GENERAL INFORMATION

- All eighth grade students in Hunterdon County are eligible to apply. Out of county students will be considered based on availability of seats.
- Acceptance into the program will be based on placement test scores, attendance, discipline records, 7th & 8th grade transcripts, and an interview.
- Students will be bused from their home to Voorhees High School(VHS) where the program is held. Students should coordinate transportation services through their school.
- The Academy program is designed for students to attend VHS the entire day and for all four years of high school.
- Each ESEA class is equivalent to one 55 minute class within a rolling block schedule.
- There are no fees for this program. The start up costs have been covered by grant funds and tuition is charged to the home school.
- After completing all the courses and academics necessary for graduation, students will graduate from the Academy.
- Students will be eligible to earn college credits from at least one or more NJ colleges. Colleges may require a discounted tuition fee.

FAQ

How does a HCVSD Academy differ from my high school's program?

- 4 years of sequential cohesive technical education curriculum
- Multiple college credits and certifications
- Career focused student organizations
- Professional Advisory Board comprised of collegiate professors and industry professionals
- Structured learning experiences through internships and mentorships.

FOR MORE INFORMATION

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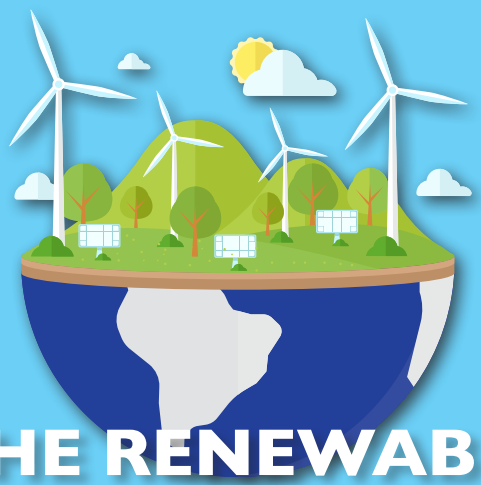
ENVIRONMENTAL SUSTAINABILITY & ENGINEERING ACADEMY

WWW.HCVSD.ORG



THE RENEWABLE ENERGY INDUSTRY GENERATED

2.3 MILLION

JOBS GLOBALLY LAST YEAR

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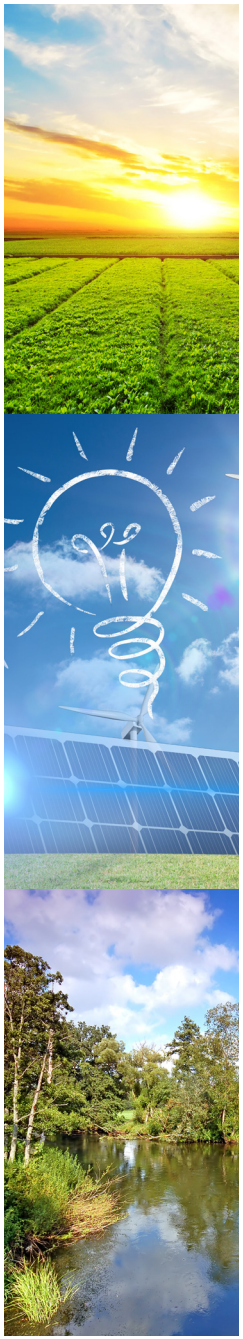
HUNTERDON COUNTY VOCATIONAL SCHOOL DISTRICT

ENVIRONMENTAL SCIENCES



ENVIRONMENTAL SUSTAINABILITY & ENGINEERING ACADEMY

The Environmental Sustainability & Engineering Academy (ESEA) is the county's first four-year academy that focuses on renewable & sustainable energy in concert with environmental engineering. The program's curriculum will infuse multiple nationally recognized curricula aligned with the Curriculum for Agricultural Science Education (CASE) Natural Resources & Ecology program, Project Lead the Way's Introduction to Engineering and NJ High School's Green Program of Study Sustainable Energy.

Hunterdon County Vocational School District's ESE Academy is operated on 40-acres of environmental and agriculture land located at Hunterdon County Educational Services Commission's (ESC) facility in Califon. The students take academic courses at Voorhees High School. The program provides students with exposure to engineering principles, resource management and policy development, sustainable resource management, and principles of renewable energy.

The HCVSD Academy model offers a unique and comprehensive approach to career and technical education. Students enroll in four years of a cohesive and sequential curriculum that provides multiple opportunities for students to earn college credits while in high school. Students participate in structured learning experiences such as internships and mentorships that are relevant to their intended college and career pathways. Additionally, students participate in career-focused extracurricular student organizations, exposing students to both local and national competitions, as well as scholarship opportunities.

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ESEA I

This introductory course explores sustainable environmental practices through the lens of natural resources and ecology, energy sources and production, agriculture and food systems, water quality and management, waste production and management, and other environmental topics. Students are challenged to consider social, economic, and environmental consequences while collaborating to produce sustainable environmental practices through scientific inquiry, engineering, site assessments, computer models, upgrading regulations, and meeting specialists in various green careers.

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ESEA II

The second year course explores sustainable environmental practices through service-learning. Students explore detailed resources associated with natural resources and ecology, energy sources and production, agriculture and food systems, and other environmental topics. They are challenged to consider social, economic, and environmental consequences through a service-learning project guiding them through a problem-solving process utilized by environmental professionals to approach their work logically.

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ESEA III

Students will engage in the AP Environmental Science course as well as a Principles of Engineering course. Students will develop skills in technical representation and documentation of design solutions according to accepted technical standards, and they will use current 3D design and modeling software to represent and communicate solutions. In addition, the development of computational methods that are commonly used in engineering problem solving, including statistical analysis and mathematical modeling, are emphasized. This course will also partner with Rutgers University to allow students the opportunity to earn college-level credits through the University's CASE Natural Resources and Ecology program.

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ESEA IV

In the fourth year, students get the opportunity to work in a team to deliver a sustainable solution to a real-world environmental and/or engineering problem. Through the project, students apply effective practices in problem solving, documentation, data collection and analysis, and presentation. Students work collaboratively to produce an implementation plan through scientific inquiry, site assessments, asset mapping, computer models, and meeting specialists associated with their project.

ENVIRONMENTAL SCIENCES

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