



Welcome to Program Review

College of Alameda - 2019

AVIATION - Instruction

Program Review

Program Overview

Please verify the mission statement for your program. If your program has not created a mission statement, provide details on how your program supports and contributes to the College mission.

The AMT program's mission is to provide an affordable alternative in preparing to be aviation maintenance technicians, meeting the Federal Aviation Regulation Part 65. To serve our community to empower students consistent with the aviation industry's needs; preparing them to enter into the industry with the necessary knowledge, skill, and personal integrity to succeed.

Program Total Faculty and/or Staff

Full Time

Hoi Ko
Robert Bruce Pettyjohn
George Cruz

Part Time

.
Ben Henderson
Marquis Bosuego
Ablert Chan

The Program Goals below are from your most recent Program Review or APU. If none are listed, please add your most recent program goals. Then, indicate the status of this goal, and which College and District goal your program goal aligns to. If your goal has been completed, please answer the follow up question regarding how you measured the achievement of this goal.

AMT department assessment is done in three phases " "

1. The specific curriculum must reflect any change and new mandates from the FAA.
2. Through an advisory board with members from various sectors within the Aviation Maintenance Area, currency and job applicability are addressed. Curriculum may be modified when changes are needed.
3. Internal review by the faculty in the assessment of shop projects, tools and equipment to ensure currency in practical projects and tools can keep in pace with industry's changes.

Status

In-Progress

If Completed, What evidence supports completion of this goal? How did you measure the achievement of this goal?

College Goal

Advance CoA teaching and learning

District Goal

Build Programs of Distinction

1. The FAA has accepted the AMT curriculum as meeting Federal Mandates and covering all required topics and curriculum modules.
2. The AMT program is in the process of reestablishing an advisory board and board members from major airlines and aerospace companies have accepted the invitation to be member of the AMT advisory board.
3. An internal review of the curriculum has revealed duplications of topics, and misalignment lecture and lab contents within the approved topics.
4. During the internal assessment, it has been discovered that after extended shut down period from 2011 to 2013, the AMT program has numerous equipment and tools missing or not operational and must be replaced.
5. Internal assessment has also revealed misalignment of topics with other Bay Area's similar AMT programs.
6. The internal assessment has also covered the physical facility which has revealed numerous health and safety issues and inadequacies in the building, lightings, etc.
7. Students' interests has created long waiting list to enroll for the program; how ever, lack of qualified instructors in the area continues to play a major role recruitment leading to the program's inability

Status If Completed, What evidence supports completion of this goal? How did you measure the achievement of this goal?

In-Progress

College Goal

Advance CoA teaching and learning

District Goal

Advance Student Access, Equity, and Success

An administrative review of instructor coverage with current staffing of 2 full time and 3 adjunct instructors is problematic to the success of the program due to the restricted load factor adjunct can have. Therefore, addition of 2 full time instructor is required to have stability and consistency in our course offering.

Status If Completed, What evidence supports completion of this goal? How did you measure the achievement of this goal?

Completed

The program was able to hire one additional full time tenure track faculty, thus bring stability to the program to the three current cohorts of students.

College Goal

Advance CoA teaching and learning

District Goal

Advance Student Access, Equity, and Success

Describe your current utilization of facilities, including labs and other space

Currently, the AMT facility is about 80% utilization in both classrooms and shop area. All of the classrooms are not up to code as the building is over 60 years old. However, a Federal grant from AEDA was awarded in 2018 for the upgrade of one of the hangar building.

Career Education

Using the [LaunchBoard](#), what are the job placement rates for your program for the past three years? (What % of your graduates have secured employment in the field within 3 months of leaving the program?). Note: you will need to establish a username and password for the LaunchBoard if you don't already have one.

2016 - 17 Job Placement Rate (%)	% employed in the field within 3 months	2017 - 18 Job Placement Rate (%)	% employed in the field within 3 months	2018 - 19 Job Placement Rate (%)	% employed in the field within 3 months
80	70	90	86	95	90

Using the [LaunchBoard](#), what are the projected job openings in your discipline for the next three years?

Job Openings

How is your discipline or program responding with regard to changes in labor market demand?

As demand for aviation technician increases, we actively seek collaboration with airlines and smaller aircraft repair stations for employment opportunities for our graduates as well as part time work for in progress students.

Do you have an industry advisory board in place?

Yes

Has your industry advisory board met regularly (at least once per quarter or semester)?

