

The Foundation Supports STEM: ROBOTICS & THE MAKERSPACE



It's no secret that STEM-related jobs are among some of the fastest growing careers in our technology-driven society. To help prepare our Lake Forest High School students for their future success, the LFHS Foundation has worked collaboratively with our teachers and administration to invest in many important grants in recent years that allow our students to build important STEM skills.

In 2014, the LFHS Foundation provided robotic kits, laptops, and team fees to sponsor a newly-formed **Robotics Club** for three robotics teams. Still going strong today, these teams design, build, and program robots based on engineering principles and strategy to compete against other high school teams. Each team sends its robot into competition multiple times in a tournament, often requiring students to solve problems together and make adjustments "on the fly." Recent teams have even competed in the Illinois State Competition. "Robotics was once considered a hobby that people would tinker with in their basements or workshops at home. This is a similar pattern of how computers first started to become relevant. Now, Robotics is a full blown career path that currently has a major shortage of employees qualified for job openings," shared Applied Technology teacher, Joseph Dudeck, who co-teaches with Robotics Club sponsor Matt Wilen.











Robotics Club Just the Beginning . . .

Building on the success of the Robotics Club and to allow more students to take advantage of this unique learning opportunity, LFHS created a new **Robotics course** for the 2015-16 school year. The LFHS Foundation supplied new TETRIX start-up kits and robot supplies for the course. This class continues to grow in popularity and has evolved into Physics & Robotics, earning students both science and applied technology credits. Mr. Dudeck added, "Robotics is trending in the same direction as the computer hardware and programming field has and having a relevant Robotics program and Maker Space at LFHS sends students on a trajectory that they can enjoy their entire lives."

One of the LFHS Foundation's most significant STEM investments was the Makerspace, unveiled in January 2016. This STEM hub is equipped with 12 island tables, 25 pedestal chairs, a Digitizer scanner and six Makerbot Replicator 3D printers that allow students to build varying prototypes with the most cutting-edge technology - more advanced than many colleges.

Used by applied technology, robotics, science, and art students, the MAKERSPACE is a gathering place to INVENT, CREATE, and LEARN.







"The Foundation has impacted LFHS Applied Tech students in a positive way by routinely supporting our growth and giving students the ability to explore new ideas that are impacting the future in technology."

~Darren Brandt, Fine and Applied Arts Instructional Director





movement.

These enriching educational experiences allow our students to be programmers, problemsolvers, collaborators, and leaders, building their skills, confidence, and creativity. Since 2002, the LFHS

Looking ahead Mr. Dudek said, "Through the generous contributions from the LFHS Foundation, the Maker Space has been able to keep up with current technologies, but we will need to continue being current with technology. The number of students signing up for Robotics with Physics I, II, and III continues to grow along with the number of students involved in the Robotics Club." Just this past year, the Foundation approved a grant for **Underwater Robotics** Submarine kits. Each kit can be designed, programmed and redesigned by students in Robotics, Physics, Biology, Environmental Science, and Outdoor Education providing a much deeper learning of buoyancy, propulsion, velocity, acceleration, and

Foundation has awarded more than 250 grants across all curricular areas.



Thank you to our generous donors who make it possible for us to continue INVESTING IN EDUCATIONAL EXCELLENCE at Lake Forest High School!

Visit our Website

Lake Forest High School Foundation | Ifhsfoundation.org

STAY CONNECTED

