STEM Academy
Engineering
022-STEM-Engineering @ REL

The Engineering program of study focuses on the design, development, and use of engines, machines, and structures. CTE learners will learn how to apply science, mathematical methods, and empirical evidence to the innovation, design, construction, operation, and maintenance of different manufacturing systems.

Secondary Courses for High School Credit

Level 1
- **H09878** Introduction to Engineering Design (PLTW)

Level 2
- **H09878** Environmental Sustainability (PLTW)

Level 3
- **H09762** Engineering Science (PLTW)

Level 4
- **H09768** Engineering Design and Development (PLTW)

Postsecondary Opportunities

Associates Degrees
- Electrical and Electronics Engineering
- Drafting and Design Technology/ Technician, General
- Engineering Technology

Bachelor's Degrees
- Electrical and Electronics Engineering
- CAD/CADD Drafting and/or Design Technology/ Technician
- Bioengineering and Biomedical Engineering
- Construction Engineering Technology/ Technician

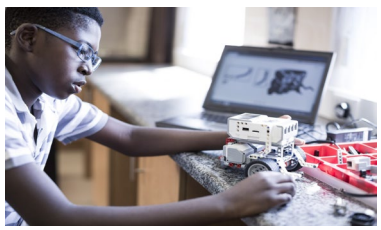
Master's, Doctoral, and Professional Degrees
- Electrical and Electronics Engineering
- Mechanical Engineering
- Bioengineering and Biomedical Engineering

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
• Participate in Technology Students Association (TSA)	• Intern at an engineering firm • Shadow a machinist

Industry-Based Certification

- Engineering Technology Foundations



Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Aerospace Engineers	$110,843	481	9%
Industrial Engineers	$97,074	1,263	10%
Mechanical Engineers	$91,107	1,535	11%
Chemical Engineers	$112,819	474	9%
Electrical Engineers	$98,405	1,137	105

Successful completion of the Engineering program of study will fulfill requirements of the Business and Industry or STEM endorsement if the math and science requirements are met.