

AG & HEAVY EQUIPMENT TECHNICIAN

CAREER PATHWAY

Bus and Truck Mechanics and Diesel Engine Specialists • First-Line Supervisors of Mechanics, Installers, and Repairers • Industrial Machinery Mechanics • Mobile Heavy Equipment Mechanics

	CAREER TECHNICAL COURSE NAME & SUBJECT CODE	RECOMMENDED ACADEMICS
7		
8		
9		
10		
11	Hydraulics & Pneumatics*	
	Power Trains	
	Electronic & Electrical Systems	
12	Outdoor Power Technology	
	Agricultural & Environmental Systems Capstone	

INDUSTRY CREDENTIAL OPPORTUNITIES

- Equipment & Engine Training Council Driveline-Hydraulics Certification - **2 Points**
- Equipment & Engine Training Council Diesel Engine Certification - **2 Points**
- Equipment & Engine Training Council 4-Stroke Engine Certification - **2 Points**
- Equipment & Engine Training Council 2-Stroke Engine Certification - **2 Points**
- Forklift Operation - **2 Points**
- Lean Six Sigma Yellow Belt - **3 Points**
- Lean Six Sigma Green Belt - **6 Points**
- Leadership Excellence - Student - **3 Points**
- OSHA - 10-Hour Training* - **1 Point**
  (College Credit - CTS001 - 1 Credit Hour)
- CPR / First Aid - **1 Point**
- Ohio Driver's License - **1 Point**

POSTSECONDARY OPPORTUNITIES

*Indicates statewide articulated credit. Please reference course descriptions for semester hours and agreement number on the postsecondary articulated credits. Additional college credit may be available through bi-lateral agreements. Please see a school counselor for details on available bi-lateral agreements.

BHCC ADULT EDUCATION	HOURS
CDL Class A Unrestricted	192
Heavy Equipment Operator	270

POTENTIAL PLACEMENT & INCOME –

*May 2025 State Occupational Employment and Wage Estimates for Ohio

Bus and Truck Mechanics and Diesel Engine Specialists	**$61,190**
Mobile Heavy Equipment Mechanics	**$66,160**
Industrial Machinery Mechanics	**$67,900**
First-Line Supervisors of Mechanics, Installers, and Repairers	**$80,750**

BUCKEYE HILLS CAREER CENTER

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AG & HEAVY EQUIPMENT TECHNICIAN PATHWAY

SUBJECT CODE **010225**

11th GRADE

COLLEGE CREDIT
CTAG CTAIE001
2 CREDIT HOURS

HYDRAULICS & PNEUMATICS

Students will learn to diagnose, repair and rebuild hydraulic systems and their components. Students will learn the physical and mechanical principles of both hydraulic and hydrostatic operating units. Topics include testing system components and properly maintaining hydraulic and hydrostatic circuits. Students will demonstrate contamination control and system cleanliness in both hydraulic and hydrostatic operating systems. Throughout the course, site and personal safety procedures and business practices are reinforced.

SUBJECT CODE **010230**

11th GRADE

POWER TRAINS

Students will learn the physical principles of power trains, the components that transfer and control power, and how power trains are designed to function. Topics include hydraulic theory, bearings and seals along with belts, chains, and gear drives included in power trains. Students will learn how to adjust and maintain transmissions along with diagnosing power take-off devices and clutches. Throughout the course, site and personal safety procedures along with business principles are emphasized.

SUBJECT CODE **010215**

11th GRADE

ELECTRONIC & ELECTRICAL SYSTEMS

Students will diagnose, test and repair the electronic and electrical components found in industrial power equipment. Students will learn the physical principles of electricity and apply this knowledge in the maintenance, diagnostics and repair of electrical and electronic systems. Students will learn the physical and mathematical principles of electronics, controllers and sensors and will learn the operation of onboard computers and programmable controllers. Site and personal safety along with business and employability skills are emphasized throughout the course.

SUBJECT CODE **010235**

12th GRADE

OUTDOOR POWER TECHNOLOGY

Students will perform technical skills needed to maintain, diagnose and repair outdoor power equipment. Students will learn the theory of power and examine the aspects of repairing various engines, drive trains, and ancillary systems that make up modern small engine powered equipment. In addition, students will develop troubleshooting skills for 2- and 4-stroke engines, electrical and fuel systems. Throughout the course, site and personal safety procedures along with business principles will be emphasized.

SUBJECT CODE **010190**

12th GRADE

AGRICULTURAL & ENVIRONMENTAL SYSTEMS CAPSTONE

Students apply Agricultural and Environmental Systems program knowledge and skills in a more comprehensive and authentic way. Capstones are project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through partnerships, students combine classroom learning with work experience to benefit themselves and others. These can take the form of mentorship employment, cooperative education, apprenticeships and internships.

Buckeye Hills Career Center | 351 Buckeye Hills Road | Rio Grande, OH 45674 | 740.245.5334 | buckeyehills.net

Career-technical education does not discriminate on the basis of race, color, national origin, sex, disability, or age for participation in any program or activity. Lack of English language proficiency will not be a barrier to admission and participation in career-technical education programs or courses.