

## K-12 Drone-Powered Programs, Ready to Launch!

## **Empowering Educators to Create Legends**

We help educators make learning interesting and relevant through drone technology supported by simplified, turnkey curricula that are easy to implement.

## **EXPLORE OUR PROGRAMS**

**Grades K-3** 



LITTLE LEGENDS

Page 2

Grades 5-8



**EGYPTIAN EXPEDITION** 

Page 10

Grades 4-8



STEM FUNDAMENTALS

Page 5

Grades 8-12



**FPV INITIATOR** 

Page 13

## **Grades K-3**



## LITTLE LEGENDS

Stories, games and classroom activities promoting SEL and early STEM concepts.



## Your Ultimate Adventure-Packed Educational Solution!

Stories, games, and classroom activities! Children join the Little Legends as they navigate unexpected challenges, harness the power of teamwork, and discover the true meaning of being legendary. Unlock a world of joy and meaningful learning with our themed 5-story sets!

**Grades K-3** 



## Each enriching adventure package offers an all-in-one classroom experience, and includes:



#### **Engaging Stories with Detailed Lesson Plans**

Dive into captivating narratives featuring Mateo, Nova, Kannon, Ember, and Gimbal—the Little Legends themselves—as they tackle real-world drone-themed challenges! Each story comes complete with a meticulously designed 45-minute lesson plan to help you guide the adventure effortlessly.



#### **Physical Play**

Break from routine with activities that are not just fun but also keep young bodies active, all while staying true to the story's theme.



#### **Interactive Card Games**

Foster teamwork and critical thinking with our custom-designed game cards— 4 decks included for group play!



#### **Downloadable Goodies**

Get instant access to coloring pages and puzzles that keep little hands and minds busy and aligned with the story.



#### **Prompt Engineering**

Gimbal the AI drone and Little Legends companion makes learning about prompt engineering a magical experience. Young students enjoy adventurous tales while gaining practical skills in effectively communicating with AI.



## Personalized Adventure Folders & Stickers:

Each student receives a Little Legends folder and a vibrant sticker sheet featuring all the characters. Let them personalize their folders to store activity sheets and share their legendary journey with family!

#### Perfect for:

- **In school:** in class, after school, specials
- Out of school: enrichment programs, school breaks, camps
- ( Anytime: learning-based fun!
- 🦁 Students grades K-3

#### **Alignment & Standards**

- Every component is meticulously aligned with Next Generation Science Standards, ELA, and Social and Emotional Learning.
- From park adventures to high-tech scenarios, your students get a taste of the booming drone industry, making STEM relatable and exciting!

#### **Technical Requirements & Pricing**

#### **Drone Legends LMS:**

Cross platform (Mac, PC, Chromebook) browser-based, GDPR-compliant application.

#### **Pricing Options:**

For pricing, please contact us at info@dronelegends.com or call (866) 376-6338, option 3.

## Are you ready to be legendary?





### STEM FUNDAMENTALS

All-in-one curriculum package that uses safe, indoor drones to make learning STEM fun.



#### **STEM Fundamentals**

#### **Course Overview**

#### **STEM Reimagined**

We believe that inside every child lives a Legend™. We use the magic of drones to engage elementary and middle school students in highly entertaining, yet academically challenging drone-themed STEM missions that require them to work in teams, fail forward, and explore solutions to real-world problems.

Drone Legends empowers teachers around the world to deliver the best STEM with drones programming to the children in their classrooms and after school enrichment programs.

#### **Curricular Topics**

- · Drone piloting
- · Real-world drone applications
- · Science and math applications
- Engineering design process
- · Aerial video and editing
- · Introduction to visual-based coding
- · Coding concepts: loops, functions, variables

#### **Educator Support**

- Live or virtual professional development support
- Customer support
- An active online community for fresh teaching ideas

#### **Perfect For**

- In school: in class, after school, specials
- Out of school: enrichment programs, school breaks, camps
- · Anytime: learning-based fun!

#### **Teacher Testimonial**

"The Operations Manual is an asset that you cannot be without! The super clear contents (that covers every possible aspect needed), clear images and detailed, yet concise, text makes it easy for both teachers and students to follow and successfully use."

