



ELECTRICAL ENGINEERING MAJOR

MAKE A REAL WORLD IMPACT

EOSYS has supported Cooperative Education since 1995, employing dozens of top students annually between our office locations. Our program, EOSYS NEXT, prepares Electrical Engineering students for a rewarding and successful career in industrial and manufacturing industries by providing an immersive, hands-on experience, and expanding their technical skills under the guidance and direction of a mentor.

**The mission of EOSYS NEXT is simple:
turn top students into world-class engineers.**

In addition to technical skills development, you will learn professional skills crucial to a successful career.

As an EOSYS NEXT Engineer, Electrical Engineering students can expect to be on the front end of developing plant information systems and plant floor control systems that assist clients with optimizing their manufacturing operations to improve overall performance.

Our Control System Integration team has the experience to help students understand the need for factory automation and industrial controls. Over the course of the co-op experience with EOSYS, students are exposed to many of the control systems fundamentals listed below:

System Design

- Electrical & MCC Design
- Functional Descriptions
- Control System Design
- Safety Design
- Process Design (S88.01)

Configuration & Programming

- PLC Programming
- DCS Configuration
- HMI Programming
- Historian Configuration
- MES Connectivity
- Factory Acceptance Testing (FAT)
- Simulation

Support

- Training
- Production Support

Startup

- Coordination/Management
- I/O Check
- Loop Checking
- Commissioning
- Site Acceptance Testing (SAT)

Chemical and Pulp & Paper

- Raw Materials Storage & Distribution
- BMS / Boiler Controls
- Distillation Processes
- Slurry Handling / Dryer Controls
- Chemical Reactor Control
- Burner / Dryer Control & Firing Sequences
- Polymerization
- Extruding and Spinning
- Continuous Batching (S88 & Custom Solutions)

Food & Beverage

- Bulk Delivery & Material Storage
- S88 Batch
- Mixing & Extruding
- Cooling & Refrigeration
- Recipe Management & Reporting Systems
- Traceability
- Liquid Delivery
- Batching & Blending Systems
- Pasteurization (HTST)
- Sanitization & CIP
- Ingredient Addition Systems

We utilize many industry-leading application packages such as AutoCAD, AVEVA/Wonderware, Foxboro DCS, Ignition, Rockwell ControlLogix, and Yokogawa DCS.