Planning a successful career can begin in high school!

The Center of Applied Technology South

High school students can attend the Center of Applied Technology South (CAT South) as part of their regular daily schedule. In each program, students can earn credits required for graduation.

Completion of any of the 14 programs at the Center provides students with a combination of technical and academic expertise that can be utilized in a variety of ways. All programs offer the background and experience needed for immediate employment. Many programs articulate with colleges and universitites, so students can earn college credits while in high school.

The programs at CAT South offer the foundation for employment, knowledge about related careers and continuing education, and work study positions. Studies combine both academics and applied technology.

The Career Exploration Program

The Career Exploration program allows students to explore four programs in one semester and earn 0.5 credit. Career Explorations is taken during period 1B. Transportation is provided to and from CAT South.

| Semesters | Programs | Credits |
|-----------|----------|------------|
| One | 4 | 1/2 Credit |

Students can experience the environment, equipment, materials, skills, and safety rules of their chosen technical areas. The information students gain can be of significant value in career planning and expanding their interests and abilities.



More information is available at www.catsouth.org

> Phone: 410-956-5900 Fax: 410-956-5905

211 Central Ave, East Edgewater, MD 21037



Anne Arundel County Public Schools prohibits discrimination in matters affecting employment or in providing access to programs on the basis of actual or perceived race, color, religion, national origin, sex, age, marital status, sexual orientation, genetic information, gender identity, or disability.

For more information, contact: Anne Arundel County Public Schools Division of Human Resources 2644 Riva Road, Annapolis, MD 21401 410-222-5286 TDD 410-222-5000

www.aacps.org 2790/94 (Rev. 10/22)





Anne Arundel County Public Schools

What is it?

The **Electricity** program provides high school students with knowledge and skills to launch a career in electricity. Level 1 introduces basic skills, practices and theories of electricity and its applications to circuits, devices and materials. Topics include the national electrical code book, electron theory, direct current fundamentals, series/parallel circuits, power, alternating current fundamentals, and calculations for power, voltage, current and resistance. Safety is emphasized as students learn to wire electrical circuits and equipment projects.

Level 2 provides students with advanced training in the techniques, processes and theories introduced in Level 1. Electrical controls, blueprint reading, estimating, trouble-shooting, meter reading, advanced wiring projects and special circuits are included

Upon completion of level 2, students can continue their studies by entering the Work Based Learning program.

Skills and career development through the National Center for Construction Education and Research's (NCCER) training curriculum, provides students with industry recognized credentials in a national registry. Students are also guided in preparing a resume, a portfolio, and employment interview skills. Completion of the Electricity program offers graduates many options for employment in the construction industry and college credits can be earned. There are several colleges that offer related courses leading to Associate of Arts or Bachelor of Science degrees.

About the program...

You will:

Gain experience in many aspects of the electricity field, including:

- Demonstrating safe work practices in the electrical shop and trade.
- · Demonstrating a knowledge of basic electrical theory.
- Applying knowledge about alternating current to circuits and transformers.
- · Constructing projects for residential wiring.
- · Identifying and properly using conduit and associated wiring and fittings.
- Applying principles and demonstrating a knowledge of commercial electrical installations.
- Interpreting and drawing circuit layouts.
- · Interpreting and applying national and local electrical codes.
- The ability to earn industry recognized NCCER credentials in a curriculum that employs the Contren Learning Series including the Level 1 Fundamental text and the Core Curriculum Training Guide.

Program Requirements

- Students must be entering 10th or 11th grade.
- Students must maintain a 2.0 GPA in all classes.
- Students must maintain a C or better to continue to level 2.
- Recommended completion of Algebra 1 with a C or better.

Credit Requirements

| Credits required for completer — 4 | | | |
|------------------------------------|----------------------------|--------------------------------|--|
| Level I | 1.0 Credit | One semester | |
| Level II Technical Math | 3.0 Credits 1.0 Credit | Two semesters Two semesters | |
| Optional | | | |
| Work Based Learning | 2.0 Credits 4.0 Credits | One semester Two semesters | |

Career Opportunities

- Commercial Wiring Technician
- Electrical Maintenance
- Electrical Supply Distributor
- Industrial Electrician
- Residential Wiring Electrician

Related Professions

- Alarms Specialist
- Applied Technology Instructor
- Communications Technician
- Data Communications Specialist
- Electrical Contractor
- Electrical Inspector
- Lighting Technician
- Voice-Video Data Installer

