



LasX Industries, Inc.  
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## Co-op System Controls Engineer Position Description

**Job Title:** Co-op System Controls Engineer  
**Department:** Research & Development  
**Reports To:** Controls Engineering Manager

### Summary:

Highly motivated and energetic person interested in developing hardware and software for system controls. The Co-op System Controls Engineer assists in control design activities relating to industrial laser systems. He or she will work under the direction of the Controls Engineering Manager.

### Major Duties and Responsibilities:

- ❖ Aids in system controls design, analysis, and testing for high-performance laser materials processing equipment. Development activities may include:
  - ❖ Microsoft Visual Studio C++/C#/.NET
    - Low level interface and control
    - Application development and GUI design
    - Networking and communication protocols
    - Database design
  - ❖ Digital Signal Processor hardware and software design
    - Circuit board level hardware design
    - Embedded C/C++ programming and debugging
  - ❖ Altera Programmable Logic Devices
    - Interfacing and programming
  - ❖ Industrial electrical component integration
    - I/O systems, sensors, actuators, machine vision
  - ❖ Geometric and other mathematical algorithms
  - ❖ Interface to computer-aided design programs and software development kits
    - AutoCAD and Adobe Illustrator applications
- ❖ Other duties as requested by LasX Management.

### Qualifications:

- ❖ Enrolled in 3<sup>rd</sup> year of Bachelor/Master of Science in Electrical/Mechanical/Software Engineering.
- ❖ Strong mathematical background including linear algebra.
- ❖ Experience in at least one of the following:
  - ❖ Microsoft Visual Studio C++/C#/.NET software development programs.
  - ❖ Digital Signal Processor hardware and software development.
  - ❖ Programmable Logic Devices hardware and software development.
- ❖ Practical knowledge of electrical/electronic components and diagnostic equipment.
- ❖ Ability to work in a team environment.
- ❖ Excellent verbal and technical writing skills.
- ❖ Ability to represent LasX in a professional manner to customers and suppliers.

### Physical Requirements:

- ❖ Extensive time working at a computer workstation.
- ❖ Working in a manufacturing environment.