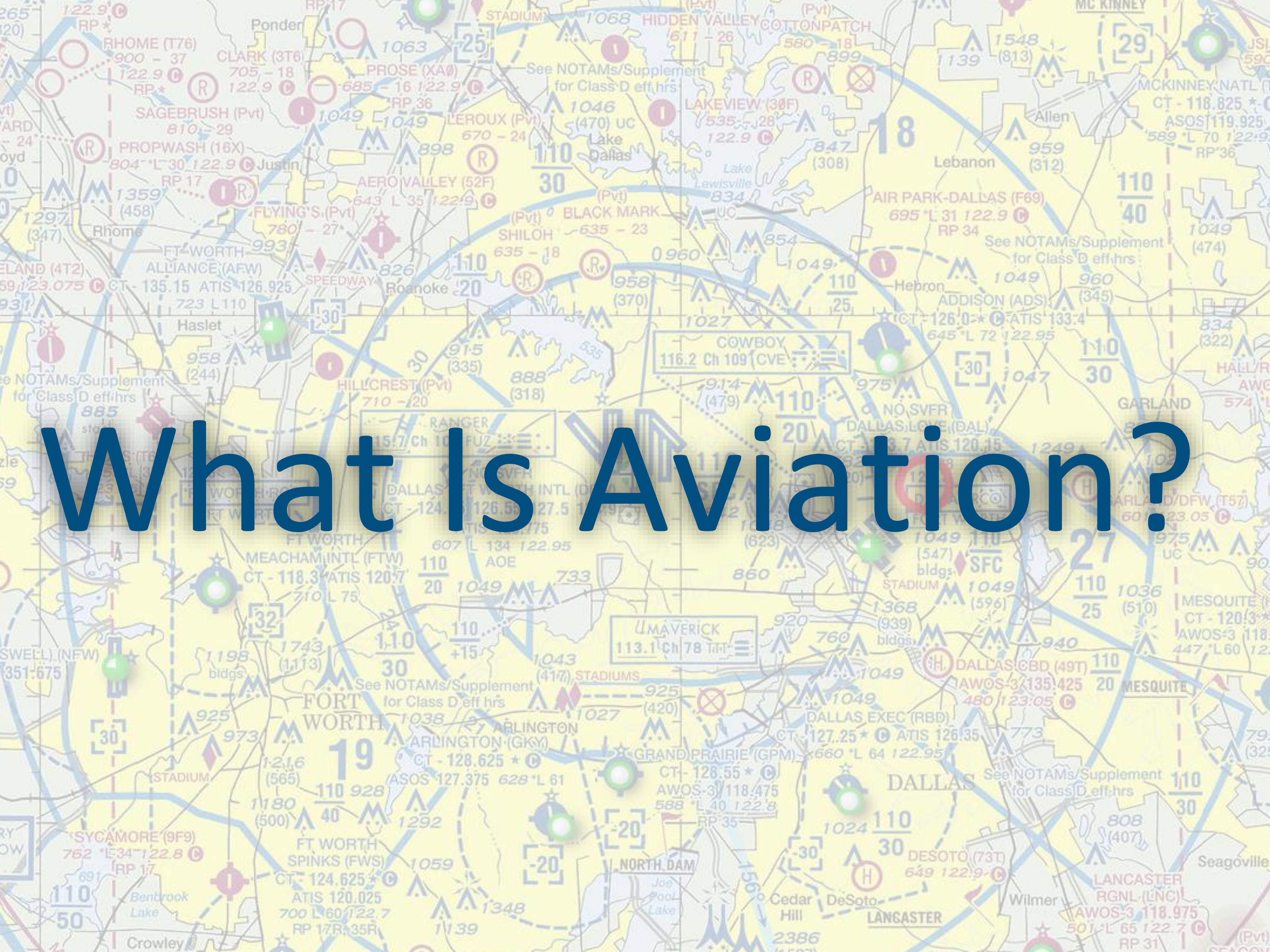




Flying with Determination



What Is Aviation?



THE FLYING OR OPERATION OF AIRCRAFT

Education Pathways



Students use virtual flight simulators to help them practice flight procedures, and scenarios.



Students will further their knowledge, and gain experience in controlling unmanned aircraft systems.