Yes

Please attach a list of your industry advisory board members.

Please describe the number of activities and recommendations resulting from advisory committee meetings that have occurred in the past three years. What information was presented that required changes to be made to your program?

1. In the process of developing an Avionics program - gearing toward a National Certification as AET - Aviation Electronics Technician
2. Increased in the number of cohort from 2 to 3 in order to increase the number of program graduate to fulfill industry demand.
3. Working directly with Industrial HR representative in in house recruitment from the various airlines and repair stations.
4. active participation in Bay Area job Council in program and job development.

Does your program require state or national licensing? If yes, please specify. What is your college's set standard passing rate for this exam or license?

Yes

If yes, Exam or License
Federal FAA Certification examination

Set standard pass rate
100

Do your students participate in other third party certifications? If so, please provide their success rates (include the % of completing students successfully getting certified).

No

If yes, Third party certification
Set standard pass rate

Is your program working with a Deputy Sector Navigator?

Yes

If yes, Briefly describe your program's work with the Deputy Sector Navigator.
Active member in program development, out reach development, and job development

What programs similar to yours exist in the surrounding area or at nearby East bay colleges? (Micro region in LaunchBoard)

College

In which ways is your program collaborating with other community colleges in the region?

City College of San Francisco

student outreach

Please list and briefly describe the grant name, granting agency, and the goals of each grant as it relates to you discipline/department/program. - Grant 1: - Text

Grant Name	Granting Agency	Grant Goals	Last year of Funding
EDA	AEDA	program and facility upgrade	2018

How is your program using Strong Workforce Funds?

1. Student outreach and development with Unified School District (Oakland and Alameda)
2. Industry outreach and job development at industry open house events
3. Program and equipment upgrade

In the boxes below, please add improvement actions and resource requests that are directly related to the questions answered in this section. If there are no improvement actions or resource requested in this area, leave blank.

Improvement Actions Improvement Action

Improvement Action

Action Item	Description	To be completed By	Responsible Person
Sheet metal break	bend sheet metal	â€Ž12â€Ž/â€Ž13â€Ž/â€Ž2019	Department Chair

Resource Request

Technology and Equipment	Replacement		
Description/Justification		Estimated Cost	
Current break is outdated and not fully operational		3000	

Improvement Action

Action Item	Description	To be completed By	Responsible Person
Magnetflux machine	Non-destructive Testing	â€Ž1â€Ž/â€Ž27â€Ž/â€Ž2020	Department Chair

Resource Request

Technology and Equipment

Replacement

Description/Justification

Old machine was not operational and has already be disposed of. Curriculum requirement. Lower engine start costs and risk.

Estimated Cost

15000

Improvement Action

Action Item

Hydraulic Test Bench

Description

Test hydraulic lines and hoses

To be completed By

â€Ž2â€Ž/â€Ž27â€Ž/â€Ž2020

Responsible Person

Department Chair

Resource Request

Technology and Equipment

Replacement

Description/Justification

Current test bench is not operational - required curriculum

Estimated Cost

5000

Improvement Action

Action Item

Industry and FAA events/seminars

Description

ATEC annual conference and required FAA seminars

To be completed By

â€Ž6â€Ž/â€Ž26â€Ž/â€Ž2020

Responsible Person

Department Chair

Resource Request

Professional Development

Individual/personal PD needed

Description/Justification

ATEC is a national organization for aircraft technicians technical school to share idea and promote national and federal interest and development

Estimated Cost

5000

Improvement Action

Action Item	Description	To be completed By	Responsible Person
engine start simulator	Engine Start simulation for reciprocating and jet engine	â€Ž4â€Ž/â€Ž10â€Ž/â€Ž2020	Department Chair

Resource Request

Technology and Equipment

Replacement

Description/Justification

Engine students to learn engine start and flight operation at no physical risks and cut operating costs from actual running an engine

Estimated Cost

10000

Improvement Action

Action Item	Description	To be completed By	Responsible Person
Faculty hiring	Hiring an additional tenure track faculty	â€Ž6â€Ž/â€Ž30â€Ž/â€Ž2020	Department Chair

Resource Request

Personnel

Full-time Faculty

% Time

100

Description/Justification

Current 3 cohorts would be the maximum for the current staff. In order to add a day time session and one to two additional cohort, an additional full time faculty is needed

