## Electromechanical Instrumentation Technology Certificate Degree 30 Credit Hours

## **Purpose:**

The Electromechanical Instrumentation Technology Program prepares students for industrial automation in applications (engineering) positions, as well as service (maintenance) type positions by providing knowledge and hands-on experience in electricity, fluid power, sensors, control systems, instrumentation and programmable controllers-components that are used in a wide variety of industrial automation systems, machines, and equipment.

This program is designed for those who are interested in oil and gas industry, plant maintenance, machine setup and installation, and troubleshooting of modern computer controlled machines. Electromechanical instrumentation jobs are found in the manufacturing, energy, medical, electronics, agriculture, biotechnology, and automotive industries.

The full Electromechanical Instrumentation Technology Certificate Program is available on the Williamson Campus. The Boone/Lincoln, Logan, and Wyoming/McDowell campuses offer the general education/program support courses only.

## **Component I-General Education Support Courses: 9 Credit Hours**

EN 101 or EN 101A	English Composition I	3 Credit Hours
MT 124 or MT 124A	Technical Math	3 Credit Hours
CS 102	Computer Literacy	3 Credit Hours

## **Component II- Specialization Major Courses: 21 Credit Hours**

EG 103	Electrical Calculations	3 Credit Hours
EG 105	Industrial Safety	1 Credit Hours
EG 107	Introduction to Circuits	4 Credit Hours
EG 123	Electrical Schematics	3 Credit Hours
MX 120	Mechanical Power I	2 Credit Hours
MX 180	PLC Fundamentals	1 Credit Hour
MX 184	PLC Interfacing and HMIS	1 Credit Hour
MX 186	PLC Applications	1 Credit Hour
MX 250	Basic Instrumentation & Control	2 Credit Hours
MX 254	Advanced Instrumentation & Control	3 Credit Hours

For more information, please contact:

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