- Charlotte, After School Program Instructor

> 12-15 STUDENTS PER CLASS











#### **Materials Included**



Recommended starter bundle, customizable to meet your unique requirements.

#### **Drones and Hardware**

- 6X Tello Boost Combo (drone, 3X batteries, 3-port battery charger, USB cord, 1X set of 4 replacement propellers)
- 12X Tello spare batteries
- 12X Tello replacement propellers (pack of 4)
- 6X Tello replacement propeller guards (pack of 4)

#### **Fundamental Curriculum**

- 12x Student Mission Guides
- 6x Operations Manuals
- 2x Educator Lesson Planners
- 12x Student Safety Cards on Lanyards
- 36x Drone Legends pilot wing pins
- 100X Drone Legends stickers
- Annual access to DL Educator Portal (slides, videos, worksheets, and more)
- 12 month unlimited Professional Development (4x Zoomsessions w/live instructor available ea. month)

#### **Class Materials**

- 1x 158pcs construction builder set
- 8x Launch/land pads
- 24x 1.25in Spiky Hedge Balls (for flip missions!)
- 6x 3D printed flip cups + STL print file to print your own!
- 10x 120 Inches/300cm, measuring tapes
- 24x mini koala animal clips
- 24x Mechanical pencils
- 8x Sticky Notes
- 12x Clipboards
- 12x Safety goggles
- 6x 6 quart storage bins



#### **Contact Hours**

20 hours — The program includes 10 lessons, each one intended to run about 2 hours. Teachers can choose to use 1 lesson per day, combine two lessons, or split them between days depending on their scheduling constraints.

#### **Technical Requirements**

One smartphone or tablet per drone to use as a flight controller (requires iOS 9.0 or later or Android 4.0.0 or later. Not compatible with FireOS/Amazon tablets). Students can conduct coding missions on the same smartphone or tablet via the DroneBlocks app or the DroneBlocks Google Chrome extension on Chromebooks or PC. Not Included.

#### **Pricing Options**

For pricing options, contact us at: info@dronelegends.com
Or call: (866) 376-6338



Give your students an educational experience they'll cherish for a lifetime. Start a Drone Legends program in your school and see firsthand the power of the Magic of Drones! For more information, visit:

#### https://dronelegends.com

\*NGSS is a registered trademark of Achieve. Neither Achieve nor the lead states and partners that developed the Next Generation Science Standards were involved in the production of this product, and do not endorse it.

## Alignment and Standards

#### **Lesson 1: Flight Training**

Subject	Standard Alignment
NGSS	4-PS3-1
Common Core Math	CCSS.MATH.CONTENT.4.MD.C.5.B
Common Core Literacy	CCSS.ELA-LITERACY.SL.4.1, 5.1, 8.1, 4.2, 5.2, 6.2, RI 4.4, W.4.4, 5.4, 6.4
CSTA	4.CS.D.1 / 5.CS.D.1
ISTE	Working cooperatively

#### **Lesson 2: Fighting Fires**

Subject	Standard Alignment
NGSS	3-PS2-2, 5-ESS3-1
Common Core Math	CCSS.MATH.CONTENT.3.MD.B.4, 6.SP.B.5.C
Common Core Literacy	CCSS.ELA-LITERACY.RI.4.4, W.4.4/5.4/6.4
CSTA	1B-CS-02, 1B-CS-03, 1B-IC-18
ISTE	2b, 3d, 7c

#### **Lesson 3: Erebus Expedition**

Subject	Standard Alignment
NGSS	4-ESS2-2
Common Core Math	3.MD.B.4, 3.NBT.A.2, 3.OA.D.8,4.MD.A.1, 4.MD.A.2, .4.NBT.B.4, 4.OA.A.3,5.MD.A, 5.MD.A.1, CCSS.MATH.PRACTICE.MP4, MP6
Comm on Core Literacy	SL.4.1, 5.1, 6.1, 4.2, 5.2, 6.2, Rl.4.4/5.4/6.4, 5.3, W.4.4/5.4/6.4
CSTA	1B-AP-10, 1B-AP-13, 1B-AP-15
ISTE	1d, 3d, 4d

