

# Industrial Automation & Maintenance



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Studies in the Industrial Automation and Maintenance program focus on the installation, repair, and maintenance of the electronic and mechanical equipment used to control manufacturing and power generation processes. Programmable controllers, industrial controls, hydraulics/pneumatics, mechanical systems and robotic systems integration are emphasized.

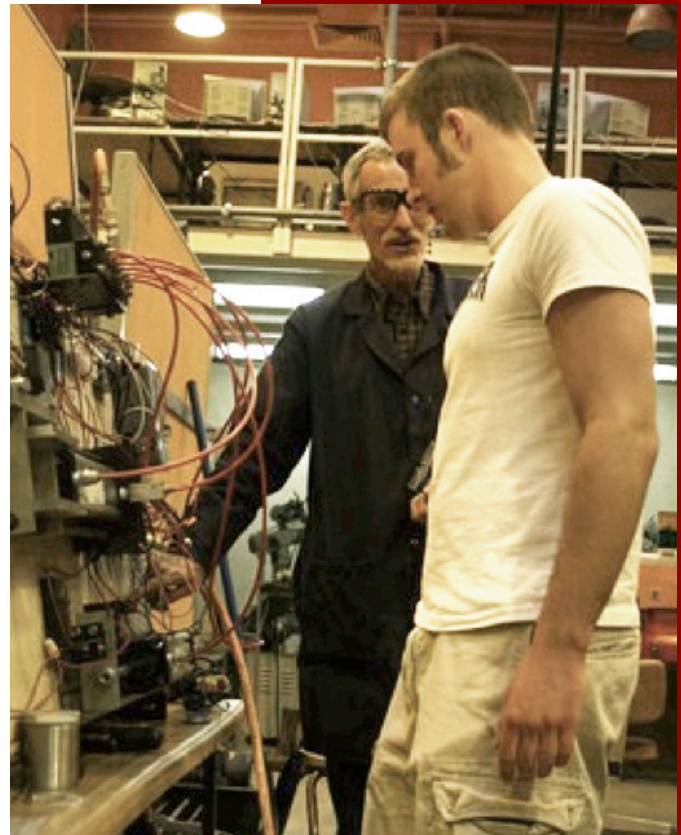
The program offers hands-on learning laboratory opportunities in all of the technical courses. Technical courses are taught just four days a week (Mondays through Thursdays).

Students can earn an associate's degree in Industrial Automation and Maintenance in just two years from Rio Grande.

Graduates of the program will be able to work in a wide range of industrial facilities in the region and around the country. Rio Grande's Industrial Automation and Maintenance graduates work for area companies and organizations such as Diamond Electric in West Virginia, Paccar(Kenworth) in Chillicothe, Toyota Motor Manufacturing in West Virginia, Electrocraft in Gallipolis, GKN Sintered Metals of Gallipolis, American Electric power plants and the Kyger Creek power plant.

Graduation requires the student to achieve a 2.00 overall grade point average in all ELE and MFG courses and a 2.00 overall grade point average in all coursework.

**Note:** This degree is a direct pathway to a Bachelor of Science Degree in Industrial Technology.



# Industrial Automation & Maintenance

## Curriculum

### First Year

#### Fall

CS	10103	PC Applications
ELE	10103	Basic Electricity/Electronics
ENG	11103	Composition I*
LA	10001	Gateway to Success
MFG	11102	Blueprint Reading
TEC	11704	Technical Math I*
<b>16 hrs</b>		

#### Spring

COM	11103	Fundamentals of Speech
ENG	21403	Business Tech Writing
MFG	14103	Schematic Diagram
MFG	16102	Hydraulics & Pneumatics
PSY	11103	General Psychology
TEC	11804	Technical Math II
<b>18 hrs</b>		

### Second Year

#### Fall

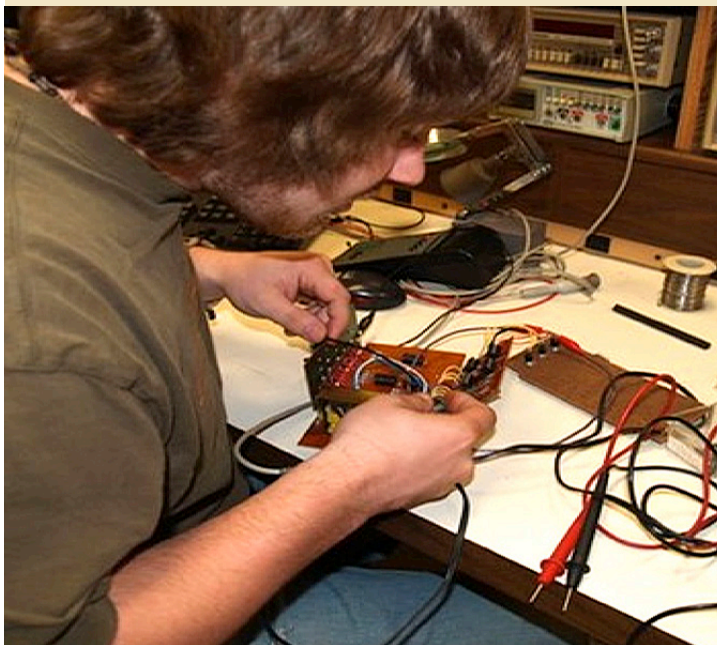
ELE	21103	Programmable Controllers I
ELE	25003	Industrial Controls
HIS		3 Hours History Course
MFG	25403	Mechanical Skills
MFG	26102	Adv. Hydraulics & Pneumatics
MFG	27102	OSHA
<b>16 hrs</b>		

#### Spring

ELE	21203	Programmable Controllers II
ELE	27003	Robotics
HPE	24302	Safety & First Aid
MFG	24302	Ele. Troubleshooting & Rep
MFG	25103	Power Transmission Devices
MFG	25302	Preventive MNT & Planning
<b>15 hrs</b>		

**TOTAL HOURS 65**

\* Placement determined by testing.



### Contacts:

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