



UAS Collegiate Training Initiative Program April 2020

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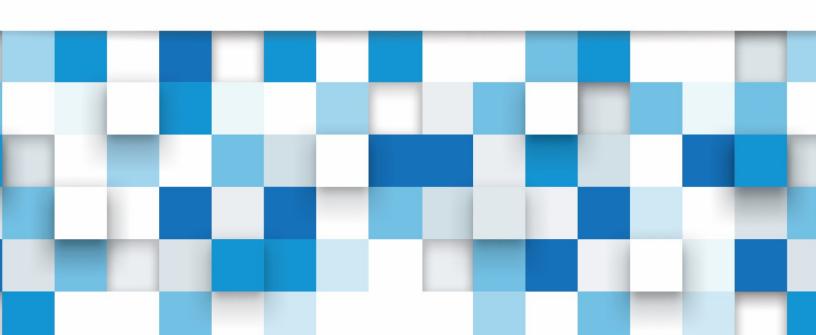


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Introduction

Overview

With the rapid growth of the Unmanned Aircraft Systems (UAS) industry, there is a need to ensure that new technology is safely integrated into the National Airspace System and that there is a pipeline of qualified professionals to meet the increasing demand. Because of this, and in response to a Congressional requirement, the FAA is establishing a Collegiate Training Initiative (CTI) that will prepare students for careers in UAS.

The FAA CTI program has been in existence for over twenty-five years. This program has allowed educational institutions to work with the FAA in the interest of helping students pursue their goals of a career in aviation. The program was first established as a way for the FAA to collaborate with schools to deliver up-to-date air traffic training and to help provide the FAA with qualified air traffic control specialist applicants. This program is referred to as the Air Traffic CTI (AT-CTI). Additionally, the FAA has a Technical Operations CTI (TO-CTI) program to prepare students for aerospace careers such as engineering and other technical specialists.

The Unmanned Aircraft Systems Collegiate Training Initiative (UAS-CTI) is a new program designed for the FAA to recognize institutions that prepare students for careers in unmanned aircraft systems. Post-secondary institutions with UAS curriculums that want to be recognized as UAS-CTI schools now have the opportunity to apply for this distinction. Additionally, interested public two-year institutions of higher education that participate in the UAS-CTI program will be designated as members of the Consortium for Small Unmanned Aircraft System Technology Training.

Background

The FAA Reauthorization Act of 2018 (Public Law 115-254) requires the FAA to establish a collegiate training initiative program relating to unmanned aircraft systems by making new agreements or continuing existing agreements with institutions of higher education under which the institutions prepare students for careers involving unmanned aircraft systems. Additionally, it requires the FAA to establish a process to designate consortia of public, 2-year institutions of higher education as Community and Technical College Centers of Excellence in Small Unmanned Aircraft System Technology Training.

As required, the FAA will enter into memorandums of understanding with institutions of higher education where participating institutions are responsible for preparing students for careers with UAS. As stated in section 632, the Administrator may establish standards for the entry of such institutions into the program. This document establishes the program to meet these requirements.



The Consortium for Small Unmanned Aircraft Systems (sUAS) Technology Training

Participation in the UAS-CTI Program also addresses the requirements for public, two-year institutions of higher education to be designated as Centers for Excellence (COE) in Small Unmanned Aircraft System (sUAS) Technology Training, as outlined in Section 631. As FAA Centers of Excellence have specific research requirements and criteria established in Title 49 U.S.C. 44513, the FAA implemented Section 631 of P.L. 115-254 by providing two-year institutions of higher education that become a CTI the opportunity to be designated as members of the Consortium for Small Unmanned Aircraft Systems (sUAS) Technology Training.

The FAA may provide the Consortium information on career opportunities in industry and government service related to the use of small unmanned aircraft systems or opportunities to engage with industry and government services.

Vision

The FAA is committed to working with UAS-CTI participants to engage and prepare a pipeline of UAS professionals for tomorrow's innovative workforce.

Mission

The program mission is for the FAA to collaborate with selected schools to deliver up-to-date UAS training tools, resources, and guidelines that will prepare students for careers in UAS and continue to maintain the safety of the National Airspace System.

UAS-CTI Program Management Philosophy

The FAA views participating schools as experts in learning theory and academic program administration. The UAS-CTI program assists schools in developing specialized education for their students through broad-based curricula that will prepare students for a career in unmanned aviation.

The FAA's relationship with each school in the UAS-CTI program is established by a memorandum of understanding. The FAA will monitor each school's UAS-CTI participation status based on its compliance with the memorandum of understanding and this program management guide. While the FAA provides technical assistance to participating schools, it does not approve or certify the individual schools' courses or the schools' instructors. As such, the FAA expects the schools to accurately represent their UAS-CTI programs and their relationship with the FAA in advertising and other promotional marketing materials.

The FAA treats each participating school individually and equally for the purpose of UAS-CTI program management and communications, regardless of program size, capabilities, school location, affiliations, or position of the FAA's point of contact.



Obtaining CTI Designation

Organizational Structure

The Unmanned Aircraft System Integration Office (AUS) Safety and Integration Division (AUS-400) manages the UAS-CTI program, with support from stakeholder offices. The AUS-400 UAS-CTI program manager (PM) is the focal point for applications and approvals. Each participating school will identify an authorized representative from the school to oversee the program and a designated point of contact for communication with the FAA.