Estimated Annual Salary Costs

80000

Estimated Annual Benefits Costs

60000

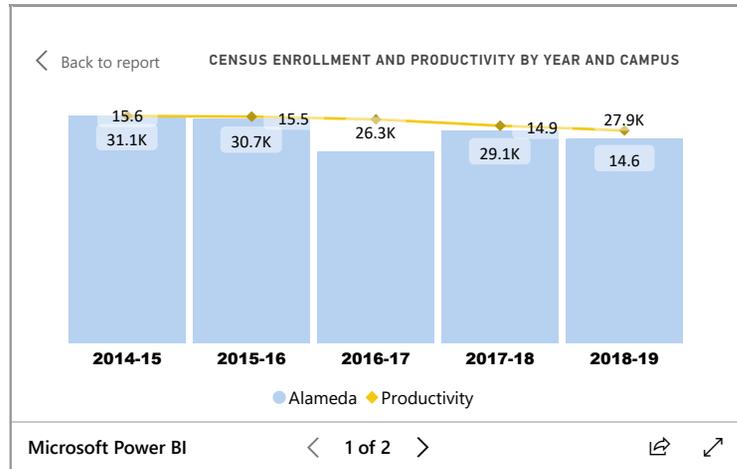
Total Costs

140000

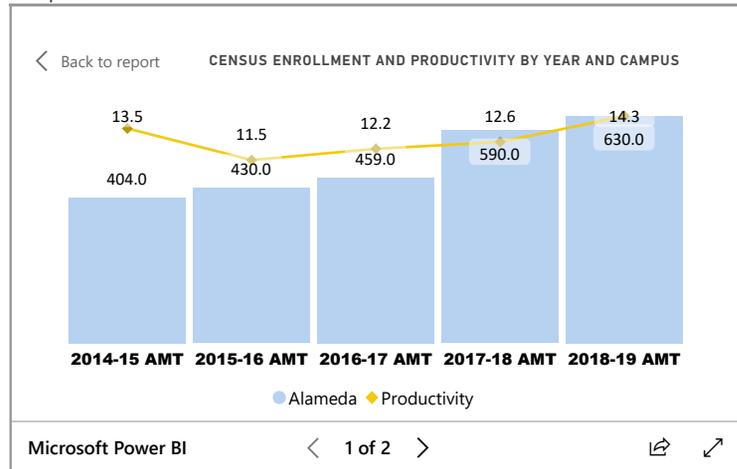
Enrollment Trends

College Level - Program and Department comparison

Chart



Compare



Using the Enrollment Trends dashboard filter to your college and subject area. Reflect on the enrollment trends over the past three years. How does the enrollment trend for your program compare to the overall college trend? What factors could be attributing to this trend?

The enrollment trends for the AMT program is on a rise, sturdily at a peace of 10+% on an average. As compared to the enrollment of College of Alameda as a whole which is on a slow decline. We see this trend will slow to a stop as we reach our capacity per FAA mandate of maximum 25 students in each class. However, it would be on the rise again when we have the ability to add one additional cohort of students.

Describe effective and innovative teaching strategies used by faculty to increase student learning and engagement.

Some of the faculty are using Canvas and other digital media for their classes. Actual hands on experience is enhanced with newer and current aircraft and mockups.

How is technology used by the discipline, department?

Computer and LED projector are used, in addition of online media and IT tools such as Canvas are used.

How does the discipline, department, or program maintain the integrity and consistency of academic standards with all methods of delivery, including face to face, hybrid, and Distance Education courses?

Constant evaluation and discussion among faculty to identify the best method(s) used to develop a best practice within our department and student outcome.

In the boxes below, please add improvement actions and resource requests that are directly related to the questions answered in this section. If there are no improvement actions or resource requested in this area, leave blank.

Improvement Action

Improvement Actions

Improvement Action

Action Item	Description	To be completed By	Responsible Person
Impletmentin smart classroom	to have available at least 2 smart classroom	â€Ž3â€Ž/â€Ž19â€Ž/â€Ž2021	Department chair

Resource Request

Technology and Equipment	New		
Description/Justification Smart Classroom		Estimated Cost 20000	

Improvement Action

Action Item	Description	To be completed By	Responsible Person
Expanding an additional cohort	As of current student, additional 1 to 2 cohort is possible to extend classes into day time	â€Ž6â€Ž/â€Ž30â€Ž/â€Ž2020	Department Chair

Resource Request

Personnel	Full-time Faculty		
% Time	Description/Justification	Estimated Annual Salary Costs	Estimated Annual Benefits Costs
100	With current staffing, it would reach a maximum capacity within a semester, the only way to expand would be to extend into day time for add addition 1 to 2 cohort, expanding capacity. Current waiting list surely justify filling these sports as early as Spring 2020.	80000	70000
Total Costs			
150000			

Curriculum

Please review your course outlines of record to determine if they have been updated or deactivated in the past three years. Use the pull-down menus to identify courses that still need updating or deactivation and specify when your department will update each one, within the next three years.

