

SPARKING STUDENTS' CREATIVITY, DISCOVERY AND INNOVATION

Michael Pham had a polytechnic experience through the Learn Through Discovery Initiative.

He founded Bronco Space, in which more than 100 students are launching satellites, high-altitude balloons and advancing wildfire-fighting technology.

Bronco Space launched a cube satellite into space through SpaceX and won \$500,000 in a NASA challenge.

Michael Pham was 8 years old when he fell in love with space after he saw a live rocket launch.

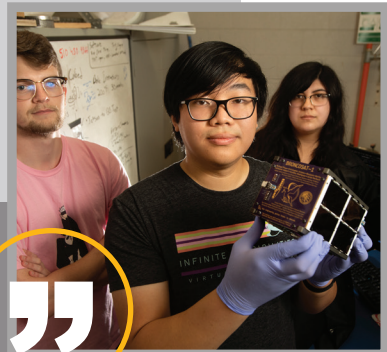
Pursuing aerospace engineering at Cal Poly Pomona, he discovered our Learn Through Discovery (LTD) Initiative, which aims to have every student participate in at least one signature polytechnic experience (PolyX) by graduation and be able to talk about it.

LTD ignited Michael's entrepreneurial spirit, and he wanted to spark that same excitement about space in other students. He founded Bronco Space, where more than 100 students are:

Launching BroncoSat-1 – a cube satellite (CubeSat) the size of half a loaf of bread was launched into space during a SpaceX mission in May 2022 to run intelligence and machine-learning algorithms in orbit.

Advancing the fight against wildfires using small-satellite observation technology to detect, track and report on them. The Bronco Ember technology has won \$500,000 in the NASA Tech Leap Challenge so far.

Accomplishing a high-altitude balloon mission by designing, building, testing and sending it 23 miles into a near-space environment to gather data. Students also practice creating a mock CubeSat to prepare for real projects. The Balloon Launch Assessment Directive for Everyone is a first-year experience for students to enhance their engineering skills.



“Space is thought of as an aerospace engineering playground, but we are engaging other engineering majors, computer science students and reaching out to science majors. We try to make Bronco Space as diverse and interdisciplinary as possible.”

MICHAEL PHAM
'22, aerospace engineering

HELP SUPPORT CREATIVITY, DISCOVERY AND INNOVATION

Through Bronco Space and other LTD initiatives, our students foster their creativity, connect with mentors and develop innovative solutions to real community and industry challenges. You can also be part of that solution.

Mentor current students to give industry perspective

Provide funding to support student innovation and ensure their projects continue

Provide scholarships to relieve students of financial stress and give them more time to focus on their academic and career success

Contact the Cal Poly Pomona Philanthropic Foundation at 909-869-4997 or philanthropy@cpp.edu for more information.



HOW OUR STUDENTS LEARN THROUGH DISCOVERY

PROJECTS HATCHERY

Students receive guidance in bringing their innovative ideas to life.

LTD FIRST YEAR EXPERIENCE SHOWCASE

Freshmen conduct research with faculty mentors and present at an annual showcase.

SIGNATURE PolyX (POLYTECHNIC EXPERIENCES)

Students learn how to learn, learn by doing, and learn through diverse sources.

They receive mentoring and enhance their skills in critical thinking, problem solving and collaboration.