

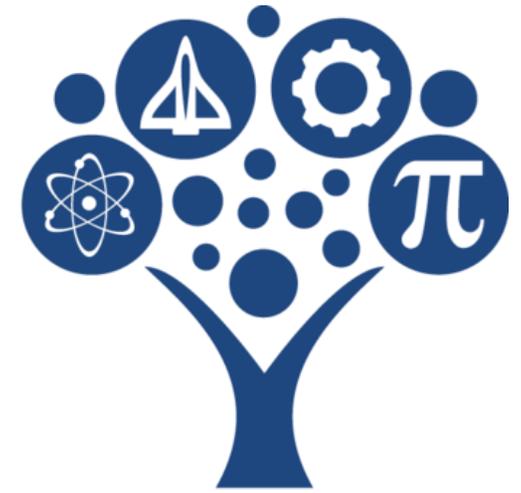
If we want to have the scientists and engineers to solve future problems, STEM schools are important to the country's future: finding sustainable energy sources, keeping water supplies clean, and discovering new technologies that help us compete in a global economy. -

*US Department of Education*

### STEM at Woodstock High School:

- Provides a challenging and rigorous program of study focusing on the application of STEM subjects .
- Offers courses and pathways for preparation in STEM fields and occupations.
- Bridges and connects in-school and out-of-school learning opportunities.
- Provides opportunities for student exploration of STEM related fields and careers, especially for underrepresented populations .
- Prepares students for successful post-secondary employment, education, or both.

The STEM program at WHS utilizes teacher collaboration across the curriculum (such as AP Physics and Engineering), and directly linking concepts of different subjects. Students will learn how different concepts, in different areas, coalesce and seamlessly integrate.



# STEM

## At Woodstock High School

**Science**  
**Technology**  
**Engineering**  
**Math**

### Why STEM?

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## **STEM Defined:**

STEM is an acronym for Science, Technology, Engineering and Math education. We focus on these areas together not only because the skills and knowledge in each discipline are essential for student success, but also because these fields are deeply intertwined in the real world and in how students learn most effectively.

## **Why you should consider STEM:**

Over the past 10 years, jobs in STEM fields have grown three times as fast as jobs in non-STEM fields, according to the Department of Commerce, and STEM fields are expected to grow by 17 percent between 2008 and 2018, compared to just 9.8 percent growth for non-STEM fields in the same time frame. But without an influx of graduates in these areas, the U.S. will not have enough workers to fill those jobs. STEM schools can help young people gain the skills necessary to succeed in these fields. Over the next decade alone, the U.S. must produce approximately 1 million more STEM-degree graduates than currently projected to meet the demands of the economy, according to a 2012 report by the President's Council of Advisors on Science and Technology. Recognizing this gap, educators have focused on getting more students hooked on math and science earlier in their school careers, which is why more STEM programs are being launched nationwide.

## **Who is a STEM Student?**

A STEM-literate student is not only an innovator and critical thinker, but is able to make meaningful connections between school, community, work and global issues. A STEM-literate high school graduate can enroll in a college-level course of study in science, technology, engineering, and math without the need for remediation. STEM skills are increasingly necessary to engage in a knowledge-based economy. There is solid evidence to suggest that the fastest-growing and highest-wage jobs in future years will be in STEM fields and all employees will need to utilize STEM skills for problem solving in a wide range of industries.

### **Woodstock High School**

2010 Towne Lake Hills S. Drive  
Woodstock, GA, 30189

(770) 721-3000

J. Mark Smith, Principal

[mark.smith@cherokee.k12.ga.us](mailto:mark.smith@cherokee.k12.ga.us)