

## Greenlight Academy - A Beacon of Hope

**Green Light Academy (GLA)** is one of many educational and cultural programs offered by **Beacon Preservation, Inc.** a nonprofit organization designed to promote environmental conservation, sustainable energy options, and “green collar” skills training through lighthouse preservation. **Green Light Academy** is made possible through a grant from the Connecticut State Department of Education, the 1772 Foundation, and the generous support of private donors. In 2009, the GLA opened to the public high school students from **Bridgeport, New Haven, Norwalk, Stratford, and Oxford.**

### Higher Learning: WCSU 2009 - Present

The Green Light Academy (GLA) began offering a four-week summer residential program for high school students (grades 10-12) that takes place on the college campus of Western Connecticut State University (WCSU) in Danbury, Connecticut. GLA students live in university housing, dine in the Westside Student Center, use WCSU's classrooms and computer labs, conduct experiments in the laboratories of West Conn's new state-of-the-art Science Building, explore the Ives Nature Center, and enjoy the many playing fields, gymnasiums, and recreational facilities on both the midtown and west side campuses. Our faculty and guest speakers are experienced professors and certified teachers committed to engaging the learner through hands-on skill-building exercises. We believe that academic achievement improves when students develop a new interest and appreciation for science, technology, and sustainable energy by doing real-world “applied learning” lessons and hands-on activities.

GLA is an innovative program for 70 high school students of diverse backgrounds to engage in an intensive four-week residential training program designed to reduce isolation due to race, ethnicity, socioeconomic status, gender, and sexual identity. Students participate in an interactive curriculum of academics and applied learning activities to learn sustainable energy system design and green-collar skills. The academy promotes math, science, and technology through collaborative teamwork where students diagnose, design, test, and trouble-shoot with newfound knowledge and abilities.

**The program** is experiential in that small diverse inter-district teams of students are challenged to brainstorm on most appropriate energy sources (wind, solar, tidal, current) for the Penfield Light. They will conduct technology research to assess the efficiency of each energy source, collect the data, identify variables that determine best design, “crunch” data to calculate the most efficient and cost-effective power system, and work together (in concert with a team of engineers, scientists, architects, and teachers) to implement and test the system.

The student's Days start with morning academics, followed by afternoon teamwork sessions where students tackle specific skill-building challenges. Team membership rotates weekly to ensure all students meet and interact in problem-solving activities. Applied learning exercises include enrichment activities utilizing a diverse population of guest speaker-experts who involve students in scientific experiments, equipment demonstrations, and field trips. Students will have weekends off, department Friday evenings and returning Sunday evenings. All transportation is provided, and the Green Light Academy is free of charge to all students.

Use of local experts and stakeholders ensures that the scope of curriculum and sequence of activities fits the needs of today's students and future industry trends. It acquaints students with a variety of green-collar career options, exposing them to pathways of higher education.

**2012** Greenlight Academy Vimeo [ [video](https://vimeo.com/45684114) ] (<https://vimeo.com/45684114>)