



STEM Leadership & Industrial Design

(Grades 5-9)

(July 11 - July 22)

Our Immersives provide experiential learning with students having close collaboration with master level faculty as well as peers who are equally passionate about the topic. Immersives generally range from one week to two weeks in length. The students' immersion in the topic of study over the course of a day is long enough to provide a depth of knowledge and skills building in the targeted areas. We have some exciting offerings this year that range the gamut across six major themes: String Orchestra; Sports Camp; Art and Digital Media; STEM Literacy & Leadership; Culinary Arts; Coding for Good; and Musical Theatre and Production. Look at the description that follows for more information about STEM Leadership & Industrial Design. Immersive programs include opportunities for health and wellness activities where students participate in team-building games and get a sampling of athletics offerings in tennis, fencing, archery, dance and basketball. For returning STEM Leadership participants, there are two options to consider this summer: 1) STEM Leadership & Industrial Design (see below) or 2) [Protecting Our Western Shore: Environmental Field Research & Activism.](#)

Two Week Immersive ♦ STEM Leadership & Industrial Design ♦ \$1595 ♦ Lunch and Supplies Included

(July 11 - July 22) 9:00 AM - 2:30 PM

Grades 5-9

We've built this program in STEM Leadership and Industrial Design with a number of exciting goals in mind. STEM is so much more than Science, Technology, Engineering, and Math. It is the universal framework we use to understand, communicate, create knowledge and lead. It is also an opportunity to directly connect and shape the world around us. Over these two weeks we'll focus on **leadership, assistive technology, and industrial design** with the intent to not only raise awareness of issues impacting the world but to also grow and prepare the next generation of STEM leaders. Participants will consult with outside STEM experts as well as explore engineering and creative problem solving to address different challenges through a design lens.

The first week entails examining STEM leadership through discussions with leaders in STEM fields, learning the basics of a variety of tools and techniques that students will have available to them, and building empathy, problem-solving skills, and resilience through design thinking

challenges. At the end of the week, students will have unstructured Genius Hour time to take a deeper dive into areas of interest.

The second week centers around students expressing more autonomy as they work in small groups to define and solve a real-world problem in one of the three areas of focus: **leadership, assistive technology, or industrial design**. Participants will take turns being their group leader and tasked with running group meetings, delegating, and following up on key work. Topics such as conflict resolution, data literacy, communication, and presentation skills will be covered in workshop sessions. The week concludes with a project showcase.

Program designed to:

- promote STEM literacy & leadership with:
 - action-based leadership development in STEM with hands-on, problem-based design challenges
 - real-world application areas of **leadership, assistive technology** and **industrial design**
 - addressing the phenomena of social justice, diversity and differences in engaging change and sustainability
- cultivate hands-on learning through community action projects, which may include:
 - written reports, community ordinances and resolutions, digital media campaigns, online events, producing blogs or other written materials, and more.
 - experiential learning opportunity that facilitates growth in STEM literacy, project management, community organizing, and other leadership development skills.
 - CAD & 3D printing, microcontrollers, coding, and forensic analysis.
- build agency in young leaders to become the inventors, scientists, and engineers who will make the world a better place in fun and creative ways
 - **STEM Leadership**
 - **Assistive Technology:** Learners will consider ways in which technology can increase accessibility to those with different needs, such as by 3D printing braille signs or using a simple microcontroller to make a communication device for a nonverbal person.
 - **Industrial Design**

STEM(L&L) Daily Schedule Week 1:

9:00-9:50 am Workshop 1

9:50-10:00 am 10 Minute Break

10:00 am-10:50 am Workshop 2

11:00-11:50 am ATHLETICS

11:55 am-12:45 pm Lunch Break

12:55 - 1:55 pm Workshop 3/Genius Hour*

*Workshop 3 Mon-Wed/Genius Hour Thurs-Fri

STEM(L&L) Daily Schedule Week 2:

9:00-9:50 am Workshop 1

9:50-10:00am 10 Minute Break

10:00am-10:50am Workshop 2

11:00-11:50 am ATHLETICS

11:55 am-12:45 pm Lunch Break

12:55 - 1:55 pm Community Action Project Work/Showcase

Click [here](#) to register through Campbrain.