# Alternative/ Electric Vehicle Technician





The Alternative/Electric Vehicle Technician program is an exciting new two-year exploration of technology in motion. The program prepares students for careers in manufacturing, installing and maintaining alternative and electric power sources for everything from electric bikes and scooters to forklifts, cars, SUVs, buses and even semi-trucks. In this engineering pathway, students will focus on AC/DC circuits, drives, and mechanisms in the first year, and then pneumatics and hydraulics with a capstone project of building an electric vehicle during their senior year.







# WHAT YOU'LL LEARN

- \* Regulations, electrical safety procedures, and practical skills to operate and repair recreational, retail, commercial EV-powered equipment.
- \* Operations, management principles, and logistical aspects of sales, service and rental of EV-powered equipment.
- \* Essential topics EV theory or operation and various EPA regulations, related to the battery, charging and traction control systems.
- \* Students will learn about the heart of an EV vehicle, the battery, including proper charging, repair and maintenance.



#### **COURSES**



- AC electronic circuits
- DC electronic circuits
- Mechanisms and drives



- Hydraulic and pneumatics
- Capstone project senior year



VIEW Great Oaks Course Guide greatoaks.com/ course-guide

\*Courses subject to change.



# **Alternative / Electric Vehicle Technician**

# IS THIS YOU?



Find your work personality type with this free assessment at truity.com:



Holland's Model of Occupational Themes – graphic courtesy of the University of Tennessee.

# Realistic | Conventional

Realistic personality types are "doers;" they like doing something, as opposed to talking or thinking about it. They like to solve problems in the real world. They are practical, independent, assertive, competitive, and interested in activities that require motor coordination, skill, and strength. Doers with a secondary personality type of "conventional" like to work in organized, independent and structured environments.

Key strengths that lead to success in this career path

- Attention to detail
- ✓ Dependability
- ✓ Cooperation
- ✓ Stress tolerance
- Independence
- Integrity

# INTERNSHIP/EXTRACURRICULAR OPPORTUNITIES

- Internship opportunities with various EV companies to gain real-world experience and build professional networks
- ► EV carting

- **▶** BattleBots
- ► Field trips to local materials handling equipment and industrial truck dealerships
- ► Tours of manufacturing plants

#### **UPON GRADUATION**

- Graduates will be equipped with the necessary skills and certifications to pursue careers as an EV technician or manufacturing assembler.
- Students can pursue additional training to obtain EV ASE and High Voltage Battery and Charging certifications.



For more information, visit ohiohighered.org

# **CAREER PATHWAYS**

After earning credentials, get more education and experience to



SCAN ME

VIEW Essential Skills Guides greatoaks.com/ essential-skills

- ▶ Battery/charger technician
- >> EV recreational vehicle technician
- >> Parts/equipment sales
- >> Service rental/management
- Battery manufacturing operator or technician
- Electric vehicle service technician
- Industrial EV service technician
- Mobility equipment service technician









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