

# **FIRST Washington STEM Robotics PD**

## **Program Application Links**

### **Intro PD Workshops (1.5-days - \$249 before up to \$200 scholarship)**

**Elementary STEM Robotics** will provide a hands-on experience and walk-thru of free curriculum resources for both the LEGO WeDo 2.0 for early elementary (and *FIRST* LEGO League Jr.) and [Elementary STEM Robotics \(EV3\)](#) for upper elementary (and *FIRST* LEGO League). Additionally, participants earn a 5% LEGO discount and 9 STEM clock hours.

**Apply here:** <https://app.smartsheet.com/b/form/c9a8878615394ed988c5b94ddae59895>

**CTE STEM Robotics 101** will provide a hands-on experience with LEGO EV3 and a walk-thru of the free/customizable [STEM Robotics 101 \(Robo101\) curriculum](#). Robo101 has approved model CTE Frameworks and Leadership Equivalencies for both middle and high school Introductory Robotics and the high version may be adapted for both Science & Math Course Equivalencies. Additionally, participants earn a 5% LEGO discount and 9 STEM clock hours.

**Apply here:** <https://app.smartsheet.com/b/form/a2c04b3bb8ff47c2827caa092ae7205e>

**FTC Robotics Intro** will provide a hands-on experience with the Tetrrix robot and Android phones used by *FIRST* Tech Challenge (FTC) as well as walk-thru of the free [Java for Robots \(Robo202\) curriculum](#). Robo202 has approved high school model CTE Framework and Leadership Equivalency. Additionally, participants receive 10 STEM clock hours for this workshop.

**Apply here:** <https://app.smartsheet.com/b/form/e5275b5f80b94a2eac78583917b4ce85>

### **Advanced Topics PD Workshops (1-day - \$149)**

**LEGO Robotics Advanced Topics (Refresh & Extend)** addresses any questions Intro PD graduates have before moving deeper into [the Robo101 curriculum](#). Advanced programming and Data Logging are covered, unlocking the full science & math capabilities of the EV3 platform for high school course equivalencies. Participants earn 6 STEM clock hours for this workshop

**Apply here:** <https://app.smartsheet.com/b/form/679d161b777343cc8330241808a0e936>

**Java for Robots (EV3)** provides a path to text-based programming for the EV3, leading to skills needed for *FIRST* Tech Challenge and *FIRST* Robotics Competition, as well as advanced programming classes like AP Computer Science or Computer Science Principles. Participants walk-thru the [free Java for Robots EV3 \(Robo102\) curriculum](#) and earn 7 STEM clock hours for this workshop.

**Apply here:** <https://app.smartsheet.com/b/form/7eb317ac0c46439db6679864d825cc50>

**Aerial Robotics 101 (Drones for STEAM & CS)** is a hands-on workshop introducing the [Aerial Robotics 101](#) curriculum for recreational small UAVs (drones), targeting elementary and middle/high school. Topics include introduction to UAVs, equipment & procedures (safety), aerodynamics & modeling UAVs with the EV3, coding UAVs for autonomous flight, and aerial photography/cinematography. We will be flying the Parrot Mambo, DJI/Ryze Tello and DJI Spark. This course is intended for recreational use of UAVs for STEAM & CS education, not a UAV Pilot Training Course (i.e. not FAA Part 107). The drone usage is indoors and limited use outdoors over school property. OSPI has approved this curriculum to be used in existing CTE Robotics, VisCom, Video Production, Computer Science, etc. CTE classes **WITHOUT** submitting a new Framework for approval (since there is no “Drone” CipCode yet). Participants earn 6 STEM clock hours for this workshop.

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

**Questions?** Contact PD Program Administrator Randy Steele at [rsteale@osd.wednet.edu](mailto:rsteale@osd.wednet.edu)