#### Lesson 4: Shark Watch

Standard Alignment
3-5-ETS1-2
CCSS.MATH.CONTENT.5.MD.A.1, 4.NBT.B.6
CCSS.ELA-LITERACY.SL.4.1, 5.1, 6.1, 4.2, 5.2, 6.2, RI.4.4/5.4/6.4, 5.3, W.4.4/5.4/6.4
1B-AP-08, 1B-AP-10, 1B-AP-11, 1B-AP-12
3d, 5c, 7c

#### **Lesson 5: Medicine Delivery**

Subject	Standard Alignment
NGSS	5-PS2-1
Common Core Math	CCSS.MATH.CONTENT.3.MD.B.4, 4.MD.A.2, 5.MD.A.1
Common Core Literacy	CCSS.ELA-LITERACY.RI.4.4, 5.3, W.4.4, 5.4, 6.4
CSTA	1B-AP-08, 1B-AP-10, 1B-AP-11, 1B-AP-12



#### **Lesson 6: Helper Bees**

Subject	Standard Alignment
NGSS	4-LS1-1, 5-ESS3-1
Common Core Math	CCSS.MATH.CONTENT.3.MD.B.4, 5.G.A.1, 5.G.A.2, CCSS.MATH.PRACTICE.MP1
Common Core Literacy	CCSS.ELA-LITERACY.RI.4.4, 5.3, W.4.4, 5.4, 6.4
CSTA	1B-AP-12, 1B-AP-16, 1B-IC-18
ISTE	4a, 5c, 7c

#### **Lesson 7: Fighting Fires**

	<u> </u>
Subject	Standard Alignment
NGSS	_
Common Core Math	CCSS.MATH.CONTENT.3.MD.B.4, 4.MD.A.2, 5.MD.A.1
Common Core Literacy	CCSS.ELA-LITERACY.RI.4.4, 5.3, W.4.4, 5.4, 6.4
CSTA	1B-AP-10, 1B-AP-11, 1B-AP-16
ISTE	4d, 7c

#### **Lesson 8: Mission to Mars**

Subject	Standard Alignment
NGSS	5-PS2-1
Common Core Math	CCSS.MATH.CONTENT.3.MD.B.4, 4.MD.A.2, 5.MD.A.1
Common Core Literacy	CCSS.ELA-LITERACY.RI.4.4, 5.3, W.4.4, 5.4, 6.4
CSTA	1B-AP-08, 1B-AP-10, 1B-AP-11, 1B-AP-12
ISTE	4a, 5c, 7c

#### **Lesson 9: Koala Care**

Subject	Standard Alignment
NGSS	5-ESS3-1, 3-5-ETS1-3
Common Core Math	-
Common Core Literacy	CCSS.ELA-LITERACY.W.4.4, 5.4, 6.4, .4.5, 5.5, 6.5, .4.6, 5.6, 6.6, 4.7, 5.7, 6.7, RI.4.4, 5.4, 6.4, 5.9
CSTA	1B-AP-13, 1B-AP-16, 1B-IC-18
ISTE	1a, 1b, 7c

#### **Lesson 10: Video Production**

Subject	Standard Alignment
NGSS	5-ESS3-1, 3-5-ETS1-3
Common Core Math	_
Common Core Literacy	CCSS.ELA-LITERACY.W.4.4, 5.4, 6.4, .4.5, 5.5, 6.5, .4.7, 5.7, 6.7, 4.8, 5.8, RI.45.9
CSTA	1B-AP-13, 1B-AP-16, 1B-IC-18
ISTE	1a, 1b, 7c

## **Grades 5-8**



## **EGYPTIAN EXPEDITION**

Promotes STEM and problemsolving skills in a simulated environment.

#### **Embark on a LEGENDARY adventure with**

# The Egyptian Expedition Experience

## A brand-new simulated drone flight program for students in grades 5-8 brought to you by Drone Legends!

This eight-mission adventure is a highly interactive and engaging educational program that gives students practical experience and proficiency in coding and drone piloting in a simulated environment as they try to solve an ancient Egyptian mystery left behind by an early explorer.