Processing and Review

Requests for participation in the UAS-CTI program should be submitted to <u>9-FAA-UAS-CTI@faa.gov</u> and include:

- Name of your school
- Point of contact
- School type
- Accreditation
- Description of UAS degrees or certifications

The FAA will send qualified schools an initial questionnaire to establish eligibility for the program.

The UAS-CTI Program Manager will facilitate the memorandum of understanding between the FAA and a qualified school. The PM may coordinate with appropriate FAA offices prior to entering into an agreement.

Roles and Responsibilities

Below are a few examples of what the collaborative relationship may include.

FAA may provide:

- Links to applicable regulations and other resources
- Recognition and description of program and a map of schools on the FAA website
- Invitation to participate in events and/or conferences
- Invitation to FAA webinars
- Information on jobs and internships



- Technical assistance to participating schools, if requested, on opportunities such as:
 - o Becoming test administrators for the recreational flyer knowledge test (TRUST)
 - Establishing community based organizations or fixed sites in accordance with the Exception for Recreational Flyers (49 USC 44809)
 - Operating in accordance with Section 350 of the FAA Reauthorization Act of 2018 (Use of unmanned aircraft systems at institutions of higher education.)
 - o Participation in Drone Safety Awareness Week

Schools will:

- Submit initial and annual questionnaires to the FAA
- Establish a central program office to coordinate UAS-CTI topics with the FAA and respond to FAA information requests or data
- Accurately represent the intentions of the UAS-CTI program in the institution's advertising and other promotional or marketing materials
- Provide counseling to students in all aspects of the UAS-CTI program
- Ensure the faculty is knowledgeable about current UAS laws, regulations, policies, and procedures

Memorandum of Understanding

The memorandum of understanding between the FAA and each school describes the commitment to the program, high-level responsibilities for the two parties, and the duration, amendment, and termination terms of the program. The FAA AUS-400 Division Director and an authorized representative from the school will sign the memorandum of understanding. It must be renewed every three years, at a minimum.

Review and Acceptance of Schools

How to Become a UAS-CTI

The UAS-CTI program has been designed and customized from the existing AT-CTI program. The eligibility guidelines are as follows:

- **School type:** Not-for-profit, two- or four-year, post-secondary educational institution, either public or private.
- Accreditation: Must be institutionally accredited by an agency recognized by the U.S. Secretary of Education.
- **Degree/Certification:** Currently offer a Bachelor's or Associates degree in UAS or a degree with a minor, concentration, or certificate in UAS. The FAA considers a degree viable only if it is active and students graduate with the degree or certification.



The FAA will send potential applicants an initial questionnaire to further evaluate eligibility for the program.

UAS Specific Development Options

Institutions of Higher Learning will meet criteria for unmanned aviation training programs in accordance with Section 631 of the FAA Reauthorization Act of 2018. These training objectives include:

- 1. Training on UAS Platforms including multirotor and fixed-wing small unmanned aircraft
- 2. Knowledge of the operation of UAS components and the capabilities and limitations of the aircraft
- 3. Maintenance and inspections program training, insurance and awareness of privacy and security systems
- 4. Simulation and/or hands-on flight training using sUAS, including practical flight assessments
- 5. Training in functional areas, including agriculture, environmental services, infrastructure and utility inspections, petroleum, oil and gas inspections, and public safety
- 6. Remote pilot certification requirements, and training on applicable Federal policies and regulations
- 7. Training related to flying with sensors and processing data

Diversity and Inclusion

Diversity and Inclusion for UAS-CTI Program

The FAA expects all UAS-CTI schools to encourage diverse and inclusive participation in the program.

The FAA promotes diversity and inclusion by:

- Diversity: recruiting from a diverse, qualified group of potential applicants to secure a highperforming workforce drawn from all segments of American society.
- Inclusion: cultivating a culture that encourages collaboration, flexibility, and fairness to enable individuals to contribute to their full potential and further retention.

These recommendations do not constitute a Federal mandate or a program requirement; the purpose is to provide guidance to help UAS-CTI programs develop, implement, and manage a local diversity and inclusion program.

Scope

Executive Order (E.O.) 13583 requires "Establishing a Coordinated Government-Wide Initiative to Promote Diversity and Inclusion in the Federal Workforce" in order to promote the federal workplace as a model of equal opportunity, diversity, and inclusion.



The FAA is committed to compliance with all anti-discrimination laws, regulations, and policies. The agency will ensure Equal Employment Opportunity (EEO) for all FAA employees and applicants for employment. The FAA fosters diversity, inclusiveness, and respect as integral parts of its day-to-day management and work.

UAS-CTI schools are expected to actively embrace these principles and affirmatively work to demonstrate diversity and inclusion in their UAS-CTI programs.

Measure of Success

The UAS-CTI will become a collaboration between the FAA, universities, colleges and technical schools. The results of this working relationship will include a continuous dialogue with stakeholders to connect universities with general industry, local governments, law enforcement, and regional economic development entities to address labor force needs. The quality of information shared during this working relationship will ensure that knowledge and skills are obtained and will result in well-trained, safety conscience graduates/professionals who are pursuing their goals for a successful career in UAS.

