

WANTED:
INNOVATIVE
K-12
EDUCATORS



Drone Racing League & Biosphere 2 ... flying at the speed of innovation!

SATURDAY MARCH 24, 2018

11:30AM – 6:00PM (Lunch, coffee, & snacks provided)

Teacher Professional Development Workshop

Autonomous Vehicles, STEM Education, & Cross-Disciplinary Pedagogy

Information and application: <http://biosphere2.org/education/educator-training-az-stem-center>

(\$35 Registration Fee Upon Acceptance; 6 hours of continuing education professional development)

Along with: **Afternoon Drone⁺ FESTIVAL & Evening Drone RACING**

The Drone Racing League (DRL) produces a global series of races with professional pilots from across the world. Races are televised by networks like ESPN and watched by 30 million people around the world!

Biosphere 2 is a truly unique venue for highlighting how drones and other autonomous vehicles are being used today in the many facets of our daily lives, and in the scientific community. Especially relevant to Biosphere 2 are the multiple Earth Systems Science applications (post fire assessment, hurricane analysis, remote surveying, etc.), innovative engineering design, and multi-disciplinary approaches.

UA Biosphere 2 and DRL will bring together a wide variety of UA and community programs, as well as local teachers, students, and the public to *showcase the science of autonomous vehicles, machine learning, and the 4th Industrial Revolution.*

Questions?

Candice Crossey crossey@email.arizona.edu, Kevin Bonine kebonine@email.arizona.edu or Alex Ruff aruff@email.arizona.edu.

MACHINE LEARNING, PHYSICS, OPTICS, LIDAR, UAV, COMPUTER ENGINEERING, ROBOTICS, AUGMENTED REALITY, ETC.!

Teacher Professional Development Workshop
Saturday March 24th, 2018
Biosphere 2
Program Schedule
(subject to adjustment)

Autonomous Vehicles, STEM Education, & Cross-Disciplinary Pedagogy
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Time	Topic
9:00 - 11:30 am	Teacher Check-In (come to Biosphere 2 Visitor Center; drive is 60 minutes from downtown Tucson)
11:30 - 11:45	Introductions & Overview
11:45 - 12:30	TED Talk style presentation #1 (30 mins) Q/A Discussion (15 mins)
12:30 - 1:15 pm	TED Talk style presentation #2 (30 mins) Q/A Discussion (15 mins)
1:15 - 1:30	Lunch (provided, along with coffee and snacks)
1:30-1:45	Working Lunch session: FAA rules & regulations, drone funding ideas
1:45 - 2:30	TED Talk style presentation #3 (30 mins) Q/A Discussion (15 mins)
2:30- 3:30	Exhibit Walk
3:30 - 3:45	Exhibit Walk Discussions
3:45 - 4:15	Lesson Development
4:15 - 5:00	Drone Demos on Biosphere 2 Lawn
5:00 - 6:00	Lesson Development & Discussion – Continued
6:00 pm - on	<i>Dinner (for purchase) and Drone Racing League Event (6 to midnight)</i>