

Presentation to Academic Senate New Program Proposal

Aviation Maintenance Technology (AMT)

Associate of Science
Certificate of Completion (3)

Dan Cearley (Anthropology)

October 27, 2022

Collaborators

Marquis Bosuego (AMT -College of Alameda), Brian Hagopian (Auto), Scott Miner (Welding), Vicki Shipman (CTE), Kevin Kramer, (PATH) Dr. Kristina Whalen (VP - Academic Services)



Aviation Maintenance Technology (AMT)

Elements

1. Regional Programs
2. Need and Demand (CTE/Labor)
3. Curriculum – Sequence
4. Outcomes (PSLO)
5. Education Master Plan
6. Community Partners
7. On-Campus Support
8. Costs and Resources
9. FTEF
10. Implementation Schedule



Aviation Maintenance Technology (AMT)

1. Regional Programs

- 15 programs statewide
- SF City College closes program 2021
- College of Alameda is impacted with waitlist
- Opportunity for LPC

AVIATION MAINTENCE TECHNOLOGY PROGRAMS



Aviation Maintenance Technology (AMT)

1. Regional Programs

- 4 programs Northern California
- Private College Fremont
- 60+ Graduates annually



Top Schools	Completions (2020)
Aviation Institute of Maintenance-Fremont	110 
College of Alameda	71 
City College of San Francisco	60 
Gavilan College	48 
West Valley College	2 

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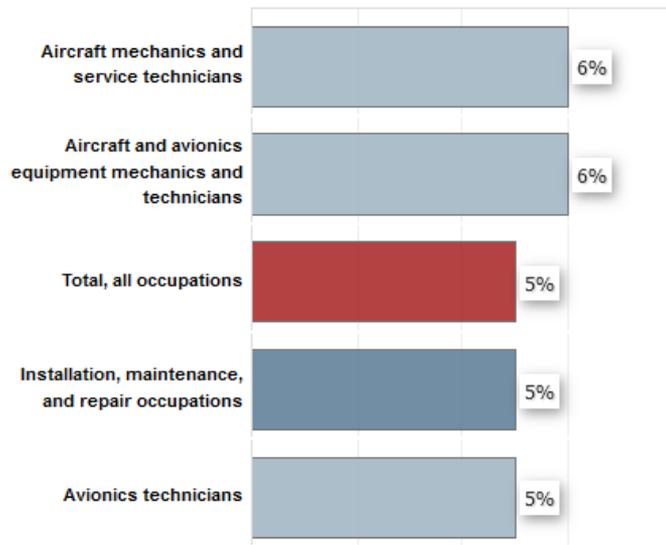
2. Need and Demand

- Broad Industry Trends



Aircraft and Avionics Equipment Mechanics and Technicians

Percent change in employment, projected 2021-31

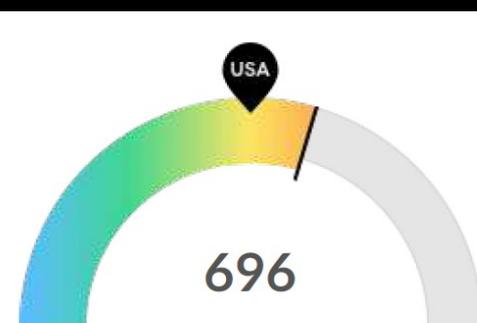


Note: All Occupations includes all occupations in the U.S. Economy.
Source: U.S. Bureau of Labor Statistics, Employment Projections program



Compensation

Earnings are high in your area. The national median salary for Aircraft Mechanics and Service Technicians is \$66,249, compared to \$88,021 here.



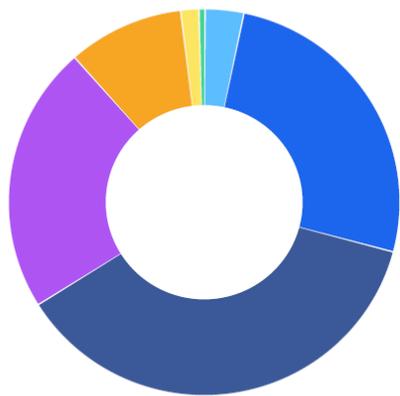
Retiring Soon

Retirement risk is high in your area. The national average for an area this size is 538* employees 55 or older, while there are 696 here.

