COLORADO STATE UNIVERSITY EXTENSION

CSU DRONE CENTER

Drone Education and Operations Instructor Internship

Collin Agne

Mentor Adam Smith

PROJECT INTRODUCTION

This summer, I had the privilege of serving as a summer intern for the CSU Drone Center, instructing Denver-area high school students. My instruction covered drone operations as well as preparation for their FAA Part 107 drone license exam.

In this role, I helped prepare study materials, led in-class instruction, and provided hands-on flight line training, all aimed at ensuring students were fully prepared to pass their FAA Part 107 exam when the time came.

Through this internship, I gained valuable skills in both one-on-one and group instruction, along with a deeper understanding of aviation regulations. Developing lesson plans and leading class exercises were also key parts of the experience, and proved to be incredibly valuable.

INTERNSHIP GOALS

The main goal of this internship was to provide the content needed to help high school students pass their Part 107 exam for drone operations and get them involved in aviation

A second goal of mine was to provide the first step in these students' professional aviation journey, as I soon learned that most had aspirations of flying professionally in the future

HOW DOES THIS APPLY TO YOUR EDUCATION

Currently, I am a Commercial Pilot and Certified Flight Instructor. This internship provided a means of working in the aviation industry and instructing in a completely new environment compared to where I came from in manned aviation operations. This proved to be very beneficial overall, as it increased my understanding of aviation operations as a whole.

WHAT YOU DID

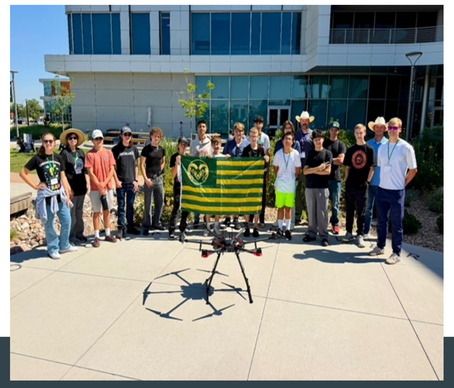
As a summer intern for the CSU Drone Center teaching their Part 107 commercial drone pilot course, I had several responsibilities. These included creating lesson plans, developing activities on weather and airspace and most importantly, delivering in-class instruction along with flight line instruction.

To make my classroom instruction as effective as possible, I would often pivot between group instruction with lecture slides and class activities, to one-on-one instruction during lunch breaks, to help students understand and reinforce the concepts needed to pass their Part 107 exam.

Drawing on my background as a Certified Flight Instructor and Commercial Pilot, I was able to apply my expertise to instructing drone operations. Concepts like weather, airspace, and aerodynamics translated nicely into teaching UAS operations. This role also gave me the opportunity to teach a full class, which was very beneficial to my instructional skills, since I was typically more accustomed to one-on-one instruction.

Overall, this internship provided as a great opportunity to work in the aviation industry while sharpening my overall instructional skills. I greatly enjoyed the position and the chance it gave me to help students get started in aviation and study for their first FAA certificate.

2nd Highschool Class



A picture of our 2nd High School class that went through this years program along with Adam and Nick my fellow instructors/mentors

WHAT YOU LEARNED

There were several key takeaways I got from my time interning for the CSU Drone Center. These included my instructional development, drone knowledge, and lesson plan creation. Of these though, the most beneficial for me was the instructing environment the internship provided. High school students were something I had not instructed before, since most of my students are adults, and learning the nuances associated with instructing teenagers proved to be very beneficial.

Along with this, I also expanded my knowledge base in drone operations, which proved very beneficial as I learned how UAS's and manned aviation work together within the national airspace system. Creating lesson plans was also interesting, as I had never developed lesson plans for UAS's before, only for manned aviation aircraft.

Additional Photos





NEXT STEPS

For me as an instructor, this internship provided a very valuable experience in instructing in different settings compared to what I am used to. Instructing high schoolers in a group setting enhanced and further developed my instructional abilities for the future.

Coming out of this internship I plan to flight instruct and work in the aviation industry. The connections with the CSU Drone Center and instructional experience with which this internship provided to me will be very valuable.