

ARCHITECTURE & CONSTRUCTION

Kenneth Baker, Instructor

INDUSTRY CERTIFICATIONS

- BICSI ITS Installer 1
- Certified Satellite Installer
- Copper-Based Cabling
- Core: Introductory Craft Skills
- Customer Service
- Data Cabling Installer—DCIC
- Electrical Construction Technology
- Electrical Level One
- Electrical Occupations
- Fiber Optic Network Cabling
- Fiber Optics Installer
- National Career Readiness
- Network Cabling Specialist
- Residential Construction Academy
- Residential Wiring
- Workplace Readiness Skills for the Commonwealth

POSSIBLE CAREER PATHWAYS

- Construction Electrician
- Maintenance Electrician
- Electrical Utility Installer
- Communication Equipment Installer
- Aircraft Electrician
- Maritime Electrician

COLLEGE AND CAREER OPPORTUNITIES

- Wyotech www.wyotech.edu/
- Know How Virginia www.knowhowvirginia.org/
- Tidewater Community College www.tcc.edu/
- College Board www.collegeboard.com/
- Virginia Career View www.vaview.vt.edu/
- National Joint Apprenticeship and Training Committee <http://www.njatc.org/>

STARTING SALARY

\$36,200 - \$90,060

Earning may vary by specialty

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2016-17 Edition*, Electrical and Electronics Engineers, on the Internet at

<http://www.bls.gov/ooh/architecture-and-engineering/electrical-and-electronics-engineers.htm>

**The Electricity course participates in the SkillsUSA co-curricular club.



Electricity

PROGRAM DESCRIPTION

This two-year program is designed to allow students to develop skills and gain technical knowledge that will prepare them to enter the electrical industry as an apprentice/trainee or pursue further education at the college level. Students will develop skills in the installation, maintenance, and repair of residential, commercial, and industrial electrical systems. They will study the science of electricity, blueprint reading, residential and commercial electrical design, the National Electrical Code and occupational safety, as it relates to construction.

PROGRAM CONTENTS/SKILLS

- Demonstrating Workplace Readiness Skills: Personal Qualities and People Skills
- Demonstrating Workplace Readiness Skills: Professional Knowledge and Skills
- Demonstrating Workplace Readiness Skills: Technology Knowledge and Skills
- Examining All Aspects of an Industry
- Addressing Elements of Student Life
- Applying Basic Construction Safety Standards (Core Safety)
- Focusing on the Electrician's Profession
- Using Tools and Materials
- Applying Basic Electrical Theory
- Solving Mathematical Problems
- Interpreting Prints and Specifications
- Navigating the National Electrical Code (NEC) Book
- Selecting and Installing Conductors
- Identifying and Installing Panelboards and Switchboards
- Describing Generators and Power Supplies
- Exploring Environmentally Friendly Choices
- Examining Lighting Systems
- Identifying and Installing Conduit and Raceways
- Identifying and Installing Grounding Systems
- Installing Transformers

FOR FURTHER INFORMATION contact (757) 892-3300 or schools.nps.k12.va.us/ntc