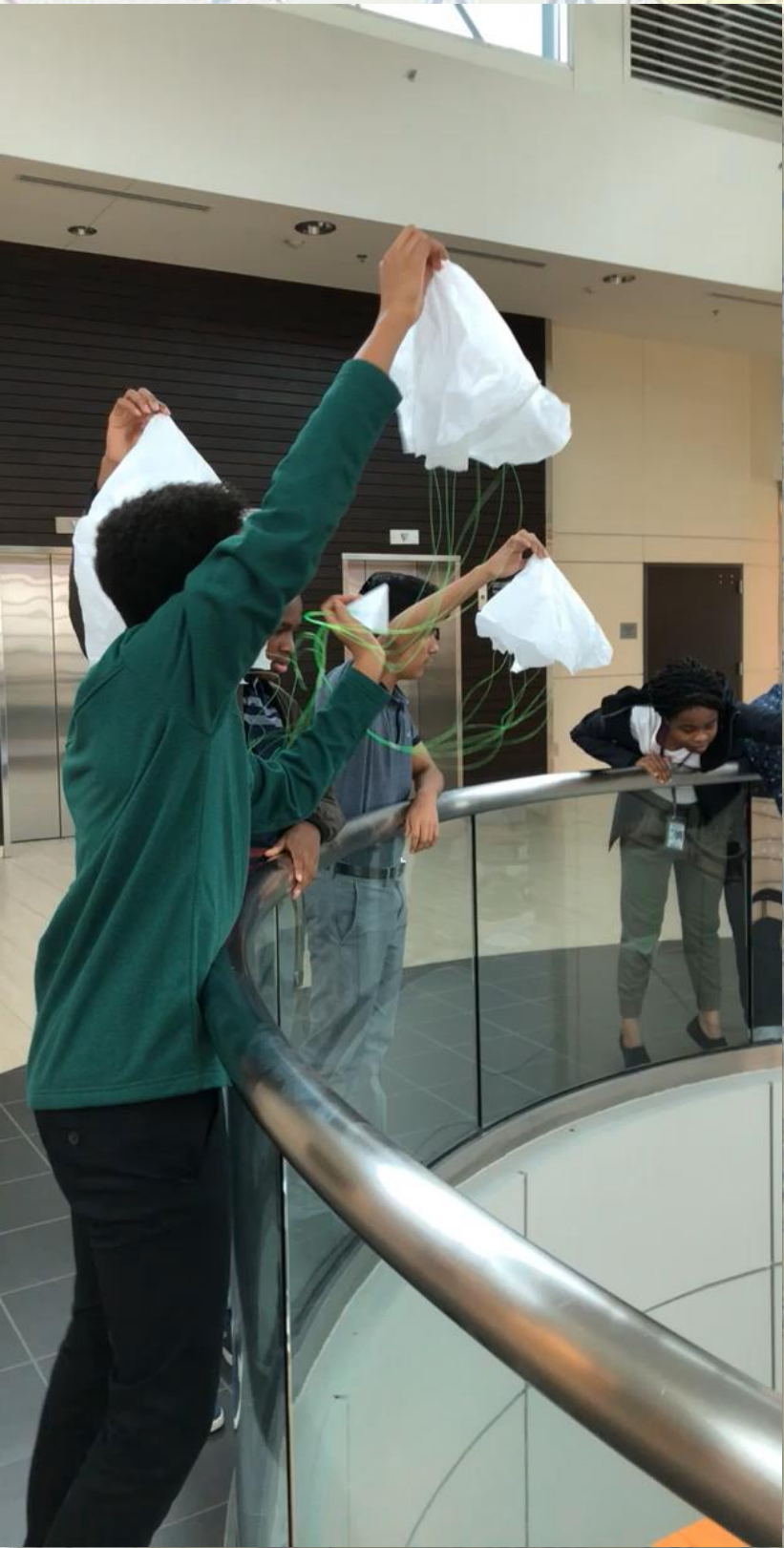


Students use their communication skills to collaborate with others, and prepare them for a career as an Air Traffic Controller.



Students participate in hands on activities to understand basic aircraft structures, and how to fix them.

9th Grade



-Engineering practices :

- Apollo 13
- Parachute Design

-Problem solving :

- Step 1- identify the problem
- Step 2- develop a solution to the problem
- Step 3- Apply the solution
- Step 4- Repeat the process

-Aviation Innovations

- Leonardo Da Vinci
- the Wright Brothers
- Military aircraft
- Jet Engine

10th Grade



-Basic aircraft structures

- Ailerons
- Elevator
- Flaps
- Stabilizers

-Principals of flight

- Lift
- Drag
- Weight

-Motion

- Physical laws affecting flight
- Newton's Laws

11th Grade



- Pilot and aircraft qualifications
- Flight maneuvers
- Flight procedures
- Airport operations
- Regulation
- Weather
- Aircraft systems
- Weight balance
- Emergency procedures
- Flight planning

12th Grade



- Commemorative Air Force Internship
- Private Pilot Knowledge Exam

Red Bird Simulator



- Computer Simulation of Cessna 172
- 6 surround screens
- 50 deg. Pitch
- 60 deg. Yaw
- 40 deg. Roll
- Log flight hours



- **Employability**
- **Cyber Safety**

- **10 hour safety training**



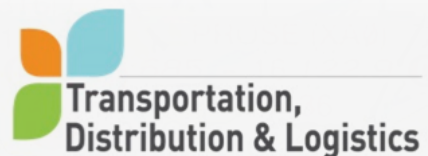
- **Written Knowledge Exam**
- **Private Pilots' License**

Pathway Instructor

William Ervin:

- Aviator College of Aeronautical Science and Technology
- Flight Instructor
- Commercial pilot
- Airplane Instrument
- Advanced Ground Instructor
- US Navy- Aviation Machinist Mate
- US Army Reserve





