



COMMUNITY COLLEGE  
OF BEAVER COUNTY  
CCBC.EDU

*Real Learning  
for Real Life*

# MECHATRONICS

Associate in Applied Science



**Scan to get started!**

**TO LEARN MORE CONTACT**

Admissions  
724-480-3504

## Program Info:

The program provides the student with a broad-based education in installing, operating, troubleshooting and repairing, commercial, mechanical, electrical, fluid-power, electronic, robotic and integrated manufacturing systems.

### WHAT WILL I LEARN?

Students will develop skills to work as a technician in an integrated, multi-disciplinary industrial environment and will acquire the knowledge and hands-on training. Student successfully completing this program can manage, investigate, repair, and troubleshoot mechatronics systems.

### CAREERS IN MECHATRONICS

Graduates of Mechatronics can pursue careers in Electro-mechanical Technicians, Electrical and Electronics Repairers, Electronics Engineering Technicians, Automation Technicians, Maintenance and Repair Workers, Maintenance Workers, Machinery, Mechanical Engineering Technicians, Robotics Technicians, Electrical and Electronic Equipment Assemblers, Technical Sales, and Manufacturing Supervisor.

### CERTIFICATIONS

Manufacturing Technician Certification, offered by the Manufacturing Skills Institute.

## FIRST YEAR

### First Semester – 15 credits

Course	Credits
MECH 100 - Mechatronics and Industry 4.0	3
MECH 110 - Manufacturing Technology: Math, Technology and Reasoning	3
MECH 115 - Fluid Power Systems	3
MECH 120 - Introduction to Mechanical Systems	3
MECH 130 - Electrical Systems	3

### Second Semester – 18 credits

Course	Credits
MECH 140 - Manufacturing Technology: Process, Control, Quality	3
MECH 142 - Industrial Power Systems	3
MECH 145 - Motors and Motor Controls	3
MECH 150 - Programmable Logic Controller (PLC) II	3
MECH 155 - Digital Electronics	3
MECH 160 - Intro to Robotics	3

## SECOND YEAR

### Third Semester – 16 credits

Course	Credits
PHYS 101 - College Physics I	4
PTEC 102 - Safety, Health, and Environment	3
ENGR 120 - Engineering CAD and Drafting	3
MATH 130 - College Algebra	3
COMM 110 - Interpersonal Communication <b>OR</b>	3
COMM 201 - Public Speaking	

### Fourth Semester – 12 credits

Course	Credits
MECH 280 - Brazing and Welding	3
MECH 296- Mechatronics Capstone <b>OR</b>	3
MECH 298 - Cooperative Education	
WRIT101 - English Composition	3
SOCI 231 - Cultural Diversity <b>OR</b>	3
PHIL 110 - Introduction to Ethics	

**Program Curriculum**

Credits Required 63/64