Name	Last updated date	Semester and Year	To be updated on	To be deactivated on
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Please summarize your plans for curriculum improvement/development, including details on specific courses or programs you plan to improve/develop.

The AMT program is in the process of expanding its curriculum to broaden its scope and to serve the aviation community by moving into the Avionics field in the certification of AET Aircraft Electronics Technicians. This course may be taught online through DE. Eventually, we would like to develop a certificated program in Avionics in addition to the current Airframe and Powerplant certification program.

In the boxes below, please add improvement actions and resource requests that are directly related to the questions answered in this section. If there are no improvement actions or resource requested in this area, leave blank.

Improvement Actions	Improvement Action
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Improvement Action

Action Item	Description	To be completed By	Responsible Person
Develop avionics curriculum	Development of avionic curriculum toward the FAA certificate as AET, Aircraft Electronics Technician	â€Ž6â€Ž/â€Ž30â€Ž/â€Ž2020	Department Chair

Resource Request

Personnel	Part-time Faculty
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% Time	Description/Justification	Estimated Annual Salary Costs	Estimated Annual Benefits Costs
60	to teach the online class	40000	20000
Total Costs			
60000			

Instruction - Assessment

Student Learning Outcomes Assessment

List your Student Learning Outcomes. SLOs are specific, measurable statements of what students will know, be able to do, or be able to demonstrate when they complete a course. An SLO focuses on specific knowledge, attitudes, or behaviors that students will demonstrate or possess as a result of instruction.

Course	Student Learning Outcomes (SLO)	Last date Assessed	Planned Assessment Date	Attachments
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How has your department worked together on assessment? Provide examples on collaboration, leadership, planning exercises, and data analysis. What aspects of assessment work went especially well in your department and what improvements are most needed?

All Departmental SLO's are predetermined by the Federal Aviation Administration. One of the ways this is tracked by the FAA is through their National Testing passing norm in all related subjects. On the average, COA AMT is slightly above the National Norm.

What were the most important things your department learned from assessment? If implementation of your action plans resulted in better student learning and/or changes in curriculum, detail the results

Through the review of COA passing averages as compared to the National Norm, which are broken down per subject matters directly aligned with our curriculum, allow us to evaluate our successes and failures, thus forcing us to modify our curriculum as required by the FAA.

Give us an update on your Program Learning Outcomes (PLOs). A complete program assessment means all PLOs have been assessed for that program. Attach any evidence, i.e. reports from Task Stream or Curricunet Meta.

Does your department participate in the assessment of multidisciplinary programs?

No

If Yes, Describe your department's participation and what you learned from the assessment of the program that was applicable to your own discipline.

Does your department participate in your college's Institutional Learning Outcomes (ILOs) assessment?

No

If Yes, Please describe your departments participation in assessing Institutional Learning Outcomes.

What support does your department need from administrators, assessment coordinators and/or your campus assessment committee to continue to make progress in assessment of outcomes and implementation of action plans?

In the boxes below, please add improvement actions and resource requests that are directly related to the questions answered in this section. If there are no improvement actions or resource requested in this area, leave blank.