2018-2019
BUSINESS & INDUSTRY ENDORSEMENT
Aerospace Academy
Dubiski Career High School

Grade	Language Arts	Math	Science	Social Studies	Required CTE Courses	Potential Certification Opportunities: <i>Italics are possible new certifications</i>
9 th	English 1	Algebra 1	Biology	World Geography Or World History	Intro to Aircraft Technology (1 credit)	OSHA General Cyber Safety Career Essentials: Customer Service Career Safe: Employability
10 th	English 2	Geometry	Approved 2nd Year Science	World Geography Or World History Or Political Science	Aircraft Airframe Technology (2 Credits)	
11 th	English 3	Approved 3 rd Year Math	Approved 3 rd Year Science	U.S. History	Aircraft Powerplant Technology (2 Credits)	<i>Unmanned Aircraft Systems, Aviation Mechanic Private Pilot Air Traffic Controller CPR</i>
12 th	English 4 Or Approved 4 th Year English	Approved 4 th Year Math	Approved 4 th Year Science	Government Economics	Practicum in Aerospace (2 Credits)	Aerospace /Aviation Aircraft Assembly Certification (AAA). (NCATT National Center for Aerospace and Transportation Technologies)

Career & Technical Student Organizations:

SkillsUSA
Business Professionals of America
DECA
TSA

Dual Credit: Offerings

English 4	U.S. History
Government	Economics
Statistics	Pre-Calculus
Computer Science	

Required Electives:

Fine Arts
Heath
Foreign Language
Physical Education
Personal Financial Literacy
Business Information Management

Additional Recommended Electives:

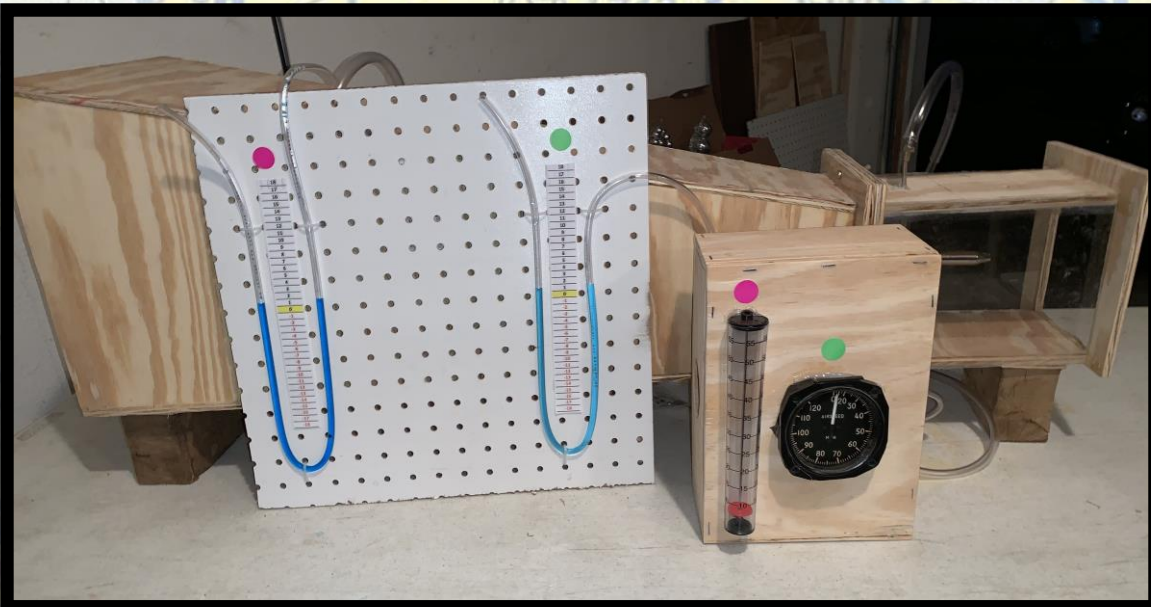
Accounting 1 & 2	Robotics & Automation I
Entrepreneurship	AC/DC Electronics
Robotics I	
Solid State Electronics	
Professional Communication	

Sample Career Opportunities	High School	On the Job Training	Certificate	Associate's Degree	Bachelor's Degree	Advanced College Degree	Average Annual Salary	Possible Majors for this Pathway
Aerospace Engineer					X	X	\$74,000	*Aerospace Engineer *Industrial Engineer *Mechanical Engineer *UAS Operations *Air Traffic Controller Flight School
Civil Engineer					X		\$84,000	
UAS				X	X		\$65,000	
Pilot					X		\$100,000	
Aerospace Program Manager				X	X		\$107,000	
Aircraft Engine Mechanic		X	X	X			\$60,200	
Air Traffic Controller			X	X	X		\$118,650	

The Grand Prairie Independent School District does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups.



ALLIANCE
Oct 18, 2019





Our promise

Upon completion of the Aerospace Program, students will have gained the knowledge and qualifications needed to pilot a single engine aircraft, operate unmanned aircraft systems, and use their skills to communicate, collaborate, and excel.