SECCA Energy

A career pathway offered by Southeastern Early College and Career Academy
419 Pete Phillips Drive, Vidalia, Georgia 30474 www.seccaweb.org

Energy 3-Course Pathway

Foundations of Energy Technologies
Generation, Transmission, and Distribution
Energy Systems Applications



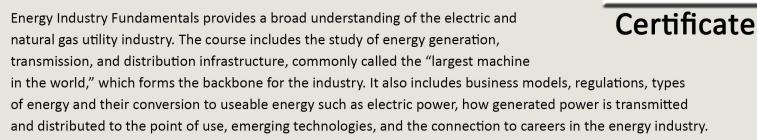
What is SECCA?

SECCA is an educational partnership among four Georgia school systems and Southeastern Technical College (STC). SECCA builds course opportunities for high school students that are directly relevant to their career and educational goals.

Our mission and goals include building schools' capacity to produce work-ready students and increase workforce readiness through a variety of career pathways.

SECCA has been approved by the Center for Energy Workforce Development as an Approved Course Provider for the Energy Industry Fundamentals course.

Only students taking coursework from an approved course provider qualify to earn the Energy Industry Fundamentals Certificate from the Center for Energy Workforce Development (CEWD).



The bearer of the Energy Industry Fundamentals Certificate has a foundational knowledge and understanding of the utility industry.









Fundamentals





Energy and Power: Generation, Transmission, and Distribution

Foundations of Energy Technologies

Course Number 49.53700

Course Description: Foundations of Energy Technologies explores the relationship among force, work, energy, and power. Students study the characteristics, availability, conversion, control, transmission, and storage of energy and power. They also examine and apply the principles of electrical, fluid, and mechanical power. Students research renewable, nonrenewable, and inexhaustible resources as well as conservation efforts.

Energy and Power: Generation, Transmission, and Distribution

Course Number: 49.53800

Course Description: Energy and Power: Generation, Transmission, and
Distribution course is designed to allow students to develop a broad
understanding of the energy industry including infrastructure, generation, transmission
and distribution of nonrenewable, renewable, and inexhaustible energy sources.
Energy sources will be researched to include the regional and global economic
implications as well as environmental and sustainability issues.

Energy Systems Applications

Course Number: 49.53900

Course Description: In Energy Systems Applications, students will further their knowledge regarding electric power generation, transmission and distribution. In addition, the students will gain knowledge about business models, regulations, and safety within the energy industry.



Module 1 - History and Organization of the Industry

Module 2 - Safety

Module 3 - Electric Power Generation

Module 4 - Electric Power Transmission

Module 5 - Electric Power Distribution



Kipling D. Hart, Ed.D. Energy Pathway Instructor

Dr. Hart is an experienced Georgia educator with highly developed skills in curriculum and instructional practices. With a strong chemistry background, he brings to SECCA innovative instruction and a passion for career preparation for area students.