

LAUNCHPAD 2020 virtual program hosted over 70 high school students daily from across Los Angeles. LAUNCHPAD was able to give students an insight into what the different types of engineering, computer science and technology jobs there are available and how they are incorporated in everyday life to make the world a better place. The experiences shared by 20 College of Engineering, Computer Science, and Technology Faculty, 4 ECST students, and 36 industry professionals gave students a better understanding of the different types of engineering fields as well as giving them an idea of what to expect in college and after college. Their stories reminded students that no matter how hard it may sometimes feel, they can accomplish anything they set their minds to, “The biggest lesson I have learned during the 2 weeks of this program was to not let any negativity bring down your character while pursuing the subject or the thing you enjoy doing.”

The ECST student assistants were part of the creation of the new online version of LAUNCHPAD. They incorporated Guidebook to engage the high school students and creating a space for students to post what they were learning daily. They worked with industry professionals to create a virtual online culminating project to incorporate all concepts learned by the students throughout the program. They served as daily moderators and hosts of the entire LAUNCHPAD program. We can proudly say they were the face of 2020 LAUNCHPAD Summer Program!

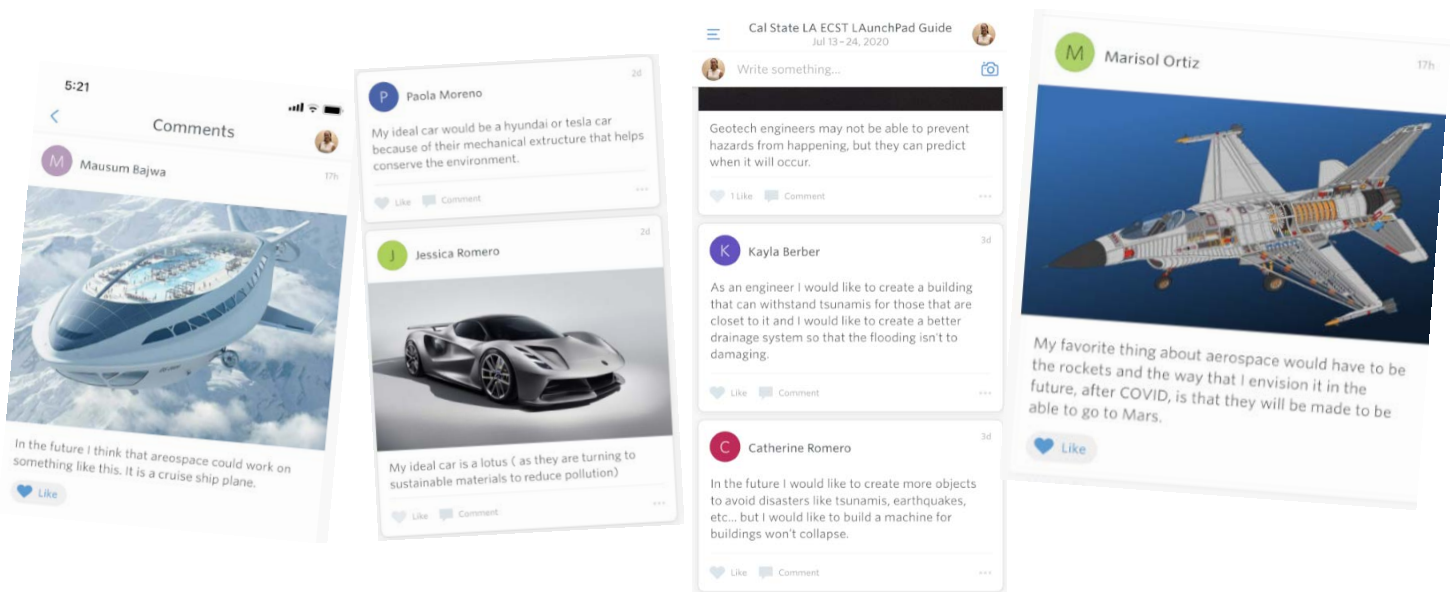
Quotes from participants:

“The biggest lesson learned from my participation in LAUNCHPAD2020 is that I can help improve our future with my ideas whether I think their dumb ideas, one day they won't be. I could use my ideas and educate myself so that one day I can make these ideas real and improve the way others live.”

