



ELECTRICITY

WHITEWATER CAREER CENTER

PROGRAM OVERVIEW

Electricity is a hands-on program. You will use applied math skills to solve problems and complete tasks. If you are interested in a bright future and providing a service that makes the world run, you should consider this program.

YOU WILL LEARN

- Residential wiring
- How to read technical drawings
- Theory & how to apply it to projects
- How to use mathematical principles to solve electrical problems
- How to work in a team setting with Construction Technology students

A TYPICAL STUDENT

The typical student is one that enjoys hands-on learning and has the applied math skills to be successful. There will be a significant emphasis on mathematical principles to solve electrical problems. These skills will be required through the second year of the program, during further training, and on the job. Successful students have the patience and attention to detail to solve problems using the skills they have learned. They can work on projects independently or with other students. They can read drawings, check their work as needed, and stay on task without constant supervision. Safety is a primary focus, and students must follow OSHA guidelines to keep themselves and others safe.



GET YOURSELF READY

To be prepared, focus on doing well in math classes, being on track for graduation, and developing a good work ethic. The following pathway courses will help prepare you for the Electricity program, further education and training, and a career in the electrical industry:

- Preparing for College & Careers
- Introduction to Construction



WHITEWATER

CAREER CENTER

Where opportunities flow

Centerville | Connersville | Franklin County
Lincoln | Rushville | Union County

1300 Spartan Drive, Connersville, IN 47331
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www.WhitewaterCareerCenter.org



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CERTIFICATIONS & DUAL CREDITS

INDUSTRY CERTIFICATIONS

OSHA 10-Hour Construction Industry

NCCER (National Center for Construction Education & Research) Core - Year 1

NCCER (National Center for Construction Education & Research) Electrical 1 - Year 2

IVY TECH DUAL COLLEGE CREDITS

BCTI 130

Introduction to Electrical

4 credits

Industry certifications are earned in both years.
Dual credits are earned during year two.

COURSE CONTENT

Electricity focuses on the installation and repair of the electrical and wiring systems of physical structures, including instruction on the reading of technical drawings. Mathematical principles are used to solve electrical problems, including both AC and DC circuits. Students learn about electron theory, Ohm's Law, Watt's Law, Kirchoff's Law, series circuits, series-parallel circuits, electromagnetic induction, current, voltage, resistance, power, inductance, capacitance, and transformers. Students team with Construction Technology students to complete custom construction projects throughout the school and community.

MEET GRADUATION PATHWAYS

PATHWAY 1 HIGH SCHOOL DIPLOMA

Students can earn 6 high school elective credits per school year at WCC. WCC courses can also lead to a Technical Honors Diploma.

PATHWAY 2 EMPLOYABILITY SKILLS

All WCC programs have a work-based learning component built into the curriculum.

PATHWAY 3 POSTSECONDARY READY

Students can meet the requirement by completing 2 years of a career program at WCC, or earning industry certification.

WHEN YOU FINISH

Upon completion of this program, you may continue your education in 2 and 4-year degree programs at the postsecondary level or enter employment in one of the many electrical/construction fields. You may also enter apprenticeship programs for specific electrical or construction trades.

POTENTIAL CAREERS

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|---|----------|
| • Electrician | \$59,190 |
| • Electrical and Electronics Installer & Repairer | \$53,190 |
| • General Maintenance & Repair Worker | \$41,020 |
| • Electrical Power Line Installer & Repairer | \$70,240 |
| • Electrical & Electronics Engineering Technician | \$65,050 |

NATIONAL MEAN WAGE

All career and salary information is cited from the U.S. Department of Labor Bureau of Labor Statistics, May 2018 National Occupation Employment & Wage Estimates.



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