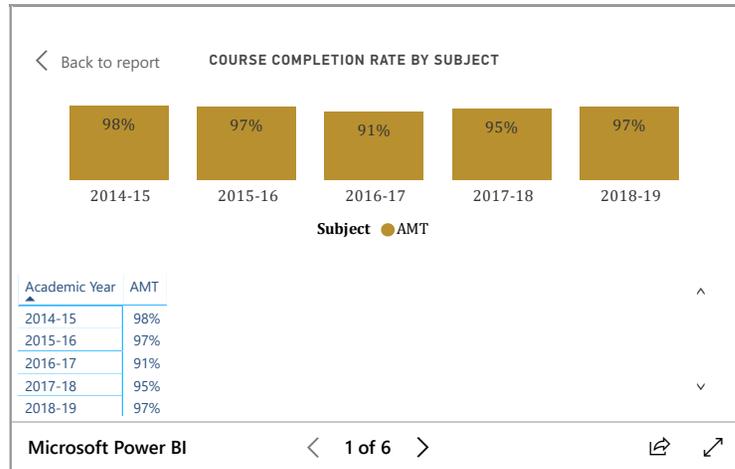
Improvement Actions

No Actions/Requests

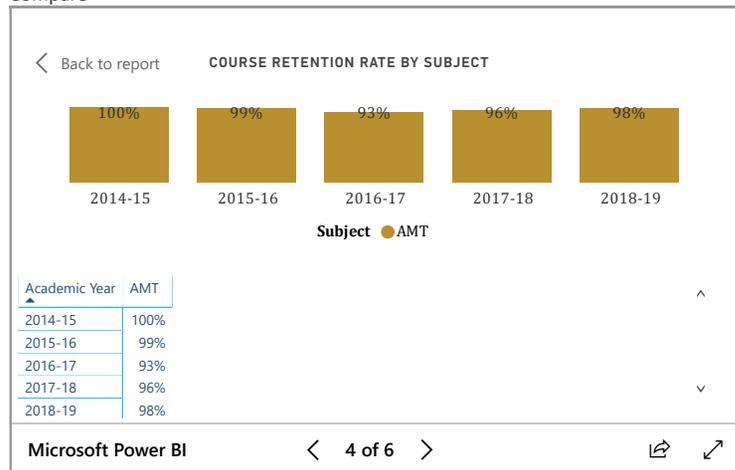
Course Completion

College Level - Program and Department comparison

Chart



Compare



Consider your course completion rates over the past three years (% of student who earned a grade of "C" or better).

Name	2016 - 17 Completion Rate (%)	2017 - 18 Completion Rate (%)	2018 - 19 Completion Rate (%)
All AMT courses	98	98	98

Use the filters on the top and right of the graphs to disaggregate your program or discipline data. When disaggregated, are there any groups whose course completion rate falls more than 3% points below the discipline average? If so, indicate yes and explain what your department is doing to address the disproportionate impact for the group.

Age	<input type="radio"/> Yes <input checked="" type="radio"/> No	If yes, Please describe the difference
Ethnicity	<input type="radio"/> Yes <input checked="" type="radio"/> No	If yes, Please describe the difference
Gender	<input type="radio"/> Yes <input checked="" type="radio"/> No	If yes, Please describe the difference
Foster Youth Status	<input type="radio"/> Yes <input checked="" type="radio"/> No	If yes, Please describe the difference
Disability Status	<input type="radio"/> Yes <input checked="" type="radio"/> No	If yes, Please describe the difference
Low Income Status	<input type="radio"/> Yes <input checked="" type="radio"/> No	If yes, Please describe the difference
Veteran Status	<input type="radio"/> Yes <input checked="" type="radio"/> No	If yes, Please describe the difference

Consider your course completion rates over the past three years by mode of instruction. What do you observe?

How do the course completion rates for your program or discipline compare to your college's Institution-Set Standard for course completion?

The completion percentage at over 90% is well above the College's norm.

How do the department's Hybrid course completion rates compare to the college course completion standard?

There is no hybrid classes at AMT, all classes are 40% classroom and 60% shop.

Are there differences in course completion rates between face to face and Distance Education/hybrid courses? If so, how does the discipline, department or program deal with this situation? How do you assess the overall effectiveness of Distance Education/hybrid course?

NA

Describe the course retention rates over the last three years. If your college has an Institution-Set Standard for course retention, how does your program or discipline course retention rates compare to the standard?

The AMT has a very low drop out rate, almost anyone drop out is due to financial or family issues, and not before their inability to keep up with the curriculum. AT AMT, we provide peer to peer collaboration/tutoring, and students are encouraged to work in workgroup to help each other succeed.

What has the discipline, department, or program done to improve course completion and retention rates?

At AMT, we have a loan-a-tool program to help students with financial challenges to have a tool set to use for the entire semester. Also, peer to peer tutoring/mentoring.

In the boxes below, please add improvement actions and resource requests that are directly related to the questions answered in this section. If there are no improvement actions or resource requested in this area, leave blank.

