## Electrical Control Systems
### Diploma Program
EC22

**Curriculum**

**Basic Skills – Total of 8 Hours**
- ENGL 1010 *Fundamentals of English I* (3)
- EMPL 1000 *Interpersonal Relations* (2)
- MATH 1012 *Foundations of Mathematics* (3) - OR - MATH 1013 *Algebraic Concepts* (3)

**Program-Specific Core – Total of 30 Hours**
- IDFC 1011 *Direct Current I* (3) - OR - IDSY 1101 *DC Circuit Analysis* (3)
- IDSY 1130 *Industrial Wiring* (4)
- IDSY 1110 *Industrial Motor Controls* (4)
- IDSY 1210 *Industrial Motor Controls II* (4)
- IDSY 1230 *Industrial Instrumentation* (4)
- IDSY 1120 *Basic Industrial PLCs* (4)
- IDSY 1220 *Intermediate Industrial PLCs* (4)
- ELTR 1020 *Alternating Current Fundamentals* (3) - OR - IDFC 1012 *Alternating Current I* (3) - OR - IDSY 1105 *AC Circuit Analysis* (3)

**Occupational-Related Electives – Choose 6 Hours**
- ACCT 1100 *Financial Accounting I* (4)
- AIRC 1005 *Refrigeration Fundamentals* (4)
- AIRC 1010 *Refrigeration Principles/Practices* (4)
- AIRC 1020 *Refrigeration Systems Components* (4)
- AUMF 1150 *Introduction to Robotics* (3)
- AUMF 2060 *Work Cell Design Laboratory* (2)
- CIST 1130 *Operating Systems Concepts* (3)
- CIST 2451 *Cisco Introduction to Networks* (4)
- DFTG 1101 *CAD Fundamentals* (4)
- ELCR 1005 *Soldering Technology* (1)
- ELCR 1030 *Solid State Devices* (5)
- ELCR 1040 *Digital/Microprocessor Fundamentals* (5)
- ELCR 1060 *Linear Integrated Circuits* (3)
- ELCR 1230 *Communications Elec Survey* (3)
- ELCR 2160 *Microprocessors/Robotics* (3)
- ELTR 1060 *Elect Prints Schematics Sys* (2)
- ELTR 1080 *Commercial Wiring I* (5)
- ELTR 1205 *Residential Wiring I* (3)
- ELTR 1260 *Transformers* (3)
- ELTR 1270 *NEC Industrial Applications* (4)
- IDFC 1007 *Industrial Safety Procedures* (2)
- IDSY 1170 *Industrial Mechanics* (4)
- IDSY 1190 *Fluid Power/Piping Systems* (4)
- IDSY 1240 *Maintenance for Reliability* (4)
- MCHT 1011 *Intro to Machine Tool* (4)
- MCHT 1119 *Lathe Operations I* (3)
- MCHT 1120 *Mill Operations I* (3)
- WELD 1000 *Intro to Welding Technology* (4)
- WELD 1010 *Oxyfuel Cutting* (4)

**Total: 44 Hours**

For more information about our graduation rates, the median debt of students who complete programs, and other important information please visit our website: [http://www.laniertech.edu/GE.aspx](http://www.laniertech.edu/GE.aspx)
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Program Description
The Electrical Control Systems diploma program is a sequence of courses designed to prepare students in the field of electrical control systems. Learning opportunities develop academic and professional knowledge, along with skills required for job acquisition, retention, and advancement. The program emphasizes specialized training in PLCs, electrical controls, and instrumentation. Graduates of the program receive an Electrical Control Systems diploma that qualifies them for employment as industrial electricians or industrial control technicians.

Program Specific Information
Students are accepted every semester based on course and space availability.

Program Length & Availability
3 Semesters
Campus Availability: Oakwood

Admissions Requirements
• Must be 16 years of age.
• High school diploma or GED is required prior to admission.
  (Official transcripts or GED scores must be submitted from all colleges and/or high schools attended for credit.)
• ACCUPLACER Testing, or submit SAT, ACT, CPE, COMPASS, or ASSET test scores.

Financial Aid
This program is eligible for the Pell Grant and may be eligible for Institutional and State Financial Aid. Contact a Financial Aid Counselor for eligibility requirements and application materials.

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