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# Introductory Drones for STEAM & Computer Science

This hands-on workshop will introduce the **Aerial Robotics 101** curriculum for recreational small UAVs (drones) for STEAM and CS education, targeting elementary, middle and high school. The free/customizable curriculum covers an introduction to UAVs, UAV equipment, safety and procedures, aerodynamics, modeling UAVs with the LEGO robots, UAV coding (autonomous flight) and Aerial Photography/Cinematography. We will be flying the Parrot Mambo (~\$33/student/crew), DJI/Ryze Tello (~\$66/student/crew) and DJI Spark (\$99/student/2 crews). This course is intended for recreational UAV use for STEAM and CS education, not a UAV Pilot Training/Certification Course (i.e. not FAA Part 107). Drone usage is indoors and limited use outdoors over school property.

The course is approved for 6 STEM Clock Hours and covers:

- > Introduction to Recreational UAVs & free Aerial Robotics 101 curriculum
- > UAV Equipment, Basic Piloting (indoors) and Advanced Operations
- > UAV Aerodynamics and Technology (modeled with LEGO EV3)
- > UAV Coding for Autonomous Flight
- > Aerial Photography and Cinematography

**Introductory Drones for STEAM & Computer Science is scheduled for:**

**June 21, 2019**  
**ESD 123; 9:00 – 3:30**

**NOTE:** This professional development event is limited to 10 participants.

The \$149 registration fee includes:

- Hands-on professional development (computers, software and aircraft supplied) with an experienced instructor
- A free turn-key and customizable curriculum
- Flight time with up to 3 aircraft types
- 6 STEM Clock Hours for teacher certification

## ***Registration Information:***

Registration for this Introductory Drones for STEAM & CS PD is handled through *FIRST* Washington. Find registration form at:

<https://app.smartsheet.com/b/form/d9b72f058bb749d6b7393147ce3cbec0>

Questions?

- Please contact the instructor, Randy Steele: [rsteele@osd.wednet.edu](mailto:rsteele@osd.wednet.edu)



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