#### STANDARDS FOR CAREER READY PRACTICE

- Apply appropriate technical skills and academic knowledge
- Communicate clearly, effectively, and with reason
- Develop an education and career plan aligned with personal goals.
- Apply technology to enhance productivity.
- Utilize critical thinking to make sense of problems and persevere in solving them.
- Practice personal health and understand financial literacy.
- Act as a responsible citizen in the workplace and the community.
- Model integrity, ethical leadership, and effective management.
- Work productively in teams while integrating cultural and global competence.
- Demonstrate creativity and innovation.
- Employ valid and reliable research strategies
- Understand the environmental, social, and economic impacts of decisions.

#### The AC<sup>2</sup>E Vision

The Academy for College and Career Excellence, in partnership with our parents and community, strives to create a safe environment where students are empowered to discover their strengths and to achieve their maximum potential. Students are encouraged to become lifelong learners who are prepared to meet the challenges of a culturally diverse society along with the demands of current and future job markets.

#### **ROP/CTE COURSES OFFERED**

(Not all courses are offered each semester)

- 911 Communications Dispatcher\*
- Private Security Guard\*
- Criminal Justice
- Early Childhood Development
- Culinary Arts
- Woodworking Occupations
- Furniture & Cabinet Manufacturing
- Cyber Security\*
- Unmanned Aerial Vehicle\*
- Pharmacy Technician\*
- Medical Assistant
- Registered Dental Assistant\*

#### \*Open to adults

#### Populations Served

- Black Rock High School
- Twentynine Palms High School
- Yucca Valley High School
- Adult Learners

#### For More Information:

#### www.morongousd.com/CTEOfferings.aspx

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Morongo Unified School District Academy of College & Career Excellence

# Unmanned Aircraft Systems





### **Course Description**

This course introduces students to the expanding world of Information and Communication Technology using Unmanned Aircraft Systems (UAS). Students will focus on the history of the technology and how the field has grown in the past decades. In collaboration with the Unmanned Safety Institute (USI), the UAS 1 and UAS 2 courses will prepare students to test for the 'Small UAS Safety Certification' indicating safe and professional application of a UAS. Students will be exposed to the exciting field of small, remotely controlled flying systems through in-classroom systems цр to professional grade systems in the field. Students will participate in reviews and discussions on current US and international usage and industry applications of this evolving technology, including understanding of systems, programming and communication protocols.

# Why a career in Unmanned Aerial Vehicle flying?

It is important for training to include the technical skills along with safety guidelines. UAV pilots also must adhere to the Federal Aviation Administration (FFA) guidelines for UAVs. Working with USI (Unmanned Safety Institute) to provide industry-leading curricula, the course is recognized by the FFA. Upon successful completion of the course, students are eligible to take the Remote Pilot Small UAS Certification exam through the Federal Aviation Administration.

Drone piloting is a relatively new career and expected to grow, with many opportunities in both civilian and military sectors. Some of the industries that will depend on UAV pilots include:

**Agriculture** - According to Forbes magazine: "The legalization of commercial drones will create more than \$80 billion economic impact between 2015-2025, and that precision agriculture will provide the biggest piece of growth."

**Utilities** - Companies will be able to rely on drones to survey storm damage or look for downed power poles. Solar companies will be able to find damaged panels.

**Real Estate** - Drone pictures and videos are posted on-line for perspective buyers to view property.

**Movie Filming** - Less expensive than using a helicopter, drones can easily maneuver into small spaces and obtain great video footage.

**Package Delivery** - Drones are capable of delivering packages to homes and businesses and experts foresee drones being used in this capacity within a few years.

## **Career Outlook**

Careers in the UAV industry are expected to rise over the next twenty years. The integration of drone technology into the National Airspace System Institute will created more than 100,000 new jobs in the next 3 years. There will be a need for licensed UAV pilots with the technical skills in many careers.



Median Salaries in the Drone Industry

Drone Operator (Military)	\$55,000
Drone Maintenance Specialist	\$60,000
Drone Engineer	\$90,000
Drone Pilot	\$115,000

Source: U.S. Bureau of Labor Statistics