Improvement Actions Improvement Action

Improvement Action

Action Item	Description	To be completed By	Responsible Person
Colabarate with other departments	To collaborate with Math and Physic in developing elementary level non credit classes to help our students	â€Ž11â€Ž/â€Ž30â€Ž/â€Ž2019	Department Chair

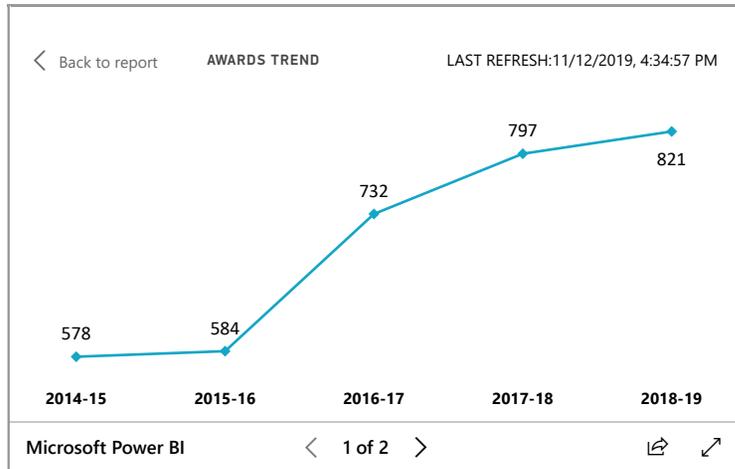
Resource Request

Other	Other	Estimated Cost
Description/Justification Funding to work with other departments		10000

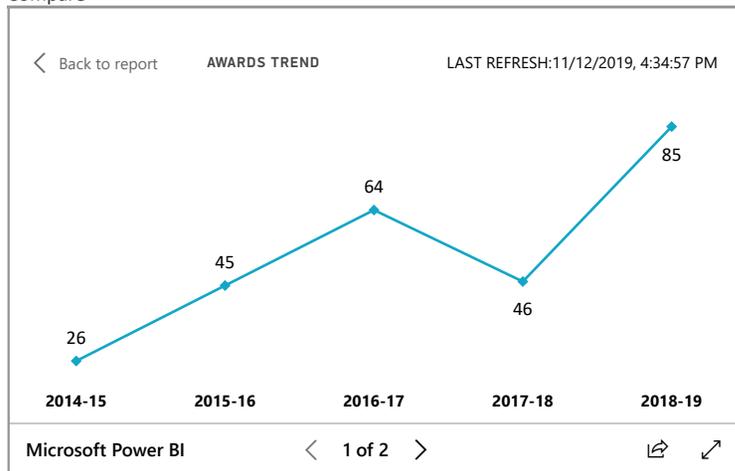
Degrees and Certificates

College Level - Program and Department comparison

Chart



Compare



What has the discipline, department, or program done to improve the number of degrees and certificates awarded? Include the number of degrees and certificates awarded by year, for the past three years.

During the initial intake of student, each is informed of the opportunities as well as the advantage in pursuing their degree. The department working closely with the counseling department, we strive to have all new students in preparing their academic plan during their first to second semester. CSU and private university are also invited to speak with our students in exploring their educational opportunities during their time at the AMT program.

Over the next 3 years, will you be focusing on increasing the number of degrees and certificates awarded?

Yes

What is planned for the next 3 years to increase the number of certificates and degrees awarded?

Inviting students who have gone on in their advanced degree to come back and speak with the students.

In the boxes below, please add improvement actions and resource requests that are directly related to the questions answered in this section. If there are no improvement actions or resource requested in this area, leave blank.

Improvement Actions Improvement Action

Improvement Action

Action Item	Description	To be completed By	Responsible Person
Invite universities to speak at AMT	Inviting other universities to come speak to our students	11/30/2019	Facility Supervisor

Resource Request

Personnel	Classified Staff		
% Time	Description/Justification	Estimated Annual Salary Costs	Estimated Annual Benefits Costs
10	Working closely with universities	2000	
Total Costs			
2000			

Engagement

Discuss how faculty and staff have engaged in institutional efforts such as committees, presentations, and departmental activities. Please list the committees that full-time faculty participate in.

1. Curriculum Committee
2. Pathway cohort 3 development
3. College academic senators

Discuss how faculty and staff have engaged in community activities, partnerships and/or collaborations.

Faculty are members of the above committees, in addition, the AMT program is an active member of the Bay Area Job Council and work closely with OUSD in developing a feeder system from High School to COA.