Aviation Maintenance Technology (AMT)

2. Need and Demand

- Entry Level Positions
- FAA Certification w/Exam
- Mainly AS/Certificates



	% of Jobs
Less than high school diploma	3.2%
High school diploma or equivalent	25.9%
Some college, no degree	37.0%
Associate's degree	22.4%
Bachelor's degree	9.6%
Master's degree	1.5%
Doctoral or professional degree	0.5%

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3. Curriculum – Sequence

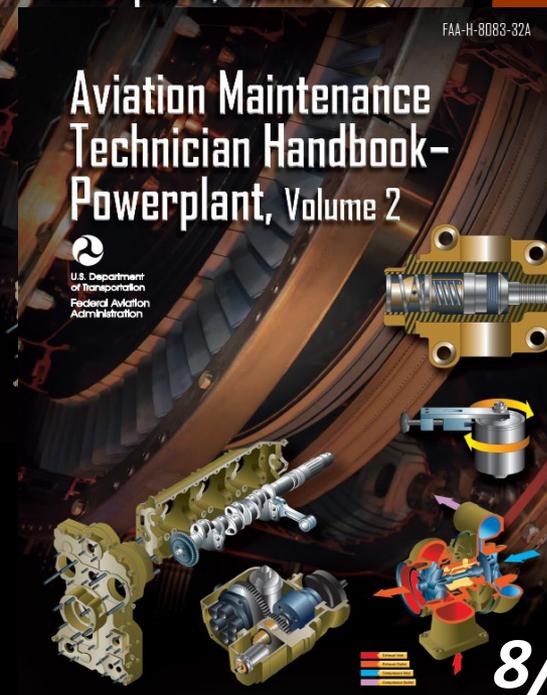
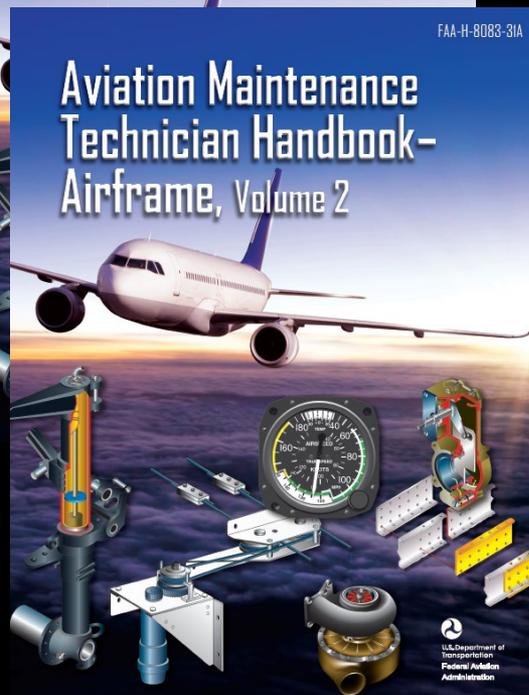
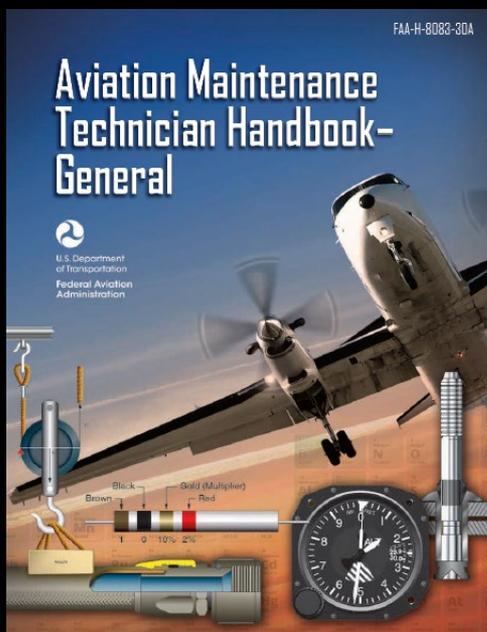
- Associate of Science (A.S.)
- Certificates
 - AMT - General Aircraft
 - AMT - Aircraft Airframe
 - AMT - Aircraft Powerplant

In consultation with Mark Bosuego, Brain Hagopian, and Kevin Kramer, we reviewed all 15 programs in California. Based upon simplicity and regional similarity, we crafted a program similar to College of Alameda and Gavilan. Course are separated by lecture versus lab, adding flexibility for DE, day vs. night courses.



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3. Curriculum – FAA Standards



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3. Curriculum – Courses

The FAA requires 1150 hours (four full semesters) of instruction.



Course	Title	Lecture	Lab
AMT 56/56L	Basic Science of Aviation Maintenance Technology	6.5	3
AMT 58/58L	Survey of Aviation Maintenance Technology	6.5	3
AMT 62/62L	Airframe Systems I	6.5	3
AMT 64/64L	Airframe Systems II	6.5	3
AMT 66/66L	Airframe Systems III and Review	6.5	3
AMT 70/70L	Theory of Powerplants I	5	2.5
AMT 74/74L	Theory of Powerplants II	5	2.5
AMT 76/76L	Theory of Advanced Powerplants I	5	3
AMT 78/78L	Theory of Advanced Powerplants II	5	3
AMT 82/82L	FAA Exam Preparation	1	3
WRKX 94	Work Experience/Internship	1-4	
NAMT 100	Non-Credit Test Preparation	1	

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4. Outcomes (PSLO)