Students learn the basics of drone flight and navigation, and apply science and math concepts to write code to program the drone to complete the objectives of each mission.

The program is designed to cultivate and increase students' critical thinking and problem-solving skills with limited assistance and instruction from the teacher.



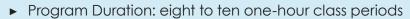
The **Egyptian Expedition Experience** is an innovative curriculum that challenges students to apply their STEM knowledge and problem-solving skills to code and fly a drone in a simulated environment.

As **leaders of their own learning**, students use these skills to complete eight missions, solving puzzles through hidden clues left behind by the explorer.





#### **Program Overview**



- No physical drones or other hardware required
- Student-driven, easy-to-follow, self-paced modules with limited teacher instruction required
- No previous coding or drone flight experience needed for students or teachers
- Students can work individually or in teams of two.
- Compatible with Chrome and Safari browsers
- The **Egyptian Expedition Experience** is included **FREE** with our STEM Fundamentals program or can be purchased separately as a standalone program.



#### Egyptian Expedition Experience Print Pack

To get the most out of The Egyptian Expedition Experience, Drone Legends recommends using printed copies of the reference materials, which include:

- Resource and reference pages supplemental materials to aid students in understanding and solving problems throughout the program
- Drone Pilot Notes worksheets and problem sets for each mission, with room for students to document ideas, plans, calculations, and coding steps
- Teacher's Guide includes lesson plan outlines for the entire program and answer keys for each mission



Drone Legends is pleased to offer a **complete print package** for the **Egypt Expedition Experience**, which includes 1 Teacher's Guide and 25 student folders, with all the reference and resource pages and Drone Pilot Notes for each mission.

This print package of over 1,500 pages is available for purchase at **shop.dronelegends.com.** 

## Don't miss out on this chance to bring the excitement of drone coding and flight simulation to your students!



#### Contact:

www.dronelegends.com • info@dronelegends.com 1-866-376-6338, option 3





## **FPV INITIATOR**

A precision drone piloting program that helps form technical career connections.



## PRECISION DRONE PILOTING PROGRAM



COURSE OVERVIEW

DRONELEGENDS.COM

#### Course Overview

Meet FPV Initiator, a new precision drone pilot training program from Drone Legends. FPV Initiator takes the quick reflexes, sharp decision-making, and thrill of the race to a whole new level, all while building in the academic alignment educators have come to expect from Drone Legends programs.

Ready-to-run out of the box, FPV Initiator has everything you need to put your middle school, high school, and college students on a track toward real-world, precision drone operations and the ultra-cool world of virtual and in-real-life competitive drone racing!

Designed for the novice teacher and student, information is presented through engaging lesson modules that make it easy to teach and learn. We've done the heavy lifting for you so you can focus on what's important – **coaching and preparing your students for success.** 

#### What is FPV?

FPV stands for **First-Person View**. When piloting the drone, students wear VR goggles, allowing them to see from the drone's perspective. Unlike traditional drones, which are piloted from the pilot's ground perspective, FPV offers a viewpoint directly from the drone. This provides an exceptionally immersive experience, leading to more precise flying and heightened accuracy. The outcome is faster reactions and a heightened awareness of the surroundings. That's why we call it "precision drone pilot training."



Practicing FPV flight in a simulator lets students safely crash and recover an unlimited number of times in a virtual environment. This way, they learn the basic controls of an FPV drone while developing the muscle memory their hands require for precision flight.

Our immersive microdrone simulator delivers a truly authentic FPV flight experience, allowing students to hone their skills in hyper-realistic environments.

#### **Course Overview**

The **12-lesson FPV Initiator program** is designed to introduce students and teachers to the exciting world of flying FPV drones. Students will learn the fundamentals of drone safety, flight mechanics, and radio control. They will also gain hands-on experience repairing and flying their own FPV drone.

