Building High School Pipelines

05.30.23

CHOOSE
AEROSPACE

AVIATION TECHNICIAN EDUCATION COUNCIL
ATEC

About

In 2020, ATEC incorporated a new 501(c)(3) organization to facilitate educational initiatives in furtherance of workforce development.

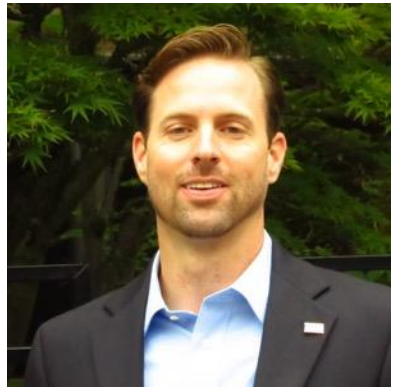
Choose Aerospace is a partnership of aerospace stakeholders, joined together to address one of the biggest threats to continued industry growth: the availability of a diverse, qualified technical workforce.

Leadership

President
Ryan Goertzen, AAR CORP

Vice President
Kevin Dallaire, Piedmont

Secretary/Treasurer
Joel English, AIM



Director
Justin Madden, A4A

Director
Tammera Holmes, AAI

Advisory Director
Sean Torpey, FAA

Executive Director
Crystal Maguire

Scholarship Coordinator
Tarra Ruttman

Sequence of Courses

This modular content facilitates a flexible approach to meet a wide-range of schedule and program needs. For example, the approximately 500 hours of content can be delivered in a full-time, 12-week program for adult learners, or as an elective in the 11th and 12th grade year of high school.

The following courses make up the entire suite of aviation maintenance curriculum. We have provided a suggested order for completion below.

01	FAA-ACS-AM-IF-GOS	Safety, Ground Operation, and Servicing
02	FAA-ACS-AM-IK-HTM	Hand Tools and Measuring Devices
03	FAA-ACS-AM-IC-WAB	Weight and Balance
04	FAA-ACS-AM-IH-MAT	Mathematics
05	FAA-ACS-AM-IJ-PFA	Physics for Aviation
06	FAA-ACS-AM-II-MIR	Maintenance and Inspection Regulations
07	FAA-ACS-AM-IB-ACD	Aircraft Drawing
08	FAA-ACS-AM-IA-FEE	Fundamentals of AC Electricity
09	FAA-ACS-AM-IA-FEE	Fundamentals of DC Electricity
10	FAA-ACS-AM-ID-FLF	Fluid Lines and Fittings
11	FAA-ACS-AM-IE-MHP	Materials, Hardware, and Processes
12	FAA-ACS-AM-IG-CCC	Cleaning and Corrosion Control

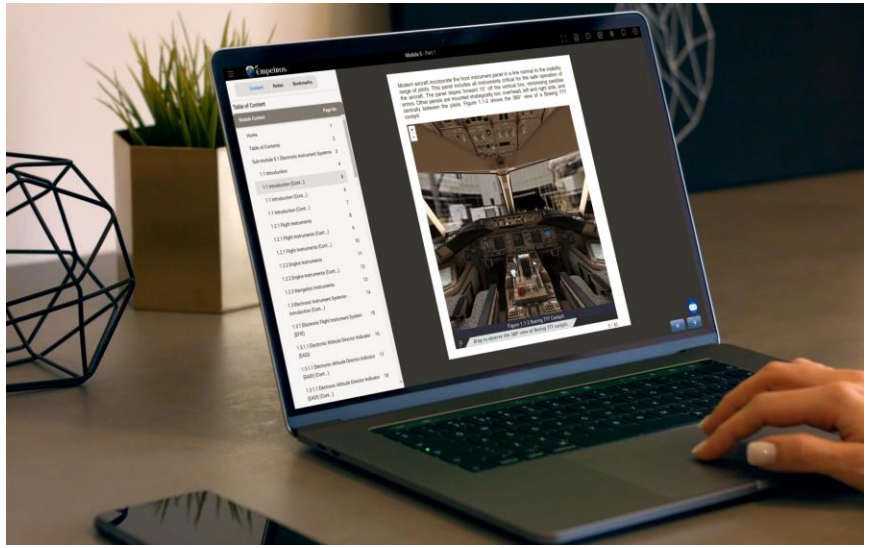
Maintenance Curriculum

- Created to make aviation technical content more accessible and build pipelines into part 147 schools.
- Developed by Clemson University Center for Workforce Development and ARCS Aviation in partnership with Choose Aerospace, ATEC, and Advisory Committee.
- Five hundred hours of content covers the general subject areas in the FAA mechanic ACS.