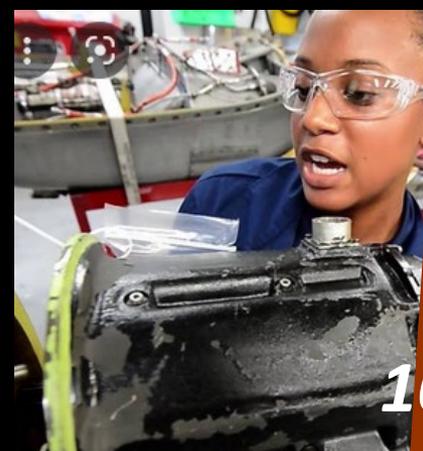
Program Learning Outcomes

Upon successful completion, students will be able to:

- Prepare for personal, educational and/or career goals.
- Perform entry-level aviation inspection, maintenance, and repair skills on aircraft engines, aircraft structures, and aircraft systems.
- Demonstrate the knowledge and skills to pass oral, practical and written FAA examination in general and airframe & powerplant subjects.



LAS POSITAS
COLLEGE



10/15

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5. Education Master Plan

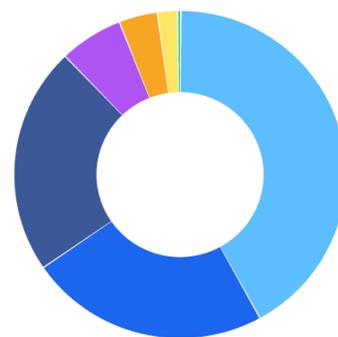
Goal A: Educational Excellence

A1. Analyze and meet the educational needs of a diverse population and global workforce through ongoing program support and innovation.

A4. Provide students with the knowledge and skills necessary for career readiness and advancement.

Goal E: Equity and Anti-Racism

The associated certificate allows for expanded opportunities for a wide group of people. Clear objectives, standardized training, high salary.



● White
● Hispanic or Latino
● Asian
● Black or African American
● Two or More Races
● Native Hawaiian or Other Pacific Islander
● American Indian or Alaska Native

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6. Community Partners

Livermore Airport Meet & Greet
April 1, 2022

- LPC - Dr. Foster, Dr. Whalen, Vicki Shipman, Scott Miner, Dan Cearley
- Marquis Bosuego, Adjunct Faculty, College of Alameda
- Pete Sandhu - Five Rivers Aviation/Alameda County Sheriff's Air Squadron
- Airport Manager
- Local Aviation Maintenance Companies
- Flight Schools Operators



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7. On-Campus Support

LPC has supportive programs

- Welding
- Automotive

8. Costs and Resources

- CTE secured a Planning and Development grant
- Includes business planning and feasibility study
- Identifying Industry Partners and Investors
- Site visit of Cuesta College's new facility underwritten by SLO County funds (500k) and ACI Jet (500k)



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9. FTEF

Student/Teacher Ratios.

- Section 147.23 requires at least 1 certificated instructor for every 25 students in each laboratory or shop class.
- 1 - 4 instructors



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10. Implementation Schedule

- 2022/23 Planning/Development
 - Feasibility and Business Plan
 - Curriculum Development
 - Approval by Bay Area Community College Consortia (BACCC).
 - Stakeholder engagement
 - Funding & Resource Acquisition
 - Begin FAA certification process
- 2024 Launch



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10. Implementation Schedule

- FAA Certification Process.

Certification Process / Action	2023												2024											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Initial Inquiry	█	█																						
Preapplication Meeting			█	█	█	█	█	█																
Formal Application Submission								█	█	█	█	█												
Formal Application Meeting											█	█	█	█	█	█								
Document Compliance (Curriculum)															█	█	█	█						
Demonstration (Onsite Inspection)																	█	█	█	█				
Certification																			█	█	█	█	█	█

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Final Considerations

This is a preliminary proposal.

1. We are asking senate approval to develop curriculum
2. Provide update
 - Feasibility Study
 - Business plan is completed
3. Future discussion of final approval.



Thank You All

WEST WINS AGAIN AT AEROSPACE MAINTENANCE COMPETITION

Team Scores Awards, Scholarships and Jobs

By Destine Gibson, Student Intern

West Los Angeles College's aviation maintenance team placed fourth out of 25 school teams and 16th out of 68 overall teams consisting of licensed maintenance professionals in the armed forces, domestic and international airline teams as well as other schools at 2018 Aerospace Maintenance Competition (AMC) in Orlando. West even placed ahead of several of the professional teams sponsored by companies such as American Airlines, United Airlines and Quantas Airlines.



The five-member team was led by team captain Yolanda Gong who so impressed United Airlines professionals that she was invited to interview and also to tour the United Airlines hangars at San Francisco International Airport. Gong outshined 130 nominated students to win the Snap-On Professionalism Golden Wrench Award, marking the second-consecutive year that a woman from West has won this prestigious award.