



Illinois 4-H | Spark Ideas. Ignite Possibilities.

Are you into flying robots or Drones? Do you love aerial videography or photography? Do you want to learn about drone racing? Discover the exciting world of Drones using the Quads Away Curriculum and other multimedia resources. Learn how UAV/UAS/Drones work, fundamental aerospace principles, commercial uses of drones, FAA regulations, and basic UAV operation.



Exploring 4-H Unmanned Aerial Vehicles (Drones)

Spark Activity: Drone Deploy

Go to: go.illinois.edu/UAVspark for a short Spark activity that guides youth through a real-world map planning scenario where youth plan and simulate a mapping mission using a powerful map stitching site called Drone Deploy! Follow the link and do Part 2: Simulated Mission of Real World Mission 3.

ILLINOIS 4-H
TECHNOLOGY: DRONES



Open your phone's camera app, scan the QR code, and follow the link!



ILLINOIS 4-H STEM TEAM
YOUTUBE CHANNEL



4-H Project Levels and Goals

Beginner

- Discover Drones/UAV topics
- Learn the basic laws and regulations that govern UAS/UAVs
- Learn the basics of how to safely fly and operate your drone
- Tackle real world missions and tasks that test your abilities as a pilot

Advanced

- Assemble or make an Unmanned Aerial Vehicle and associated system - this must either be originally designed or built from a kit of reconfigurable parts and components
- Explore multicopters (tri, quad, hex, and octocopters), as well as FPV airplanes and flying wings with wingspans up to 36" with a Flight Controller and camera/video transmission system

Put Your Project Into Action

Show Your Skills

- Build and fly drones using junk parts
- Watch videos and tutorials on building FPV planes or make one yourself
- Design and build delivery drones capable of delivering packages up to 1 pound
- Use FPV gear to design and fly racing drones
- Create a list of terms and abbreviations important to know if you're flying a drone

Service and Leadership

- Bring awareness to your community about drone laws and regulations
- Hold UAV awareness/demonstration events
- Provide aerial photos for local municipalities
- Take stock photos of local sites or landscape and make them available, free of charge, to local community groups, businesses and organizations
- Capture photos and video of your local community; create a short marketing video about your local town

Entrepreneurship

- Exhibit in Ready-4-Life at the county/state fair
- Start an ag-based drone company
- Provide aerial photography of homes or businesses
- Specialize in drone repair

Technology Connection

- Artificial intelligence
- Drone technology
- Advanced computing
- Internet of Things

Connecting with a Mentor

- Community college - instructor who teaches about drones
- Local drone hobby club
- Local small plane pilots
- Contact local businesses or technology companies about potential internship opportunities

Events

- Local / statewide drone races or competitions
- Civic engagement opportunities using drones
- County and State Fair
- Events hosted by Academy of Model Aeronautics



Careers for People Interested in UAV's / Drones

UAS Pilot	Property Management
UAS Developer	Cinematographer
Computer Science	Transit / Delivery
Robotician	UAS Educator
Aerospace Engineer	Drone Racing
Precision Agriculture	Wildlife Conservation
Military	Search and Rescue

Start a Conversation

What is a Drone? What is a UAV? UAS?

What kinds are there?

How high can they go?

How far can they go?

Are there legal restrictions on drones?

How do I make money using one?

Want to learn more?

go.illinois.edu/4Hdrone

Explore more at Illinois 4-H!

4-H.extension.illinois.edu



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