GROSSMONT COLLEGE

COURSE OUTLINE OF RECORD

Curriculum Committee Approval: 05/10/2022

GCCCD Governing Board Approval: 06/14/2022

1. COMPUTER SCIENCE AND INFORMATION SYSTEMS 070 - DRONE FLIGHT SCHOOL

Course Number Course Title Semester Units

CSIS 070 Drone Flight School 0

Semester Hours: 112 lab hours 112 total hours

1. Course Prerequisites

Students must be at least 18 years or older and must meet eligibility requirements under FAA 107 guidelines.

Corequisite

None

Recommended Preparation None

1. Catalog Description

The Drone Flight School course prepares students for the FAA 107 Drone Pilots license examination. Course consists of FAA rules and regulations, safety protocols, drone flight controllers, and drone flight theory. Upon obtaining license, students will receive hands-on flight training where student applies flight theory to hands-on practical flight training and basic aerial photography and cinematography. The course will also provide an introductory training to various other drone industry areas.

1. Course Objectives The student will:
   1. Use Judgment –The need for the student to demonstrate common sense is an important characteristic to

ensure safe flight operations, and how human factors can effect that judgment.

* 1. Understand Standard Operations - Standard operations vary across different drone manufacturers and types. It is important for the student to understand the standard operations of the particular aircraft being operated.
  2. Implement Emergency Procedures - Emergency procedures vary from aircraft to aircraft, but generally include a standardized guideline. It is important for the student to thoroughly understand the emergency procedures as specified by the FAA, a job site, and manufacturer.
  3. Be expected to know and understand Crew Resource Management and the Aeronautical Decision-making process as defined by the FAA.

1. Instructional Facilities

An outdoors area with sufficient room for flying drones, approximately 40 yards square.

1. Special Materials Required of Student

None

1. Course Content
   1. Students will receive an introduction to drones, career applications, flight theory, weather, and FAA rules and regulations.
   2. Students will be trained and prepare for FAA 107 Drone Pilots test.
2. Method of Instruction
   1. Lecture and demonstration in a traditional classroom or via electronic means.
   2. Hands on instruction using Flight Lab
   3. Discussion of current drone technology trends and issues
   4. Individual flying time
3. Methods of Evaluating Student Performance
   1. Students will receive instruction and support in preparation to take the FAA 107 flight test
   2. Students will be evaluated on their flight skills, maneuvering, and safety protocols.
   3. Students will be evaluated on the use of the drone camera and various settings for photography, cinematography, and aerial inspections.
   4. Hands-on performance evaluations and a potential written final exam.
4. Outside Class Assignments

None

1. Representative Textbooks
   1. Representative Text(s):

None

* 1. Supplemental texts or Workbook:

U.S. Department of Transportation Federal Aviation Administration: *Remote Pilot- Small Unmanned Aircraft Systems Student Guide* (2016)

Addendum: Student Learning Outcomes

Upon completion of this course, students will be able to do the following:

* + 1. Student will obtain an FAA UAV/Drone License with a Night Certificate Authorization as well as receive FAA airspace authorization to fly a drone in federal airspace
    2. Student will be able to read an FAA Sectional Flight Chart and operate a drone safely, and get a drone log book and log flight hours and missions
    3. Student will able to apply to several drone sourcing companies and get immediate work as a Drone Real Estate Photographer
    4. Student will know how to apply for drone jobs and set-up an online portfolio to promote drone work