

## Introduction to Drones Middle School Module

This module is designed for middle school teachers to incorporate “On the Go” drones lessons into career development, aviation, engineering or enrichment classes. The module contains complete lesson plans including bell-ringers, PowerPoint presentations, related activities complete with instructions and rubrics, test questions, and assessments for each topic. The entire *Introduction to Drones Middle School Module* is designed for four to five weeks of instruction. While the Remote Pilot license is recommended for the instructor, it is not required since the activities involve flying the Tello drones indoors.

This curriculum is the perfect fit for teachers to grab on the go and take student learning to new heights!

Objectives/Indicators
<b>1. Introduction to Aerospace</b>
1.01 Identify types of aerospace vehicles.
1.02 Understand aerospace history.
<b>2. Introduction to Unmanned Aerial Systems (UAS)</b>
2.01 Understand the basics of UAS.
<b>3. UAS Career Opportunities</b>
3.01 Identify industry specific applications for UAS systems.
<b>4. UAS Rules, Regulations and Safety Procedures</b>
4.01 Understand rules and regulations within the UAS industry.
4.02 Understand why safety is important within the UAS industry.
<b>5. Principles of Flight</b>
5.01 Explain the four forces of flight.
5.02 Identify the structure of a UAS.
5.03 Define and demonstrate roll, pitch and yaw.
<b>6. Introduction to UAS Flight Operations</b>
6.01 Identify components of pre- and post-flight operations.
6.02 Execute in-flight operations.
<b>7. UAS Mission Project</b>
7.01 Execute a UAS mission service project for the school.