**Module 1 - Pilot's Prelude:** Mastering FPV Drone Basics and Gear Insights

**Module 2 - Dialing in Control:** A Deep Dive into Your RC Setup & Configuration

**Module 3 - Unleash Your Potential:** Simulator Training for Superior Skill Development

**Module 4 - Batteries Included:** Tips and Tricks for Safe and Effective Use

**Module 5 - Ready, Set, Goggles Up:** Setting Up Your FPV Goggles for the Ultimate Flying Adventure

**Module 6 - Meet Your Micro:** Understanding Your Drone's Components and Functionality

**Module 7 - Betaflight Basics:** Customizing Your Drone's Flight Settings

**Module 8 - From Crash to Fix:** Learning the Fundamentals of Micro Drone Repair

**Module 9 - First Flight, New Heights:** Experiencing FPV Drone Racing in Real Life

**Module 10 - The Art of Precision:** Mastering Control and Maneuvering

**Module 11 - Breaking Ground:** Building Your First FPV Obstacle Course

Module 12 - Mind over Motors: Navigating Nerves in Your Inaugural FPV Heat

#### **Materials Included**

\*All materials subject to change

#### **Drones & Drone Accessories**

**4x** Orqa FPV.One Race goggles

12x Orga FPV.Ctrl controllers

**4x** Orqa 65mm Micro Drones

4x ImmersionRC rapidFIRE receivers

**4x** ImmersionRC Ghost Tx modules

**4x** ImmersionRC SpiroNET antenna bundles

24x 380 mAh 15 LiPo batteries

**16x** replacement propellers

4x goggle battery chargers

**4x** flight battery chargers with cables

**4x** 4-port USB charging hubs

1x LiPo safe storage bag

12x USB to USB Type C cables

12x microSDHC cards - 16GB

4x microSD card readers

**4x** Micro USB cables

4x 6-pc mini-screwdriver set

**2x** storage trunks

#### Course Materials

10x mini arch gates

**6x** race flags

**2x** race cubes

**60x** floor indicators

1x 1000 ft. measuring wheel

**4x** stopwatches

100x USDRA League stickers

#### **FPV Initiator Curriculum**

1x Coach's Playbook
12x Pilot Handbooks

1x 12-month access to online curriculum

#### **Training & Support**

- Unlimited professional development, live via Zoom
- Customer support

#### **Contact Hours**

• 20+ hours - FPV Initiator includes 12 interactive learning modules, each intended to run for 90 minutes. Modules include a combination of planned activities, video instruction, quizzes, and drills. Hours can be increased through additional time spent in the flight simulator, both in and out of the classroom.

#### Training & Support

- Drone Legends LMS: Cross platform (Mac, PC, Chromebook) browserbased, GDPR-compliant application
- SkyDive drone flight simulator: Chromebook and Windows compatible, plus iOS and Android app available for at home practice

#### **Curricular Alignment**

FPV Initiator isn't just about the thrill of drone racing—it's an educational training system designed to equip students with a future-ready skill set.

Aligned with key academic standards, including:

- Career Ready Practices (CRP)
- Common Career Technical Core (CCTC)
- Computer Science Teachers Association (CSTA)
- International Society for Technology in Education (ISTE)
- Next Generation Science Standards (NGSS)
- Social-Emotional Learning (SEL)

Our curriculum ensures that students aren't just having fun—they're mastering skills that will serve them in college, in their careers, and in life. Experience the future of hands-on, experiential learning with FPV Initiator, where cutting-edge technology meets comprehensive educational development.



Virtual and In-Real-Life (IRL) Competitions in the Unified Scholastic Drone Racing Association (USDRA)

Coming winter 2024! The USDRA is the first and only hybrid drone racing association created exclusively for students. Our one-of-a-kind league gives you and your students a secure environment in which to compete virtually and IRL in regional and national tournament competitions!

Visit <u>www.usdra.io</u> for updates and exclusive league announcements



#### **Pricing Options**

For pricing, please contact us at: info@dronelegends.com or (866) 376-6338, option 3

# Are you ready to be LEGENDARY?

## **GET IN TOUCH**

- www.dronelegends.com
- info@dronelegends.com
- (866) 376-6338

