

# Volatus Youth Drone Camp

## Schedule

### Module 1

#### Introduction to Drones

##### Topics Covered:

1. The Drone Industry 5W's (Who, What, Where, When, and Why)
2. Components of a Multirotor
3. Drone Safety
  - ✎ Callouts
4. Equipment Familiarization
  - ✎ Tello Software Interface
  - ✎ Connecting Your Tello and Controller
  - ✎ Flight Skills Checklist
5. UAV Terms and Definitions

### Module 2

#### Piloting Mastery

##### Topics Covered:

1. Drone Regulations – It's The Law!
2. Precision Movements
3. Piloting by First Person View (FPV)
4. Crew Communications (Team Piloting)
5. Engineering Studio – Solving Problems with Drones



### Module 3

#### Drone Racing

##### Topics Covered:

1. History of Drone Racing
2. Skills Challenges
3. Course Design
4. Time Trials
5. Drone Races

### Module 4

#### Drone Photography and Video

##### Topics Covered:

1. Basics of Photography
  - ✎ Shutter Speed
  - ✎ Aperture
  - ✎ ISO
2. Basics of Videography
  - ✎ Framing
  - ✎ Tracking
  - ✎ White Balance
3. Principles of Photogrammetry
  - ✎ Geotagging

### Module 5

#### Coding With Drones

##### Topics Covered:

1. What is Coding?
2. Programming Languages
3. Block Coding
4. DroneBlocks App
5. Mission Set
6. Problem Solving Coding Challenge: Part 1
7. Optional Coding Challenge: Part 2