

# 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."

# **Dive Into Precision Piloting**

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** Orqa 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