

# Industrial Systems Technology

## Degree Program

### IS13

[Click here to jump to Program Description, Admissions Requirements, and Financial Aid.](#)

## Curriculum

### General Education Core – Total of 15 Hours

#### Area I – Language Arts/Communications – Choose 3 Hours

ENGL 1101 *Composition & Rhetoric* (3)

#### Area II – Social/Behavioral Sciences – Choose 3 Hours

ECON 1101 *Principles of Economics* (3)

ECON 2105 *Macroeconomics* (3)

ECON 2106 *Microeconomics* (3)

HIST 1111 *World History I* (3)

HIST 1112 *World History II* (3)

HIST 2111 *U.S. History I* (3)

HIST 2112 *U.S. History II* (3)

POLS 1101 *American Government* (3)

POLS 2401 *Global Issues* (3)

PSYC 1101 *Introductory Psychology* (3)

SOCI 1101 *Introduction to Sociology* (3)

#### Area III – Natural Sciences/Mathematics – Choose 3 Hours

MATH 1101 *Mathematical Modeling* (3)

MATH 1103 *Quantitative Skills/Reasoning* (3)

MATH 1111 *College Algebra* (3)

#### Area IV – Humanities/Fine Arts – Choose 3 Hours

ARTS 1101 *Art Appreciation* (3)

ENGL 2110 *World Literature* (3)

ENGL 2130 *American Literature* (3)

HUMN 1101 *Introduction to Humanities* (3)

MUSC 1101 *Music Appreciation* (3)

#### General Education Core Elective – Choose 3 Hours

### Program-Specific Core – Total of 37 Hours

IDSY 1130 *Industrial Wiring* (4)

IDSY 1170 *Industrial Mechanics* (4)

IDFC 1011 *Direct Current I* (3) - OR -

IDSY 1101 *DC Circuit Analysis* (3)

ELTR 1020 *Electrical Systems Basics I* (3) - OR -

IDFC 1012 *Alternating Current I* (3) - OR -

IDSY 1105 *AC Circuit Analysis* (3)

IDSY 1110 *Industrial Motor Controls* (4)

IDSY 1120 *Basic Industrial PLCs* (4)

IDSY 1210 *Industrial Motor Controls II* (4)

IDSY 1220 *Intermediate Industrial PLCs* (4)

IDSY 1190 *Fluid Power Systems* (4)

IDSY 1195 *Pumps and Piping Systems* (3)

#### Occupational-Related Electives – Choose 11 Hours

**Total: 63 Hours**

### General Education Core Electives

ARTS 1101 *Art Appreciation* (3)

BIOL 1111(L) *Biology I + Lab* (4)

BIOL 2113(L) *Human A&P I + Lab* (4)

BIOL 2114(L) *Human A&P II + Lab* (4)

ECON 1101 *Principles of Economics* (3)

ECON 2105 *Macroeconomics* (3)

ECON 2106 *Microeconomics* (3)

ENGL 1102 *Literature & Comp.* (3)

ENGL 2110 *World Literature* (3)

ENGL 2130 *American Literature* (3)

HIST 1111 *World History I* (3)

HIST 1112 *World History II* (3)

HIST 2111 *US History I* (3)

HIST 2112 *US History II* (3)

HUMN 1101 *Intro to Humanities* (3)

MATH 1101 *Math Modeling* (3)

MATH 1103 *Quant. Skills/Reason* (3)

MATH 1111 *College Algebra* (3)

MATH 1112 *College Trig* (3)

MATH 1113 *Precalculus* (3)

MATH 1127 *Intro to Statistics* (3)

MATH 1131 *Calculus I* (4)

MUSC 1101 *Music Apprec.* (3)

PHYS 1110(L) *Conc. Phys + Lab* (4)

POLS 1101 *American Govt.* (3)

POLS 2401 *Global Issues* (3)

PSYC 1101 *Intro Psychology* (3)

PSYC 2103 *Human Develop.* (3)

SOCI 1101 *Intro to Sociology* (3)

SPAN 1101 *Intro to Spanish* (3)

SPCH 1101 *Public Speaking* (3)

### Occupational-Related Electives

AUMF 1150 *Introduction to Robotics* (3)

AUMF 2060 *Work Cell Design Laboratory* (2)

CIST 1001 *Computer Concepts* (4)

ENGT 1000 *Intro to Engineering Tech* (3)

IDSY 1020 *Print Reading/Problem Solving* (3)

IDSY 1160 *Mechanical Laws/Principles* (4)

IDSY 1230 *Industrial Instrumentation* (4)

IDSY 1240 *Maintenance for Reliability* (4)

MCMT 1011 *Intro to Machine Tool* (4)

MCMT 1119 *Lathe Operations I* (3)

MCMT 1120 *Mill Operations I* (3)

MEGT 1010 *Manufacturing Processes* (3)

WELD 1000 *Intro to Welding Technology* (3)

WELD 1040 *Flat Shielded Metal Arc Welding* (4)

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>

# Industrial Systems Technology

## Degree Program

### IS13

#### Program Description

The Industrial Systems Technology degree program is designed for the student who wishes to prepare for a career as an Industrial Systems technician/electrician. The program provides learning opportunities that introduce, develop, and reinforce academic and technical knowledge, skill, and attitudes required for job acquisition, retention, and advancement. Additionally, the program provides opportunities to retrain or upgrade present knowledge and skill. The degree program teaches skills in Industrial Systems Technology providing background skills in several areas of industrial maintenance, including electronics, industrial wiring, motors, controls, PLCs, instrumentation, fluid power, mechanical, pumps and piping, and computers. Graduates of the program receive an Industrial Systems Technology degree that qualifies them for employment as industrial electricians or industrial systems technicians.

#### Program Specific Information

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

#### Program Length & Availability

4 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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