

# **Electrical & Instrumentation (E&I)**

April, 2016 Update

The E&I program is a key program in the manufacturing center curriculum with the Central Louisiana Technical Community College. Career opportunities in the field of E&I exist throughout manufacturing and include operation technicians, maintenance technicians, maintenance supervisors, maintenance schedulers and planners, maintenance managers and design technicians. The pay for trained technicians range from entry level positions at \$30,000 to over \$75,000 for experienced technicians.

## **Full Time Student Program**

The E&I curriculum is a three semester course of study. Additional courses are available to complete an associate degree. Students completing the semester 1 (summer) course of study receive their Certification for Manufacturing (C4M) certificate. Students that have already obtained the C4M credential are eligible to move directly into the second semester summer course of study.

#### Semester 1 (Summer) E&I Course of Study

ORNT 1000 - Freshman Seminar

IMFG 1100 – Introduction to Manufacturing

IMFG 1120 – Tools and Equipment Used in Manufacturing

IMFG 1200 – Automation

IMFG 1300 - Introduction to Fabrication, Process Technology and Machining

Students enrolled in semester 2 (fall) course of study are required to apply for work internships. Work internship eligibility will be based on internship availability, academic achievement, course attendance and participation and technical competence.

#### Semester 2 (Fall) E&I Course of Study

Jobs 2500 – Critical Skills in the Workplace

IIET 1433 - Wiring/Electrical Blueprint Interpretation

IMFG 1150 - Fluid Power 1

IMFG 1210 - DC/AC Electronics

IMFG 1220 - Digital Electronics

Work internships will occur during semester 3 (spring) course of study. These internships provide a source of income for the students while applying E&I technical learnings to the manufacturing workplace.

### Semester 3 (Spring) E&I Course of Study

IIET 2123 – Understanding Programmable Controllers

IMFG 1235 – Motor Controls

IMFG 1260 - Introduction to Industrial Networking

IMFG 2100 - Process Measurements

IMFG 2200 – Industrial Control Components and Equipment

