

Huron Area Technical Center
1160 South Van Dyke Rd
Bad Axe, Michigan 48413
Telephone (989) 269-9284 Fax (989) 269-2844

PROGRAM SYLLABUS

Program: Electrical Technology
Instructor: Ken Errer Jr.
Credentials: Master Electrician, Vocational Certified
Phone: (989) 269-9284 **Email:** kenejr@huronisd.org

Huron Area Technical Center Mission and Student Exit Outcomes

The Huron Area Technical Center accepts the challenge to provide each individual and business access to career and technical education which meets the changing needs of our global society.

It is our vision that all students will leave with the following skills:

- Personal Management Skills
- Specific Occupational Skills
- Technology Skills
- Employability and Career Development Skills
- Systems Thinking/Problem Solving Skills
- Workplace Communication Skills

CREDIT AVAILABLE

Elective High School Credit: Recommended by HATC and awarded by sending school.
College Articulation
Apprentice seat time hours (Night Class)
CDL

PROGRAM MISSION AND PURPOSE

The purpose of the Electrical Technology Program is to provide the knowledge and skills used in both residential and industrial electrical careers to high school students interested in the Architecture and Construction and Manufacturing Career Cluster, and to provide them with the skills to enter these occupations as well as prepare for a successful life-long career through further education.

The two-year program is designed to provide students technical, academic, and employability skills while wiring a house on-site (Residential Electrical Curriculum and while drawing and working off line diagrams used in industrial wiring (Industrial Electrical Curriculum).

Students with good math skills and an interest in learning and applying math on the job will enjoy this program and occupation. Students also need good personal management skills which include attention to safety in a work setting. Advanced students have the opportunity to articulate credit to colleges and universities as well as participate in work based learning opportunities in the community.

PROGRAM DESCRIPTION

The electrical technology class is designed to give the student the basics in both residential and industrial electricity in a two-year period. The emphasis of the class is hands-on learning, learning by doing. The course is set up to create an employable apprentice electrician with a desire to continue on in the electrical field. The student will also work with math that is used in the electrical field. Employability skills such as filling out a job application, check writing, and resume writing will also be taught. One of the projects done during the year is wiring the house which is built on site at the Huron Area Technical Center. In the residential part of class, the student will be able to work from a print to wire a simulated house. In the industrial part of class, the student will work off and draw line diagrams to learn the basic components used in industrial wiring.

PROGRAM EXIT OUTCOMES

- To provide career exploration options in electrical occupations
- To develop the student into an employable electrician
- To be able to read and work off a print
- To understand what both residential electricity and industrial electricity are
- To understand how to use the different electrical parts
- Basic robotic programming and usage
- Basic soldering, circuit usage and component usage in electronics
- Students will learn basic electrical safety
- Students will know if this is the field of work he/she wishes to go into after high school
- Students will be able to work on common electrical parts with little or no assistance
- Students will learn to work in the classroom as if he/she were on a job site

COURSE OUTLINE AND TIMELINE (MAP)

- Students will complete one task before moving on to the next task.
- Students will work at his/her own pace.

RECOMMENDATIONS FOR STUDENT SUCCESS

The class is ran like a job site with everyone doing his/her own work at his/her own pace. The student will not be told to be quiet but encouraged to talk to each other. This is how it is on a job site. The student must learn to work with distractions that are going on around him/her.

Attendance, tardiness, and other rules are outlined in the Huron Area Technical Center student handbook. This will be covered in class.

WORK BASED LEARNING OPPORTUNITIES

OJT (On-The-Job-Training) and on-site house work offered.

STUDENT RESPONSIBILITIES/UNIQUE PROGRAM FEATURE

- The electrical technology program is self-paced so there is no set schedule
- Students start in the residential program then move on to the industrial program
- After finishing the industrial program, students can go into robotics or electronics
- Students have the chance to participate in Skills USA VICA competition
- Students have a chance to compete in MITES competition
- Students learn a good and profitable trade