2021 STEM Exploration Camp Information Session

DISCOVER. IMAGINE. EXPLORE. CREATE
Our Mission

Build the self-esteem of young girls and women from untapped communities, and provide STEM literacy, leadership, and technical training to actively produce and engage in the economic and labor markets.

Engage & Inspire
Elementary to High School
(ages 7 – 17)

Unlock Hidden Sources of Innovation Talent
Engage young girls and women from untapped communities and equip them with systems thinking skills to meet the STEM workforce demands of the 21st century.

Recruit & Sustain
College to Career
(ages 18 – 22)

Closing the STEM Gap
Provide hands-on and interactive activities to cultivate creativity, igniting curiosity and develop problem solvers.

Inspiring STEM Leaders
Provide role models and programs throughout the pipeline creating future STEM leaders.
STAGE 1: Early STEM Immersion Programs

STEM Exploration Camp
- A one-week (summer) camp that provides STEM curriculum and career exposure through a culturally responsive lens.
- Projected participants: 100
- Goal: To recruit, spark STEM curiosity (growth mindset) and ignite systems thinking.
- Cost: $500 per participant.

STEM Engagement Club
- A semi-monthly weekend program that curates hands-on fieldtrips and interactive conversations with STEM professionals.
- Projected participants: 75
- Goal: To engage STEM cohort by encouraging the pursuit of STEM-centric careers and studies.
- Cost: $300 per participant.

Robotics Club
- A weekly (fall) after-school FIRST robotics program encouraging coding and engineering principles.
- Projected participants: 25
- Goal: To strengthen STEM cohort by encouraging the pursuit of STEM-centric careers and studies, while tackling real-world problems against competing teams.
- Cost: $1,000 per participant.
STAGE 2: School-2-Career Program

- Place untapped talent in STEM business and industry
  - Source paid internships
  - Identify on-the-job training

- Prepare participants for corporate and economic leadership
  - Professional & Career Development workshops
  - Life-Coaching (Sustainability)
  - Networking opportunities with influential individuals in STEM
  - Achievement in STEM
  - Entrepreneurship

(Program launching in 2022)
Program Highlights & Team Accomplishments

Executive Board team
- 2018 Walmart Community Playmaker Award.
- 2017 Take Wings Foundation Community Service Award.
- 2014 American Institute of Architects (AIA) California Council Presidential Citation for Leadership & Community Engagement; first African American & youngest president of the AIA East Bay Chapter.
- 2013/2014 Teach Tomorrow in Oakland Teacher of the Year.
- Featured on the science show “Genius with Stephen Hawking.” Written, directed and starred in educational programs for KQED.

Key Sponsors & Partners

Program
- Warriors Community Foundation Grant recipient (2019-2020).
- Coalition of Black Excellent 2019 Impact Nonprofit Award.
- The first all girls team of underrepresented minorities, to compete in a NorCal FIRST Tech Challenge competition (2018).
- The first all girls team of underrepresented minorities, to compete and receive Judge’s award in a NorCal FIRST Lego League competition (2017).

Confidential – Do not share without written consent.
Camp Agenda & Schedule

- **Theme:** Building a DREAM through STEAM!
- **Description:** As the world adapts to the global pandemic, robotics and automation will be the “new normal.” The World Economic Forum (WEF) shared a recent report that “a new generation of smart machines, fueled by rapid advances in artificial intelligence (AI) and robotics, could potentially replace a large proportion of existing human jobs.” WEF stated “automation will replace about 85 million jobs by 2025,… and… the future tech-driven economy will create 97 million new jobs,” (Forbes.com).

Participants will engage in activities that explore each pillar of STEAM using fun robots as an autonomous (self-driving) vehicle. Students are engaged in problem-based learning and critical thinking as they learn how to control their small vehicle with coding and problem-solving while they apply new concepts to solve real-world problems. As an integrated STEAM camp, the lessons include the application of math, NGSS science, arts and ELA embedded in technology and engineering. Coding with robots introduces critical thinking, problem solving, the scientific method, algorithms, and more! Girls will continue to practice Self-eSTEM’s 21st century skills and principles by presenting their work to peers and community partners. There will be fun, interactive games and art activities. By the end of camp, the participants will achieve the following learning objectives:
  - Increase knowledge and awareness of the scientific method, engineering design cycle, autonomous cars, and robots
  - Gain hands-on experience in how robots are assembled, controlled, and programmed.
  - Improve their tech and math skills through the application of Computer Science principles by creating and coding their very own robots
  - Strengthen their social-emotional skills to build confidence, collaborate with others, and drive make better decision-making

