

# **Electronics Co-op Position**

Full-Time Co-op Student (4, 8, or 12 Month Term)

Job Location: Surrey, BC, Canada

Start Date: January 2019

#### Who We Are

Kobelt Manufactures quality products that are built to last; that quality starts with our team. We are a company located in Surrey with over 50 years of experience developing and producing reliable products for the global marine and industrial sectors. To find out more about our company and our products, please visit our website at www.kobelt.com.

#### The Role

The Electronics Co-op Student works in the Engineering Department to support current product lines and New Product Development. They will work closely with the software and electronics design team within the Engineering Department to develop new product prototypes, test jigs, and transitioning of prototypes into fully functional products for release. The Electronics Engineering Co-op will work on our existing line of products and on the design, prototyping, and validation of electronics for new products and systems. They may occasionally work with Production to improve efficiency or add automated processes to enhance the quality and/or production time of products.

The right candidate will have a passion for engineering and product design, demonstrate it through personal projects or student team projects, and present an aptitude for solving practical hands-on problems.

## Responsibilities

- Create product specifications and design documentation:
  - Work within Engineering to develop new production products
  - Work within Engineering to create/update design drawings and documents
  - o Create written Work Instructions for production to utilize during new product production
  - o Develop and execute test plans for software and hardware feature validation and testing
  - Execute new product test and document changes as required
- Update documentation to reflect improvements:
  - Work with Engineering to create/update CAD drawings
  - o Create drawings and wiring diagrams for use in production
  - Create and modify Bills of Material
  - Create and update testing procedures for production
- Design and build test equipment, tooling, jigs and/or workstations as necessary to improve processes:
  - o Define technical specifications for new test equipment
  - Design and prototype new test equipment
  - o Implement mechatronic and robotic systems to assist production staff
- Aid Product Line Managers within Engineering as required
- Perform other duties as required





## **Minimum Qualifications**

- In-progress Technologist Diploma/Engineering Degree a in Robotics, Systems Engineering, Electrical, Electronics or related discipline
- Experience writing and editing design documentation
- Experience with circuit design and analysis
- Experience with embedded ARM microcontrollers
- Experience reading datasheets and schematics
- Experience with printed circuit board layout
- Experience with communications protocols: SPI, I2C, CAN, UART
- Experience with oscilloscopes, multi-meters, and other test equipment
- Experience with GIT and/or SVN
- Ability to work with minimum supervision
- Ability to take initiative in a fast-paced and changing environment

# **Preferred Qualifications**

- Experience with Altium Designer for Schematic Capture and PCB Layout
- Experience with LTSpice, or similar simulation environment
- Experience with ARM Cortex-M microcontrollers
- Experience with STM32 Series of microcontrollers
- Experience with embedded software application development
- Experience with mechanical integration of electronics hardware
- Experience with freeRTOS configuration and implementation
- Experience with product specification, design, and prototyping
- Experience with creation of datasheets and schematics

Standard hours of work are between 9:00am and 5:30pm. Kobelt offers competitive wages.

If you are interested in this position, please forward your resume (PDF), current grades (PDF), and related portfolio examples to our Hiring Manager at hr@kobelt.com. We look forward to speaking with you about this opportunity to join the Kobelt team.

