



Design Thinking, Engineering, and Computer Science Camps

Lydian Academy is excited to offer two distinct Design Thinking, Engineering, and Computer Science camps this summer at our Burlingame Campus location. While campers must demonstrate sufficient pre-reqs to enroll in our advanced STEAM SHOWCASE Camp, the STEM Camp is open to students of all levels who wish to participate. Al Davies will be our faculty advisor for both camps (SEE MR. DAVIE'S BIO BELOW).

STEAM SHOWCASE CAMP

The STEAM SHOWCASE camp combines STEM with students' inter-disciplinary passions. Students will explore STEM related fields in order to design and create a prototype of their own making. Students will be able to use their creations as Showcase capstones to demonstrate their ideas and projects on future college applications.

As a concrete example, in Mr. Davies' prior experience leading summer camps for high school students at Stanford University, he mentored three students on a project in conjunction with a Stanford professor working in advanced fluid mechanics to build something that simulates hurricane systems. Those students are all now published authors and co-authors on the project with the Stanford professor, and were able to use their designs to support admissions into Stanford, Cornell, and Columbia university, respectively.

Pre-Req: The STEAM SHOWCASE Camp is open to rising 9th-12th grade students who have some prior experience with coding and technology, demonstrate good standing in all math and science courses, and possess the ability to work independently with guidance from a faculty advisor.

Camp Dates / Times:

SESSION 1 - June 10th - June 28th - 12:30pm-3:30pm (Monday-Friday)

SESSION 2 - July 8th - July 26th - 9:00am-12:00pm (Monday-Friday)

Cost: \$4999 per session

- 1) Lydian Burlingame - (650) 437-2633; 205 Park Road, Burlingame; burlingameadmin@lydianlink.com
- 2) Lydian Menlo Park - (650) 321-0550; 815 El Camino Real, Menlo Park; staff@lydianlink.com



STEM CAMP

STEM Campers will learn how to use a variety of tools and mediums to design and create hands-on projects such as animated halloween displays, Rube Goldberg machines, computer driven lego marble runs, animated art, and simple robots. The tools and mediums at their disposal will include Legos, glue guns, cardboard, robots, 3D printing, micro bits, makecode, Tinkercad, introductory block based coding (and text based for those with experience or the desire to learn) and basic electronics. The scope and scale of student projects will be tailored to each individual camper in this small group setting, with a primary goal of empowering students to not only create a cool project by the end, but more importantly a lot of great memories along the way.

The STEM Camp is open to all rising 6th-12th graders of ALL Skill levels

Camp Dates / Times:

SESSION 1 - June 17th - June 28th - 10:00am-12:00pm (Monday-Friday)

SESSION 2 - July 8th - July 19th - 12:30pm-2:30pm (Monday-Friday)

SESSION 3 - July 22nd - August 2nd - 12:30pm-2:30pm (Monday-Friday)

Cost: \$2250 per session

AL DAVIES BIO

After a successful business career at the interface of engineering, CS, robotics, and electromechanical design and fabrication, Mr. Al Davies spent two years as a lead instructor in Stanford's Pre-Collegiate Studies program, where he embedded software, computer vision & robotics courses to students from across the globe for their intensive residential program. He subsequently taught for five years as a Computer Science/Design Thinking teacher and Robotics Mentor at The Nueva School in Hillsborough. During this time, he was also the lead design and fabrication mentor for seven years with the Serra/Notre Dame/Mercy robotics teams.

Al currently teaches Math, Science, and CS courses at Lydian Academy, and is the STEM-Makers advisor for the school.

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