

DARTDRONES



Intro to Drones: Opportunities, Careers, and FAA Certification Readiness

A SEMESTER OR YEAR-LONG COURSE DESIGNED TO ENGAGE AND EXCITE STUDENTS ABOUT CAREER OPPORTUNITIES IN DRONES.

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COURSE OVERVIEW

This course is designed to get students excited about drones and the potential job opportunities with drones. Students will not only leave the course prepared to pass their FAA Part 107 Exam, but they will also have developed their own drone business concept. Students will experience their first drone flight as well as learn important technical skills to safely fly a drone.

Course Objectives:

- Explore the Drone Industry Growth and Opportunities
- Understand Capabilities of Drones
- Learn to Pass the FAA Part 107 Certification Exam
- Understand Keys Elements to Safe Flights
- Learn the Basic of Becoming a Drone Service Provider

COURSE HIGHLIGHTS

Customizable
Curriculum

Interactive
Projects

Train the Trainers
for Teachers

Explore Job
Opportunities

Turnkey Solution
for Teachers

WHY DARTDRONES?

We Train Enterprise Drone Programs

DARTdrones' core business is training and consulting for corporate and government drone programs. We have helped to build some of the largest drone programs in the country by creating plans to start and scale programs, writing pilot Standard Operating Procedures, and designing and implementing pilot training programs to take new pilots from the very basics to developing advanced skills to safely and effectively gather data to meet the goals of a client's specific use cases, typically involving mapping, modeling, and inspections work. We know what drone employers are looking for in pilots.

Real World Instructor Experience

Our instructors are in the field every day training drone pilots who are flying complex real-world missions. We know the use cases that are in demand, the training requirements, the necessary skills pilots need to fly the missions, the data that is being collected, and how drones are being used to save time, money, and lives. We can bring this real-world knowledge to your school so that your teachers can train the next generation of drone pilots using our ever evolving and updated materials, while being supported by our expert instructors.

Workforce Development for Drones

DARTdrones is committed to creating a comprehensive training that aligns with our enterprise drone program partnerships. Where we differ, and shine, is in our ability to provide pilot training on real-world drone use cases. Since we train the pilots at numerous large oil and gas companies, electric utilities, water authorities, and public safety agencies, we have inside knowledge on how to build out professional curricula to support their operations.

EVERYTHING AN INSTRUCTOR NEEDS

Our goal is to make teaching this course a breeze for instructors new to drones.



Expert Curriculum



Quizzes and Final Exams



Adjustable Course Lengths



Train the Trainers



Ongoing Support



Class Discussion Guidelines



Class Activities



Grading Rubrics

TRAIN THE TRAINERS

- Online Video Recordings of DARTdrones Instructors Teaching Materials
- Live Virtual Question and Answer Sessions with DARTdrones Instructors
- Bi-Weekly Zoom Check Ins with Other Teachers Using the Same Materials
- Option to attend in-person nation-wide DARTdrones trainings
- Option to join live virtual DARTdrones trainings
- Option to add On-Site Visits
- Option to add On-Site Private Training for Teachers

You'll be supported by our team of instructors!



