What Can I Learn from Drones?

Use this chart to trace your interests and learn exactly where foundational drone knowledge can take you!

PHYSICS



The branch of science concerned with the nature and properties of matter and energy.

LEARN the science behind how drones fly and systems that make it possible.

- Research and **Problem-Solving**
- Fluency in Scientific Equipment
- Configuring
- Modeling and Simulation
- Quality Control Protocol
- Aeronautics and Aerodynamics
- Flight Dynamics
- Electron Flow
- LiPo Battery Procedures
- Angular Momentum
- Airfoils
- Advanced Ratio

COMPUTER SCIENCE



The study of the principles and use of computers, hardware, software, networking and the internet.

exactly what it takes to configure a drone's essential flight systems.

- System Configuration
- Troubleshooting
- Systems Thinking
- Data Transmission
- Electromagnetic Radiation
- LED Systems
- Radiomagnetic Waves and Telemetry
- GPS Systems
- Sensor Calibration
- VTX Systems

DRONE PILOTING



First-hand experience controlling unmanned aerial vehicles (UAV) in high-speed outdoor flights.

TRAIN

like professional pilots with a flight simulator, line-of-sight piloting and FPV flights.

- Equipment and Procedural Regulation
- Real-World Applications
- Federal Laws and Regulations
- Flight Simulation
- LiPo Battery Safety
- Ethical Drone Operations
- The Future of Drones
- Radio Transmissions
- Takeoff, Hover, Land, Pitch, Roll, Yaw
- Line-of-Sight Piloting
- First-Person View Piloting
- Drone Racing Prep

ENGINEERING



The hands-on science of designing, building and using engines, machines and structures.

EXPLORE

and build a modular, unmanned aerial vehicle from the ground up.

- Motor Dynamics and Calibration
- Components of a Drone
- Energy Transfer
- Drone Materials Science
- Model Building
- Electronic Speed Controls
- Accelerometer and Magnetometer Calibration
- Center of Gravity
- Propeller Considerations and Efficiency



INFRASTRUCTURE

AGRICULTURE





LEADING DRONE INDUSTRIES

DISCOVER



MEDIA (AND ENTERTAINMENT)



TELECOMMUNICATIONS



INSURANCE

MINING



© 2023 PCS Edventures, Inc.

PCS eDventures![™]

Experts in Hands-On STEM Education

Explore the world of STEM with Discover Drones to experience lessons touching on physics, material science, computer science, drone piloting, engineering, applied science and so much more.

(800) 429-3110 • edventures.com