



# DRONEBLOCKS - ADVANCED

**BEST SUITED  
GRADES  
7-12**

The DroneBlocks Curriculum can be applied with varying age ranges and is extremely conducive to students with diverse learning styles by helping them explore math, science and logic through fun and practical application. Students will learn Block, Python, and JavaScript coding by executing their code on small indoor friendly Tello drones that will fly autonomously indoors.

## THE STUDENTS WILL:

- Program Tello and Tello EDU using more advanced programming techniques such as JavaScript, Python, and OpenCV;
- Understand and implement more complex coding functions such as loops, variables, and logic;
- Work through real-world applications with drones such as creating a drone lightshow performance and panorama challenge;
- Use the DroneBlocks Simulator to fly through obstacle courses and create shapes and patterns with the simulator trail;
- Control the Tello camera through OpenCV, and use OpenCV for ArUco marker recognition;
- Code the Tello to be fly with keyboard shortcuts in OpenCV, or design your own custom control panel in NODE-RED;
- Use the Tello EDU swarm function through Python coding and NODE-RED;
- Access the Tello video stream through Python coding, or using the DroneBlocks Desktop App;
- Work through over 100 individual lessons with easy to follow video instructions; and
- Troubleshoot common coding software challenges.



**FOR MORE INFORMATION, PLEASE DON'T HESITATE TO CALL:**

[www.shemaps.com](http://www.shemaps.com) | 1300 895 795 | [hello@shemaps.com](mailto:hello@shemaps.com)

## DRONEBLOCKS MEMBERSHIP

DroneBlocks Members will have full access to all DroneBlocks curriculum and software (including the new drone simulator). The simulator can take advantage of any DroneBlocks block coding curriculum and missions for distance learning. DroneBlocks offers flexible professional development services; one-on-one coaching sessions are available to assist educators, walk through curriculum, and build user confidence. With the use of cognitive learning and coaching models, the DroneBlocks Membership creates positive outcomes, where technology is used as a tool for supporting more productive and engaging STEM learning experiences.

### Critical Thinking & Advanced Programming



Industry Skills



Block & Line-based Coding



Numeracy



Capturing and Analysing Data



Video Demonstrations



Computer Literacy



How-to Guides



Drone Recommendations



Artistic Expression



Communicating Information



Live Webinars



100+ Lesson Plans



Talk to us about purchasing drone equipment!

For expert advice and support on purchasing the right drone equipment, call Paul on 1300 895 795



### FLEXIBLE DELIVERY AND FLEXIBLE LEARNING ONLINE TEACHER TRAINING, CURRICULUM AND SUPPORT

All our programs can be tailored to suit the needs and budget of your school. We offer online professional learning for teachers and expert advice on the purchasing of drone equipment.



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