at outside institutions.

OUR WHY:

We exist to move people. Our mission is to design and deliver exceptional transportation solutions that are safe, accessible, efficient and reliable.

NFI Group is a leading independent global bus manufacturer providing a comprehensive suite of mass transportation solutions. News and information is available at www.nfigroup.com, www.newflyer.com, www.mcicoach.com, www.nfi.parts, www.alexander-dennis.com, www.arbocsv.com, and www.carfaircomposites.com.

To apply please go to: <https://ca.indeed.com/job/intermediate-design-engineer-advanced-controls-designer-b63f12783b44e93a>