Louis Morales

Thermal Drone Pilot



Seth Zora

Drone Business Owner and
U.S. Air Force Veteran



Randy Eary

Private Pilot, AGI & IGI



Dennis Fisher

Drone Business Owner and
Manned Aircraft Pilot



Roger Hall

Retired Firefighter



Jim O'Keefe

Sergeant Milford Police
Department



David Barker

Public Safety Drone Pilot



Michael Martin

Avid Drone Photographer



Sean Pagliari

Private Pilot and Patent
Holder



Bryn LeRue

Public Safety Officer &
Public Safety Drone Pilot



Matt Bettencourt

Navy UAS Instructor Pilot



Gregory Pratt

Retired FBI, Naval Flight
Officer, and Drone
Business Owner

Year at a Glance

	First Six Weeks	Second Six Weeks	Third Six Weeks	Fourth Six Weeks	Fifth Six Weeks	Sixth Six Weeks
Essential Unit of Study	Unit 1 An Introduction to Drone Use Cases, Flying, and Regulations	Unit 2 Chart Interpretation	Unit 3 Airport Operations and Drone Inspections	Unit 4 Aviation Weather	Unit 5 Drone Emergencies and Performance	Unit 6 Steps to Becoming a Drone Service Provider
Content Topics	<p>Introduction to Flying Drones</p> <p>Introduction to the FAA Part 107 Exam</p> <p>Overview: Drone Use Cases and Careers - Aerial Photography and Videography, Inspections, Disaster Response, Search and Rescue, Law Enforcement, and Drone Delivery</p> <p>Part 107 Small Unmanned Aircraft Systems (sUAS) Regulations</p>	<p>Part 107 Airspace Classifications</p> <p>Part 107 Flight Restrictions</p> <p>Part 107 Aeronautical Chart Study and Interpretation</p> <p>Flight Training Exercises: Obstacle Course</p> <p>Career Exploration: Aerial Photography</p>	<p>Part 107 Airport Operations</p> <p>Part 107 Radio Communications</p> <p>Flight Training Exercises: Inspections and Teamwork Challenges</p> <p>Career Exploration: Inspections</p>	<p>Part 107 Weather and Micro-Meteorology</p> <p>Flight Training Exercises: Visual Observers, Breaking News, and Search and Rescue</p> <p>Career Exploration: Public Safety, Search and Rescue, Disaster Response, and Law Enforcement</p>	<p>Part 107 Maintenance and Pre-Flight Procedures</p> <p>Part 107 Aeronautical Decision Making and Crew Resource Management</p> <p>Part 107 Small UAS Loading and Performance</p> <p>Part 107 Hazards to Flight and Emergency Procedures</p> <p>Part 107 Aviation Physiology</p> <p>Part 107 Night Flight Operations and Physiology</p> <p>Flight Training Exercises: Weight and Balance</p> <p>Career Exploration: Drone Delivery</p>	<p>Creating Your Drone Service Offering</p> <p>How to Find Customers and Market Your Services</p> <p>Fundamental Checklist for Basic Operations</p> <p>Legal Considerations and Drone Insurance</p> <p>Flight Training Final Skills Test</p> <p>Final Exam: Part 107 Test</p> <p>Career Plan</p>

MORE INFORMATION ABOUT THE FAA PART 107 EXAM

This course completely prepares students to pass the FAA Part 107 Exam. Students can elect on their own to sit for the FAA Part 107 Exam; passing the actual exam is not a requirement of the course. If students elect to take the FAA Part 107 Exam, they must pay \$150 to an FAA testing center to take the course.

[Learn More about the FAA Part 107 Remote Pilot Exam](#)

QUIZZES

Each lesson includes multiple online quizzes.

MID-TERM EXAM

Students will take an exam covering the first half of the Part 107 materials.

MID-TERM PROJECT

Drone Opportunity Assessment - Each student will have 5 minutes to present the greatest opportunity where they believe drones fit for them personally.

FINAL EXAM

Students will take an exam covering the full Part 107 Exam. 70% is a passing score for the FAA Part 107 Exam. Grades will likely be weighted.

FINAL PROJECT

Class presentation: Students will pitch to the class what drone business they will start and why it will be successful.

GRADING

- Lesson #1 Quiz - 5%
- Lesson #2 Quiz - 5%
- Lesson #3 Quiz - 5%
- Lesson #4 Quiz - 5%
- Lesson # 5 Quiz - 5%
- Midterm Exam Score - 10%
- Drone Opportunity Assessment - 10%
- Lesson #6 Quiz - 5%
- Lesson #7 Quiz - 5%
- Lesson #8 Quiz - 5%
- Lesson #9 Quiz - 5%
- Lesson #10 Quiz - 5%
- Final Exam - 15%
- Final Project - 5%
- Participation - 10%

COURSE CERTIFICATE

Students completing this course will earn their DARTdrones Wings.



About DARTdrones

Nation's Leader in Drone Training

DARTdrones is the leading nationwide drone training company in the United States offering courses in over 25 cities. We offer basic flight training classes, Part 107 Airman Knowledge test prep courses, advanced industry specific training, and UAS program implementation consulting services. DARTdrones has trained over 15,000 drone pilots to date from many of the nation's largest companies and organizations. DARTdrones utilizes an expert curriculum instruction team as well as instructors with manned aviation backgrounds to maintain the brand of the highest quality enterprise drone training in the country.

