

CONTROLS ENGINEERING CO-OP

Our Cincinnati-based consulting firm is seeking an electrical controls engineering co-op for design and analysis projects in commercial, industrial, and institutional facilities. The Co-op training program is structured to allow engineering students to develop technical skills while they learn aspects of the consulting engineering field.

Qualifications

- Co-op's must be in an accredited electrical, chemical, or mechanica engineering program, completed first two years toward a degree, and maintain a <u>minimum 3.3 GPA</u>.
- Co-op's will have studied network analysis, circuits and systems (I), and will possess strong computer skills including experience with, MS Excel, and MS Word.
- Experience with 3-phase power (electric machinery course, power transmission, etc.) and drafting software (preferably AutoCAD) is desirable but not required.
- Excellent problem-solving, communication and interpersonal skills are important as interaction with employees, suppliers, customers, and contractors may be required.
- Must be able to work well independently and perform research and design with available resources and assistance from engineers.
- Above all, a strong desire to learn is essential.

Responsibilities

Co-op's will work with project engineers or designers as part of project specific teams. Team size varies depending on project size and complexity. Co-ops will be exposed to many aspects of the design process including:

- Assist project engineers with specific design tasks
- Visit project sites to determine existing conditions and perform field related engineering services
- Attend project meetings
- Attend lunch learning sessions
- Make preliminary equipment selections using manufacturers' information
- Prepare designs and details using 2D and 3D AutoCAD
- Review technical specifications
- Prepare preliminary construction cost estimates
- Research and learn electrical code issues, construction methods
- Research and learn quality control procedures



- Exposure to construction administration
- Assist in concept development, design, and analysis for projects
- Learn and use various controls design and programming software including:
 - o PLC control panel design experience required
 - o Instrumentation selection and wiring diagram creation experience required
 - o Logix 500/5000 platform PLC development required
 - FactoryTalk View HMI design required
 - o Inductive Automation Ignition HMI and Historian development preferred
 - o Wonderware HMI and Historian development preferred
 - Batch and recipe system development preferred
 - o SQL experience preferred

Contact

Email your resume to <u>shendricks@thermaltech.com</u> if you are interested in learning more about co-op opportunities.