

Arduino

The Technology **Revolution Starts Here**

Arduino is an open-source physical computing platform designed to make experiencing with electronics more fun and intuitive. It has its own unique, simplified programming language, a vast support network, and thousands of potential uses, making it the perfect platform for both beginner and advanced do-ityourself enthusiast. Arduino will be introduced in middle school and with thousands of projects available, will challenge students throughout their high school years.



Why Do We Need SEMTech?

Some of the most innovative and creative people working in the STEM (Science Technology Engineering and Mathematics) fields were engaged and challenged at an early age. If students are not exposed to technology at an early age, they are less likely to pursue it in college or high school. SEMTech provides a bridge between middle and high school, sparking interest and creativity that will stay with them for life.





Thomas Russell

Information Technology Teacher Falcon High School

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SEMTech



Students Engagement and Mentoring in

Technology



Sparking Interest in **Technology Through Purposeful Applications**



What Is SEMTech?

The SEMTech program is designed to increase student's interest in, and their desire to pursue computer science courses and technology careers. The overriding goal is to increase confidence and abilities by using technology to engage students in real world community projects that exposes students to the many unexpected benefits that technology provides to society. SEMTech emphasizes the purposeful human applications of computer science. Through comprehensive technology summer programs, middle school outreach, field trips and mentorship, SEMTech aims to increase participation of all students, including underrepresented groups, in technology and computer science.

Studies find that students are more encouraged to pursue computer science degrees when it is tied to an interdisciplinary context. They are less inclined to program computers for programing's sake. At Falcon High School, computer science will be tied to health, animation, art, photography, theater, English, math and other programs in our school with the end result being a purposeful outcome.

For More Information call
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We also learn...

Robotics

The Mindstorms system is a programmable robotics kit that uses an interfaced computer program to enable students to design, construct, and manipulate their own robots. It helps foster enthusiasm among students, and encourages them to foster their own thought process. It has been proven that this helps students with other courses such as math and science.

Snap Circuits

Snap Circuits makes learning easy and fun! Students follow the colorful pictures in the manual and build exciting projects such as flying saucer, alarms, doorbells and much more. They can even play electronic games with friends. All parts are mounted on plastic modules and snap together with ease. Students enjoy hours of educational fun while learning about electronics.