

STRANDS AND STANDARDS

UNMANNED AERIAL SYSTEMS CAPSTONE



Course Description

Unmanned Aerial Systems Capstone is a self-directed project-oriented course that may be an internship with a UAS company, research project, advanced application of UAS skills, or design/build project. This course is the pinnacle in this pathway and will provide a kickstart to a student's career in Unmanned Systems.

Intended Grade Level	10-12
Units of Credit	0.5
Core Code	40.11.00.00.058
Concurrent Enrollment Core Code	000
Prerequisite	Unmanned Aerial Systems 1
Skill Certification Test Number	000
Test Weight	0.0
License Area of Concentration	CTE and/or Secondary Education 6-12
Required Endorsement(s)	
Endorsement 1	Aviation- Flight
Endorsement 2	Unmanned Aerial Systems
Endorsement 3	N/A

STRAND 1

Students will participate in personal and leadership development activities through SkillsUSA or another appropriate career and technical student organization.

Standard 1

Students will use communication skills to effectively communicate with others.

- Understand when it is appropriate to listen and to speak.
- Understand and follow verbal and written instructions for classroom and laboratory activities.

Standard 2

Students will effectively use teamwork to respectfully work with others.

- Identify and understand different roles in working with a team.

Standard 3

Students will use critical thinking and problem-solving skills.

- Analyze the cause of the problem.
- Develop a solution to address the problem.
- Implement the plan.
- Evaluate the effectiveness of the plan.

Standard 4

Students will be dependable, reliable, steady, trustworthy, and consistent in performance and behavior.

- Set and meet goals on attendance and punctuality.
- Prioritize, plan, and manage work to complete assignments and projects on time.

Standard 5

Students will be accountable for results.

- Use an achievement chart for activities and behaviors in class that encourages a personal evaluation of classroom performance.
- File a regular written report on progress toward completion of assignments and projects.

Standard 6

Be familiar with the legal requirements and expectations of the course.

- Be familiar with the course disclosure statement and all requirements for successful completion of the course.
- Demonstrate workplace ethics, e.g. fair, honest, disciplined.

STRAND 2

Students will participate in work-place readiness activities.

Standard 1

Students will demonstrate employability skills.

- Use a career search network to find career choices.
- Write or maintain a resume including a list of demonstrated skills.
- Write a letter of application.
- Complete a job application.
- Participate in an actual or simulated job interview.

Standard 2

Students will participate in a work-based learning experience outside the classroom.

- Students will create a self-directed project, that may be an internship with a UAS company, research project, advanced application of UAS skills, or design/build project. Student and Project advisor together will determine the deliverable (paper, presentation, video, etc.) for the course.
- The student project is to include individual projects that serve as a culmination of previous learning. Some examples follow, but the list is not exhaustive:
 - Make a professional video for a business school or community (can be a paid project if they are Part 107 certified) from conception, approval, implementation and completion of project
 - Collect agricultural data for a local farmer
 - Monitor production and progress at a construction site
 - Test drones to evaluate varieties for a specific project or test different set ups with propellers/sensors/payloads

Skill Certification Test Points by Strand

Test Name	Test #	Number of Test Points by Strand										Total Points	Total Questions
		1	2	3	4	5	6	7	8	9	10		