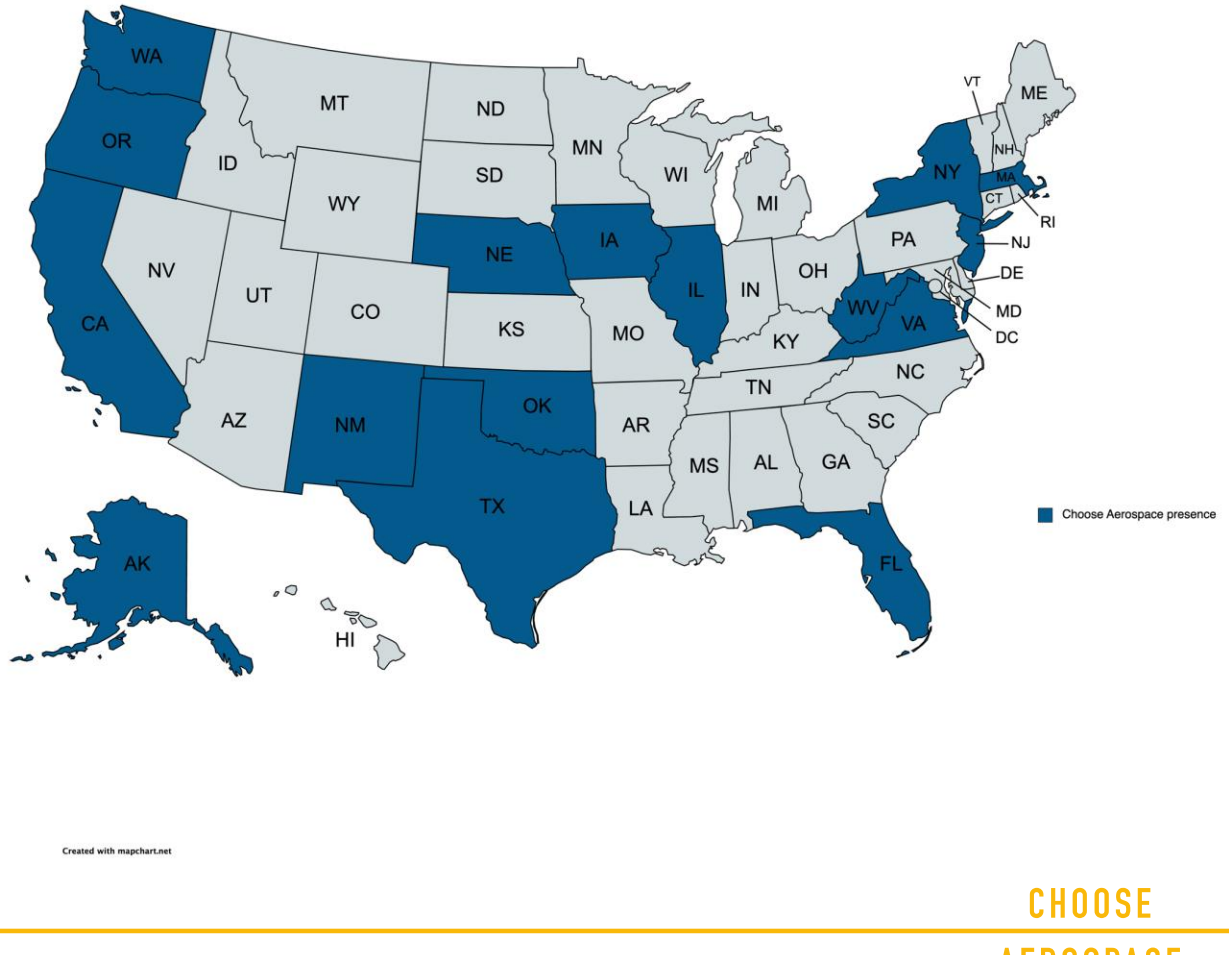
CHOOSE AEROSPACE

Maintenance Curriculum

- Includes computer-based curriculum with hands-on labs and activities in accompanying instructor guides.
- Limited equipment, materials, and teacher qualifications necessary. License fees $200 per student, per year.
- Creates opportunities to partner with part 147 schools to matriculate students to finish training required for FAA mechanic certification.



Participating Programs



	States	Schools	Students
2021-2022 Pilot Test	8	9	140
2022-2023 Academic Year	6	15	189
2023-2024 Academic Year (applied)	8	13	392
2027 Goal	--	--	10,000

Participating Programs

Viper Transitions	Community program	Anchorage	AK
Jefferson Union	High school	Daly City	CA
Des Moines Public Schools	Part 147	Des Moines	IA
Vienna High School	High school	Vienna	IL
West Michigan Aviation Academy	High school	Grand Rapids	MI
Grand Island SH	High school	Grand Island	NE
Goddard High School	High school	Roswell	NM
Butler Tech	High school	Fairfield	OH
Polaris Career Center	High school	Middleburg Heights	OH
Ada City Schools	High school	Ada	OK
Chelsea High School	High school	Chelsea	OK
Mid-Del Technology Center	High school	Midwest City	OK
Moore Public Schools	High School	Moore	OK
Okmulgee High School	High school	Okmulgee	OK
Putnam City Schools	High school	Oklahoma City	OK
Southern Tech	Part 147	Ardmore	OK
Southwest Technology Center	Part 147	Altus	OK
Tulsa Public Schools - East Central High School	High school	Tulsa	OK
Western Heights Public Schools	High school	Oklahoma City	OK
Yukon Public Schools	High school	Yukon	OK
Liberty High School	High school	Hillsboro	OR
Crowley ISD	High school	Crowley	TX
Dubiski Career High School	High school	Grand Prairie	TX
McKinney North High School	High school	McKinney	TX
Rising Aviation High School	High school	Addison	TX
US Aviation Academy	Part 147	Denton	TX
Shenandoah Valley Governor's School	High school	Fishersville	VA
Wayne County Schools	High school	Huntington	WV

Program Development

- Define multiple pathways to certification
  - Matriculate into A&P schools
  - Go direct to work as a non-certificated technician
  - Feed into apprenticeship program
- Facilitate pathway development
  - Create credential for high school student graduates
  - Expand opportunities to matriculate into A&P school
  - Facilitate industry support
- Remove barriers to adoption
  - Funding
  - Teachers
  - Training

Crystal Maguire
Executive Director
crystal.maguire@atec-amt.org

Ryan Goertzen
President
Ryan.goertzen@aarcorp.com

Tarra Ruttman
Program Manager
Tarra.ruttman@chooseaerospace.org

Questions?

www.atec-amt.org

www.chooseaerospace.org

CHOOSE
AEROSPACE