ELECTROMECHANICAL TECHNOLOGY – INSTRUMENTATION

Program Description

The Electromechanical Technology-Instrumentation (ETI) program is designed to provide students with advanced industrial electromechanical skills with an emphasis in 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 includes electrical and instrumentation technicians, electrical and mechanical technicians, industrial mechanics, millwrights and other related jobs. It should be noted, however, that work experience is necessary to becoming a master technician in this career field.

The course prerequisites for enrolling in the Electromechanical Technology-Instrumentation (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. The program costs are approximately $3,380 for tuition and fees and approximately $1,175 for books and supplies.

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 Electromechanical Technology technical certificate to enroll in the following courses.

GRADUATION REQUIREMENTS
(Suggested Schedule)

Fall Semester			**Credit Hours**
EIT	2104	Industrial Electrical Motors/AC Drives	4
EIT	2175	Industrial Automation/Robotics Concepts	5
EIT	2612	DC Controls	2
EIT	1122	Industrial Safety	2
Spring Semester			
EIT	2155	Programmable Logic Controls	5
EIT	2145	Instrumentation	5
EIT	1112	Precision Maintenance	2
Summer I Term			
EIT	2163	Advanced Instrumentation/Troubleshooting	3
		Exit: Electromechanical Technology-Instrumentation Advanced Technical Certificate	**28**