Confidential – Do not share without written consent.
Camp Agenda & Schedule

● All camp activities via Zoom and will be conducted independently
  ○ Breakout rooms to facilitate more individual assistance of group sizes of 10-15
  ○ Will need laptops or computers; mobile devices may not function properly

● Monday, July 12 - Friday, July 16, camp workshop is from 9am-12pm PST
  ○ Saturday, July 17 is from 11:00am-12:30pm for the Close Out Celebration
  ○ Please join at least 10 minutes prior to camp start time to allow for attendance checking
  ○ Videos on

● Getting Started Robotics Kits & Self-eSTEM Swag kits (in the mail)
● Overview Videos
● Virtual Tech Support on Staff
● Default information page www.selfestem.org/events
Camp Agenda & Schedule

- **Day 1-4**: Learn about robotics, how to assemble their robots and how to code them. There will be guest speakers at the end of each day, focused on inspiring participants to continue in STEM education and career pathways.

- **Day 5**: Camper presentations and fun activities! Making STEM lit!

- **Day 6**: Close Out Celebration to highlight the camp STEM Star, camper testimonies and appreciation for volunteers, campers, sponsors, community partners, parents and staff. It is time to celebrate.
Online Ground Rules

- Join Meeting in a Quiet Space
- Mute Your Audio
- Turn-On Video
- No Chatting Offline
- Breakout Rooms

**Chat Messages to Everyone & Host**
- Disabled Private Messages

- Campers should enable **Speaker View** for Main Presentation
- Camper should enable **Gallery View** for Breakout Rooms
- Waiting room enabled, **so please log-on on time!**

- Zoom account must have **First and Last Name - Age** of camper
  - Must match name on application/submitted form
    - Example: Llyahrose Tillman-8
  - Volunteers will need to add “- Role” after Last Name
    - Example: Lauren Brown - Facilitator

Confidential – Do not share without written consent.
Online Ground Rules

- Social media posts of daily camp activity
  - Looking for **STEM Stars**
  - Must hashtag **#selfestem**
  - Encourage you to tag us

- Each camper must complete **Camp Survey** to be eligible for $100 gift card
  - Pre and post* camp survey on website [www.selfestem.org/events](http://www.selfestem.org/events)
  - *post camp available on the last day of camp

- Have blank paper and pencil for note taking

- Additional Zoom Features (optional)
  - Virtual Background
  - Emoji
  - **Raiser Your Hand (via Participants list)**

- **e-Swoosh**
Virtual Code of Conduct

- **Respect**: As a community, we are dedicated to being welcoming towards everyone from all backgrounds, identities, genders, and beliefs.

- **Engagement**: Campers should keep cameras on when directed. They are expected to focus on camp and off other websites and/or other devices. They must maintain a positive attitude.

- **Virtual Rules**: Campers must avoid language and images that are inappropriate or offensive. Any violation may result in being muted or removed from the Zoom meeting.

- **Communication**: Camper’s communication will be within the Zoom and will not the ability to privately message each other. Please inform us if you need to leave the Zoom meeting for any reasons via chat.

- **Security**: Please inform Self-eSTEM staff if you lose a device or account get hacked. Someone may get unauthorized access to the Zoom camp meeting details. **DO NOT SHARE** Zoom meeting details with anyone.
Volunteer Roles - *It is a Production!*

- **Producer**: Responsible for monitoring the video cameras for raised hands for responding to question(s) and bringing to speaker attention. Also to flag inappropriate behaviors and flagging any audio noise. #LightsCameraAction
- **Messenger**: Monitor chat messages for questions, sidebar conversations or inappropriate language. Can reply or intervene directly via chat or flag Executive Producer. #DMmanager
- **Facilitator**: Help drive break out groups and leading small group discussions. Troubleshoot and problem solving. #KeepItLit
- **Photographer**: Take screenshots or photos online speakers and activities submit via Google form. Focused on capturing engagement moments. #GetThemAngles
- **Writer**: In breakout groups, will capture high level notes via Google form. Goal is to summarizes campers engagement, contributions and STEM innovation! #WriteDown
- **Executive Producer**: Behavior patrol! #StickToTheScript.
  - Shalonda Tillman (primary)
  - Gervetti Lockett
  - Adamaka Ajaelo

Confidential – Do not share without written consent.
Q&A - Questions?

Build and diversify the next generation of STEM innovators and entrepreneurs!

www.selfestem.org

info@selfestem.org