Discuss how adjunct faculty members are included in departmental training, discussions, and decision-making.

Adjunct faculty work closely with the regular assigned faculty in the development of course work and assignments.

In the boxes below, please add improvement actions and resource requests that are directly related to the questions answered in this section. If there are no improvement actions or resource requested in this area, leave blank.

Improvement Actions		Improvement Action	
Action Item	Description	To be completed By	Responsible Person
Release time	More release time for faculty to take part in the various committee.		

Resource Request		Other	
Description/Justification	release time	Estimated Cost	
		5000	

Resource Request Summary

Total Cost: \$425000
 Total Resource Request: 12

Instruction Personnel					
Type	% Time	Description/Justification	Estimated Annual Salary Costs	Estimated Annual Benefits Costs	Total Costs
Full-time Faculty	100	Current 3 cohorts would be the maximum for the current staff. In order to add a day time session and one to two additional cohort, an additional full time faculty is needed	80000	60000	140000

Full-time Faculty	100	With current staffing, it would reach a maximum capacity within a semester, the only way to expand would be to extend into day time for add addition 1 to 2 cohort, expanding capacity. Current waiting list surely justify filling these sports as early as Spring 2020.	80000	70000	150000
Part-time Faculty	60	to teach the online class	40000	20000	60000
Classified Staff	10	Working closely with universities	2000		2000
Sub-Total: \$352000					

Professional Development

Type	Description/Justification	Estimated Cost
Individual/personal PD needed	ATEC is a national organization for aircraft technicians technical school to share idea and promote national and federal interest and development	5000
Sub-Total: \$5000		

Technology and Equipment

Type	Description/Justification	Estimated Cost
Replacement	Current break is outdated and not fully operational	3000
Replacement	Old machine was not operational and has already be disposed of. Curriculum requirement. Lower engine start costs and risk.	15000
Replacement	Current test bench is not operational - required curriculum	5000
Replacement	Engine students to learn engine start and flight operation at no physical risks and cut operating costs from actual running an engine	10000
New	Smart Classroom	20000
Sub-Total: \$53000		

Supplies

No Resources found for this category

Facilities

No Resources found for this category

Library

No Resources found for this category

Other

Type	Description/Justification	Estimated Cost
	Funding to work with other departments	10000
Sub-Total: \$10000		

Engagement

Personnel

No Resources found for this category

Professional Development

No Resources found for this category

Technology and Equipment

No Resources found for this category

Supplies

No Resources found for this category

Facilities

No Resources found for this category

Library

No Resources found for this category

Other

Type	Description/Justification	Estimated Cost
	release time	5000
Sub-Total: \$5000		

Resource Request Summary

Total Cost: \$425000
 Total Resource Request: 12

Instruction

Personnel

Type	% Time	Description/Justification	Estimated Annual Salary Costs	Estimated Annual Benefits Costs	Total Costs
Full-time Faculty	100	Current 3 cohorts would be the maximum for the current staff. In order to add a day time session and one to two additional cohort, an additional full time faculty is needed	80000	60000	140000
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Part-time Faculty	60	to teach the online class	40000	20000	60000
Classified Staff	10	Working closely with universities	2000		2000
Sub-Total: \$352000					

Professional Development

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Individual/personal PD needed	ATEC is a national organization for aircraft technicians technical school to share idea and promote national and federal interest and development	5000
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Replacement	Engine students to learn engine start and flight operation at no physical risks and cut operating costs from actual running an engine	10000
New	Smart Classroom	20000

Sub-Total: \$53000

- Supplies
No Resources found for this category
- Facilities
No Resources found for this category
- Library
No Resources found for this category

Other		
Type	Description/Justification	Estimated Cost
	Funding to work with other departments	10000

Sub-Total: \$10000

- Engagement
Personnel
No Resources found for this category
- Professional Development
No Resources found for this category
- Technology and Equipment
No Resources found for this category
- Supplies
No Resources found for this category
- Facilities
No Resources found for this category
- Library
No Resources found for this category

Other		
Type	Description/Justification	Estimated Cost
	release time	5000

Sub-Total: \$5000

Sign and Submit

Please provide the list of members who participated in completing this program review.

Test
Hoi Ko
Esther Cheng
Robert Bruce Pettyjohn
George Cruz

Please enter the name of the person submitting this program review.

Hoi Ko