Course Number and Title	IT135 Pilot in Command Flight Time

Credit Hours	3

Course Description	This course is designed to prepare the pilot in command (PIC) to perform various missions with sUAS efficiently and safely, while exhibiting an understanding of the small unmanned aerial system components and displaying a strong use of crew resource management as the pilot in command. The course will help students build actual flight time in various flight modes.

Prerequisite(s) and/or Corequisite(s)	IT134

Required Textbooks/References/Course Materials:
None.

	General Education Outcomes
1	Utilize written and verbal language to discuss and comprehend information, incorporating a variety of technologies, such as text, data, and images (written language, verbal language, and information technology).
2	Identify and interpret relevant information in order to formulate an opinion or conclusion (critical thinking).
3	Demonstrate and communicate computational methods and mathematical reasoning in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate) (quantitative literacy and fluency).
4	Communicate in appropriate ways with those who are culturally diverse (intercultural competence).

	Program/Department Outcomes
1	Discuss and evaluate potential technology related ethical dilemmas and apply decision-making techniques to resolve them.
2	Demonstrate proficiency in selecting, implementing, and operating information technology solutions to meet project requirements.
3	Apply essential IT support skills in order to install, configure, secure, and troubleshoot operating systems, programs, networks, and pc hardware.
4	Prepared to take and pass industry standard certification exams.
5	Develop the ability to use oral and written communication effectively with clients and other industry professionals.
6	Engage in teams to develop and/or implement IT-based project solutions.
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	Course Outcomes (CO)	Bloom's Domain for CO (C, A, P), Category, and Level	Program/ Department Outcome(s)	Written Language	Verbal Language	Information Technology	Critical Thinking	Quantitative Literacy and Fluency	Intercultural Competence
1	Exhibit airman decision making skills at all points of the mission (Pre-flight, In-flight, Post-flight)	Psychomotor Embody (5)	1,2,3,5,6	1	2	2	2	1	0
2	Demonstrate different ways a Pilot in Command may effectively use a crew of varying sizes	Cognitive Evaluating (5)	1,2,3,5,6	2	2	2	2	1	0
3	Create and implement mission plans based on various applications	Cognitive Creating (6)	1,2,5,6	2	2	2	2	1	0
4	Identify and explain the mitigation process of setbacks a Pilot in Command may have in flight at any given moment	Cognitive Understanding (2)	1,2,5,6	2	2	2	2	1	0
5	Demonstrate the ability to maintain orientation and control of the aircraft over the course of numerous obstacles while flying with or without GPS	Psychomotor Perfect (3)	1,2,5,6	2	1	2	2	0	0
6	Create a list of equipment that would be needed for different missions	Cognitive Creating (6)	1,2,3,5,6	2	2	2	2	1	0
7	Execute seamless transitions from one flight mode to the other	Psychomotor Perfect (3)	1,2,3,5,6	0	0	2	2	0	0
8	Prepare and execute a grid style flight pattern with proper overlap and speed	Cognitive Creating (6)	1,2,3,5,6	0	2	2	2	0	0
9	Estimate object distances from the aircraft while in-flight	Cognitive Analyzing (4)		1	1	2	2	1	0
10	Prepare contingency plans then implement them midflight in a mock emergency procedure	Cognitive (Evaluating (5)	1,2,3,5,6	2	1	2	2	1	0
11	Balance a gimbal and experiment with the center gravity variances of different sensors	Cognitive Applying (3)	1,2,3,5,6	0	1	2	2	0	0
12	Create waypoints and have the aircraft carry out the pattern	Cognitive Creating (6)	1,2,3,5,6	2	1	2	2	1	0

Bloom's Domain Legend
C = Cognitive
A = Affective
P = Psychomotor

General Education Outcome Legend
2 = Included and Measurable
1 = Introduced and/or Minimally Addressed and Not Measurable
0 = Not included

Approved:		May 2021
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