Trusted by Top Organizations Across the Nation



30 Expert Instructors

25,000+ Hours of Courses Taught

20,000+ Students Trained

25 Training Cities



DARTdrones Instructor Team

OUR INSTRUCTORS

300+ Years of Aviation Experience

MARK KURZINSKI

Chief Industrial Inspections Instructor

Mark Kurzinski enlisted in the Navy in 1993 and spent 10 years as an Avionics Electronics Technician working on the F-14A/B/D Tomcat troubleshooting and repairing radar, communications and weapons systems. Mark was selected to an officer accession program in 2001 and attended Navy flight school in Pensacola FL where he flew the T-6a Texan II. Mark retired at the rank of Lieutenant in 2013 and quickly founded MidWest Drone Services in Cary IL in 2014 blending multiple passions of flying, photography and video/audio production and editing. Mark has over 700 hours flying sUAS and has been a Part 107 pilot since 2016 and a Part 61 Multi-Engine private pilot since 2006, logging over 900 fixed-wing hours in military and civilian aircraft. Mark received a BA in Communication Studies/Broadcast Journalism from the University of San Diego in 2003 and was recently certified a Level 1 sUAS Thermographer from the Infrared Training Center in Nashua NH.

MATT BETTENCOURT

Chief Drone Consultant

Matt Bettencourt is a contract UAS instructor pilot for the U.S. Navy as well as a helicopter pilot in the Navy Reserve. He has 13+ years of aviation experience and over 3,900 hours piloting military aircraft, including over 1,900 hours instructing on unmanned aircraft systems. Matt is currently the Navy's lead Contract Instructor Pilot for the MQ-8 Fire Scout, the Navy's first rotary wing UAS. He also instructs in the Navy's MH-60S multi-mission helicopter. He has helped train over 900 students in both the MH-60S and MQ-8. He holds his Commercial Pilot Certificate with single engine airplane, rotorcraft, instrument and sUAS ratings. He is a graduate of the U.S. Naval Academy with a B.S. in Systems Engineering and a focus in robotics and computers.

ALEX ABATIE

Chief Utilities Inspections Instructor

Alex is a UAV pilot/instructor/photogrammetrist and business owner with over eight years experience with RC aircraft and 4 years experience using sUAS for cinematography, photogrammetry and inspection. Alex has conducted private training for a wide cross section of DARTdrones clients, including U.S. Customs and Border Patrol, the National Transportation Safety Board and NBC. He was a member of an AUVSI Trusted Operator Program development committee, and recently participated in the largest utility inspection UAV project on record, triggered as a response to the California wildfires. Alex owns his own UAS company and contracts with clients across the west coast to provide aerial photogrammetric and inspection services.

CHRIS GRAZIOSO

Chief Public Safety Instructor

Chris has worked in the Emergency Medical Services (EMS) field for 30 years. He primarily focuses on EMS special operations and emergency management and has helped develop multiple drone programs. He serves as the Lead Drone Pilot for an EMS agency, a police tactical team, and for FEMA's urban search and rescue team. Chris uses drones for pre-mission planning, real-time situational awareness, search and rescue, suspect tracking, aerial imagery and mapping, and damage assessments.



DARTdrones as Your Resource

VETTED EXPERT FLIGHT INSTRUCTORS

Our expert flight instructors are Part 61 manned aviation pilots who utilize UAS technology on a daily basis across a variety of industries. Handpicked from over 1000 applicants, our 25 instructors each specialize in vertical specific training and stand as subject matter experts to ensure the most up-to-date mission specific training and information.

MISSION SPECIFIC TRAINING

With hundreds of different drone use cases emerging, companies are realizing that Part 107 and basic flight training are not sufficient for safely conducting advanced commercial sUAS operations. DARTdrones utilizes the vast industry-specific experience of our expert flight instructors and curriculum developers to provide advanced training on courses such as Rapid Daytime Search and Rescue, Aerial Inspections Inspections, Close Proximity Flight Inspections, Aerial Mapping and Modeling, Aerial Media, and dozens of other customized mission training modules.