“I learned that there's so many ways of engineering and science and so much careers that we don't hear about and I enjoyed being able to have a hand full of ideas of the engineering world at Cal State LA”

“Thank you so much for giving students this opportunity! Making this program free makes low income students like myself feel more welcome!”

“This was an amazing experience that I learned a lot from and I am happy that I had the privilege to be able to participate in this.”



ECST LAunchPad Partnership with ASI

Cal State LA
February 16, 2021

ECST LAunchpad Partnership Agreement

Objective of ECST Acceleration Initiatives:

The ECST Acceleration Initiative offers a range of programs to recruit and support students as they begin their ECST journey, with the goal of preparing them to successfully complete their degrees and speed ahead into their STEM career. LAunchPad is one of the four programs that is part of ECST's acceleration program. At this time ECST has 15 % female students and the goal is to increase that to 25% female students by 2025.

Introduction

We seek \$4,600 from the Associated Student Inc. (ASI) to support Cal State LA's LAunchPad 2021 Summer Program, a two-week summer engineering and computing camp for high school women. LAunchPad's goal is to inspire participants to attend college and pursue a career in a STEM-related field. When the high school participants eventually apply to college, we hope they will choose to attend Cal State LA. ASI's support will allow us to continue to hire engineering, computer science, and technology (ECST) students to serve as student technical assistants to ECST faculty and staff. Student technical assistants enhance our current program design, which includes them in the programs classes, orientation, regional field trips (when applicable), lab tours, and Futurethon event. We would welcome ASI's continued financial support and participation in these program elements.

Project Descriptions and Partnership Objectives:

LAunchPad Summer Program

A two-week summer program for rising high school female seniors teaching them how different engineering, and computer tools work together to make the world a better place. They work on various online activities and projects to learn about electrical, mechanical, civil engineering, and computer science. This summer we were able to incorporate Fire Protection and 3-D design in the Makerspace.

Partnership Objectives: ECST undergrad and grad students have an opportunity to get professional development from faculty in electrical, mechanical, civil, and computer science departments as they work as student technical assistants. The ECST student technical assistants work directly with faculty with developing and facilitating curriculum that reinforces engineering and computer science concepts to rising senior female students to develop or strengthen their interest in pursuing these fields of study. A LAunchPad student technical assistant stated "LAunchPad showed me how important it is to inspire students to believe in themselves and what they're capable of. In the process, the students reminded me of how passion, curiosity, and dreaming the impossible are what make anything possible. In them, I saw how far I've come, and was motivated to continue to push towards seeing how far I'll go."

Budget Narrative for LAunchPad Summer Program

ECST Student Technical Assistants

\$16.00 per hour X 50 hours per student=\$800

Benefits: \$800 X 15%=\$120

Total Salary and Benefits per student technical assistant= \$920

Five total student technical assistants= \$4,600

Total LAunchpad Summer Program Costs=\$4,600

GRAND TOTAL COSTS: \$4,600.00

Timeline:

Date	Activity	Responsible
March 2021	LAunchPad applications are distributed to MESA and local High Schools to nominate 5 rising senior females interested in STEM fields.	ECST Outreach, Director
April 2021	LAunchPad applications are due. ECST Student Technical Assistant applications are open to apply	ECST Outreach, Director
May 2021	ECST Student Technical Assistants are hired	ECST Fiscal Office, Faculty, and Student Technical Assistants
June 2021	ECST Student Technical Assistants work with ECST faculty on LAunchPad Curriculum preparing for classes.	ECST Faculty and Student Technical Assistants
July 2021	LAunchPad Summer Program at Cal State LA	ECST Outreach Director, Staff, Faculty, and Student Technical Assistants

Check out 2020 Schedule: <https://www.calstatela.edu/ecst/success/launchpad>
For 2021 it will be similar virtual schedule

LaunchPad Sponsors:

Mathematics, Engineering, Science Achievement (MESA)
Weingart Foundation
Aerojet Rocketdyne
Amy Ryan
Jorge Ramirez and Catherine McAfee-Ramirez
Los Angeles Water and Power
Safna Engineering & Consulting