

# ELECTRICAL, BROADBAND & TELECOMMUNICATIONS

Telecommunications Line Installers and Repairers • Telecommunications Equipment Installers & Repairers • Electrical & Electronics Repairers • Electrical Power-Line Installers & Repairers • Electrical Engineers

| | CAREER TECHNICAL COURSE NAME & SUBJECT CODE | RECOMMENDED ACADEMICS |
|---|---|---|
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |
| 11 | Intro to the Telecom-Power Industry & Safety<br>Construction Electrical Systems<br>Broadband and Fiber | |
| 12 | Telecommunications and Powerline<br>CDL / Heavy Equipment / Job Placement | |

## INDUSTRY CREDENTIAL OPPORTUNITIES

- The Fiber Optic Association - Certified Premises Cabling Technician - **12 Points**
- The Fiber Optic Association - Certified Fiber Optics Technician - **12 Points**
- Ohio State Pre-Apprenticeship - **12 Points**
- CPR First Aid - **1 Point**
- OSHA - 10-Hour Training* - **1 Point**
  (College Credit - CTS001 - 1 Credit Hour)
- Lean Six Sigma Yellow Belt - **3 Points**
- Lean Six Sigma Green Belt - **6 Points**
- Leadership Excellence - Student - **3 Points**
- 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 |
|---|---|
| Heavy Equipment | 270 |

## POTENTIAL PLACEMENT & INCOME —

*May 2025 State Occupational Employment and Wage Estimates for Ohio

- Electrical & Electronics Repairers (Commercial & Industrial Equipment) | **$64,340**
- Telecommunications Line Installers & Repairers | **$66,310**
- Telecommunications Equipment Installers & Repairers | **$66,980**
- Electrical & Electronics Installers & Repairers (Transportation Equipment) | **$72,790**
- Electrical Power-Line Installers & Repairers | **$88,330**
- Electrical & Electronics Repairers (Powerhouse, Substation & Relay) | **$90,540**

BUCKEYE HILLS CAREER CENTER

v20261109

# ELECTRICAL, BROADBAND & TELECOMMUNICATIONS

**PRE-APPRENTICESHIP**

**11th GRADE**

## INTRO TO THE TELECOM-POWER INDUSTRY & SAFETY

This introductory electrical course will emphasize electrical theory, materials, and equipment. Students will explore the National Electrical Code and learn worksite safety. They will interpret schematics; construct basic circuits, use test equipment and electrical hand and power tools.

**PRE-APPRENTICESHIP**

**11th GRADE**

## CONSTRUCTION ELECTRICAL SYSTEMS

This introductory electrical course will emphasize electrical theory, materials, equipment. Students will explore the National Electrical Code and learn worksite safety. They will interpret schematics; construct basic circuits, use test equipment and electrical hand and power tools.

**PRE-APPRENTICESHIP**

**11th GRADE**

## BROADBAND & FIBER

This introductory course presents students with the basic skills, knowledge, and certification in preparation for a career in the broadband industry. This course will cover safe workplace practices and provide an opportunity to earn certificates in OSHA and First AID/CPR. Students will be introduced to the unique working conditions of the industry which include confined space, heights, and weather. Background skills in math, digital literacy, customer service, and computer usage will be reinforced throughout the course. Students will gain technical knowledge through hands-on activities preparing students to become a Certified Premises Cabling Technician and a Certified Fiber Optics Technician through the Fiber Optics Association.

**PRE-APPRENTICESHIP**

**12th GRADE**

## TELECOMMUNICATIONS & POWERLINE

The Telecommunications and Powerline course equips students with essential skills in telecommunications and high-voltage power transmission systems. It includes hands-on training in installing, maintaining, and repairing telecommunications lines, such as fiber optic and copper cabling. Students will learn outside plant operations, fiber splicing, cable lashing, and servicing damaged lines. The course also covers high-voltage power transmission principles, focusing on building and maintaining electrical systems. Safety is emphasized, especially around high-voltage equipment. Practical skills taught include ladder safety, bucket truck operations, and pole climbing, ensuring students can effectively test and troubleshoot installed systems.

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.