TRAINING FOR THE LARGEST ENTERPRISE DRONE PROGRAMS

DARTdrones has built extensive training programs designed for the largest enterprise drone teams across the country. Through this training, our team learned what companies with drone programs are looking for when hiring drone pilots.

WORKFORCE DEVELOPMENT

DARTdrones is committed to continuing to learn and adapt our programs to be the best resource possible to prepare young drone pilots to enter the workforce.



Past Projects

DARTdrones has provided training and consulting services to organizations across many industries and verticals, including over 25 federal governmental agencies, hundreds of corporations, and hundreds of municipal agencies, police, and fire departments.

A FORTUNE 50 COMPANY PROVIDING TV, INTERNET, AND VOICE SERVICES

DARTdrones worked with this company to develop a drone program to complete inspections of their communications infrastructure and mapping and modeling of the areas where they operate. This included developing a five-year plan for a nationwide rollout of the training and policies related to the program. This company is currently introducing the program in a multi-state territory.

ONE OF THE 5 LARGEST ELECTRIC UTILITIES IN THE US

DARTdrones is the contracted drone program development and training provider for this electric utility serving more than 15 million people over a 50,000 square mile area. DARTdrones has trained approximately 200 of their pilots from the basics through customized advanced training specific to inspections of their massive infrastructure.

A FORTUNE 50 COMPANY IN THE OIL AND GAS INDUSTRY

DARTdrones consulted with this company as they started a drone program for infrastructure and pipeline inspections. This started with consulting on the industry, their initial and later use cases, and aircraft and equipment recommendations. Their flight team completed DARTdrones Part 107 Test Prep and Basic Flight Training and worked with DARTdrones to write SOPs, Checklists, and a Program Manager Guide.

A FORTUNE 50 COMPANY IN THE OIL AND GAS INDUSTRY

DARTdrones consulted with this company as they started a drone program for refinery inspections. This started with consulting on the industry, their initial and later use cases, and aircraft and equipment recommendations. Their flight team completed DARTdrones Part 107 Test Prep and Basic Flight Training and worked with DARTdrones to write SOPs, Checklists, and a Program Manager Guide. We also developed a customized advanced training program specific to refinery inspections that we delivered to their pilots at all of their refineries nationwide.

ADDITIONAL CLIENTS

In addition to the projects and clients listed above, we have trained and consulted for the following agencies:

- U.S. Army
- U.S. Navy
- NASA
- NSA
- FBI
- OSHA
- NTSB
- Pentagon Security Force
- Department of Labor
- Department of Homeland Security
- Customs & Border Patrol
- NOAA
- Fort Meade Federal Police
- Belize Dept of Civil Aviation
- British Virgin Islands Disaster Response Teams in Montserrat, Tortola, Turks and Caicos, and Anguilla
- Federal Police of Brazil
- Ghana Federal Drug Enforcement Agency

References

CITY OF ALBANY, NY

Bryan Hunter, (518) 300-0820, bhunter@albanyny.gov

10 North Enterprise Dr. Albany, NY 12204

Services: Basic Flight Training and Part 107 Test Prep as well as a Drone Launch Guide created by DARTdrones. Albany Water later did an Advanced Training that covered Aerial Mapping and Modeling.

CNN

Greg Agvent, (404) 827-1018, greg.agvent@turner.com

Services: Developed a comprehensive 5-step training program to train all CNNAir pilots from the basics through advanced broadcast media operations.

DUBAI POLICE DEPARTMENT

Lt. Abdulla Al Yammahi +97146099999 A.SAALYAMMAHI@dubaipolice.gov.ae

DARTdrones conducted a 5-day advanced training for Dubai PD's 10 top pilots in 2019. We are contracted to return this summer for 8 weeks of advanced training to train 80 additional pilots.

MANCHESTER CT EMERGENCY MANAGEMENT

Don Janelle, (860) 647-5259, djanelle@manchesterct.gov

Services: Interagency Part 107 Test Prep and Basic Flight Training for 24 Police Officers, Fire Fighters, and Emergency Management Personnel. Interagency Search and Rescue, Thermal Imaging, and Night Ops training for 10 Police Officers, Fire Fighters, and Emergency Management Personnel. Consultation on many topics including COA's and FAA waivers.