

ELECTROMECHANICAL TECHNOLOGY-INSTRUMENTATION

Program Description

The Electromechanical Technology-Instrumentation (ETI) program is designed to provide students with advanced industrial electromechanical skills with an emphasis on electrical motors, AC drives, DC controls, programmable logic controllers, instrumentation and precision maintenance. Graduates of the ETI program should possess the solid foundational knowledge and maintenance skills necessary to successfully compete for high-demand, high-wage jobs in advanced technological workplace settings. Examples of such maintenance jobs include electrical and instrumentation technicians, electrical and mechanical technicians, industrial mechanics, millwrights and other related jobs. However, work experience is necessary to become a master technician in this career field.

The course prerequisites for enrolling in the ETI program are satisfactory completion of all the courses required for the one-year Electromechanical Technology Technical Certificate. Additionally, all the credits earned in ETI program will apply toward an Associate of Applied Science (AAS) in Industrial Technology degree. Students ultimately desiring to pursue the AAS in Industrial Technology should make note of the general education course requirements when scheduling their classes each semester or term.

The length of the Electromechanical Technology-Instrumentation program for a full-time student is two (2) semesters and (1) summer term.

Student Learning Outcomes

Successful completers of this program will be able to:

- Promote a safe working environment.
- Troubleshoot and wire electrical equipment.
- Perform mechanical adjustments and repairs.
- Calibrate instrument devices.
- Describe industrial process control loops.
- Wire and program programmable logic controllers (PLCs).

NOTE: Students must have completed the Electromechanical Technology technical certificate to enroll in the following courses.

GRADUATION REQUIREMENTS

(Suggested Schedule)

<u>Fall Semester</u>		<u>Credit Hours</u>
ELTE 20104	Industrial Electrical Motors/AC Drives	4
ELTE 21703	Industrial Automation/Robotics Concepts	3
ELTE 21433	Instrumentation	3
SPCH11052	Employability Skills	2
<u>Spring Semester</u>		
ELTE 21504	Programmable Logic Controls	4
ELTE 21603	Advanced Instrumentation/Troubleshooting	3
ELTE 11102	Precision Maintenance	2
<u>Summer I Term</u>		
ELTE 2XXX4	Capstone	4
Exit: Electromechanical Technology-Instrumentation		25
Advanced Technical Certificate		