



GAVILAN COLLEGE

*Research, Planning, and
Institutional Effectiveness*

Program Integrated Planning and Review

Instruction

Program Name:	Aviation Maintenance Technology
Academic Year:	2019 - 2020

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Gavilan College

Program Integrated Planning and Review

Instruction

Academic Year 2019-20

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Purpose, Standards and Resources

Purpose

The fundamental purpose of ongoing, Program Integrated Planning and Review (PIPR) is to maintain and if possible improve the effectiveness of every College program and service, and of the institution as a whole, based on the results of regular, systematic assessment. The ultimate beneficiaries of program integrated planning and review are our students and the community we serve.

Specifically, program review facilitates:

- Creation of a three-year plan for each program
- Institutional & program improvement through the comprehensive self-study, peer review, and planning process
- Development of a three-year budget request plan, including data to support annual budget requests
- Creation of a living document that provides all basic information and forward planning for each program; can be referenced by stakeholders via public website
- Program leadership continuity of expertise (e.g., a department chair change)
- A baseline for the integrated planning process and cycle
- Assessment of program viability
- Accreditation compliance; board policy / administrative procedure compliance (c.f. [BP/AP 4020](#))

Another purpose of the process is to focus available resources—staff time, budget, technology, space - on the achievement of goals and objectives intended to maintain or improve effectiveness of the program itself, but also the programs' contribution to the College's Strategic Plan. Achieving some objectives requires resources over and above what is available, which means that a resource request is necessary. But achieving others requires no extra resources—only the reallocation of existing ones.



Whenever this symbol appears, consider creating a goal on this topic in your three year planning grid at the end of the document.

Resources:

Please refer to the accompanying PIPR Handbook which you can find [here](#). In addition, there are links and paths to information throughout the document.

Program Plan and Review Timeline

When	Description	Participation
2019 Aug	Program Lead training, including website 'tour', GavDATA and other data site overview.	PIPR Chair All Program Leads in Review Cycle
Sept	Program Lead provides budget codes to PIPR for submission to Business Office (Sept 20).	Program Lead
Sept - Nov	Program Lead seeks assistance from support team, department faculty, Dean, others to gather information for report (on-going, as needed). Write Program Report draft (Sept 2 – Nov 15).	Program Lead
Nov	Initial draft due (Nov 15). Peers review report, make suggestions, and identify areas of improvement. Sign off on last page of report (No later than Nov. 22). First Draft revision begins (Nov. 19).	Program Lead Peer Review Team
Dec	2nd draft due to Dean to review, request additions/ clarifications (Finals Week).	Program Lead Supervising Admin
2020 Feb	Dean-reviewed document returned to Program Lead with revision and planning recommendations, if needed. If report is complete and approved, Dean signs and forwards completed report to PIPR (Jan 27-31). If report needs revision, Dean returns to Program Lead.	Program Lead PIPR Supervising Admin
Feb - March	If needed , Program Lead makes edits as needed to report (Feb 3-28). Final report sent to Dean for approval and signature (March 2-6). Dean forwards approved document to PIPR (March 13).	Program Lead Supervising Admin
Feb - May	PIPR reviews final documents. Approves final report (Feb 3 – May 22).	PIPR
June	PIPR Chair presents annual report to Board	PIPR Chair, Board
June-Aug	Final reports submitted to President's Cabinet as information item.	Deans Council, Cabinet
Sept	Final documents to Academic Senate and ASGC as information item.	Academic Senate, ASGC

A. Executive Summary

(Complete this section last).

1. Please provide a brief executive summary regarding program trends and highlights that surfaced in the writing of this report. Summarize, using narrative, your program goals for your next three years. Your audience will be your Peer Review Team, the PIPR Committee, President's Cabinet, Dean's Council, ASGC, Academic Senate, Budget Committee and Board of Trustees (300 words or less).

The Aviation Maintenance Technology program provides training for technicians in the aviation field as well as drone classes. Both areas offer degree and certificate opportunities.

The demand for aviation technicians is high. United Airlines, the largest employer of aviation technicians in the bay area, predicts they will need 200 to 400 new technicians per year for the next 8 to 12 years. This demand is consistent with other employers in the area. Gavilan College has a 95+% passing rate for graduates who take the FAA certification test, and for those students there is a 100% employment rate in aviation related jobs.

Fall 2019 enrollment for AMT 100 and AMT 110 classes are FULL, with AMT 120 showing healthy enrollment. The past 3 years shows a continual increase in degrees and certificates awarded. A review of all the reported years available show a steady increase – 11 (2008-09), 19 (2011-12), 32 (2013-14). And now 38 (2016-17) and 43 (2018-19). However, drone course enrollment continues to struggle.

The program's success rate exceeds the colleges and is highlighted by the following statistics: Fall 2016: AMT Success Rate 90%/College Average 67%; Fall 2017: AMT Success Rate 83%/College Average 69%; Fall 2018 AMT Success Rate 81%/College Average 68%.

Unfortunately, a negative trend for AMT is the inability to hire and retain qualified part-time instructors, especially in the courses which provide training for technicians.

The program's goals for the next three years are: (1) Map the PLOs for each of the degree/certificate outcomes. (2) Align SLOs and PLOs to ILOs. (3) Develop a strategy for long-term staff development and retention.

The AMT department looks forward to continuing to grow the program and keeping their high student completion rate while maintaining standards that exceed FAA requirements, all while continuing to work to hire and retain qualified instructors.

B. Program Mission and Accomplishments

Gavilan College Mission Statement

Gavilan College actively engages, empowers and enriches students of all backgrounds and abilities to build their full academic, social, and economic potential.

1. Provide a brief overview of how the program contributes to accomplishing the mission of Gavilan College. In addition to a basic overview of your program's structure and services, be specific in connecting your program's services to elements of the mission statement (300 words or less).

The Aviation program's focus is to provide training for technicians in the aviation field. The program is driven by the FAA requirements which are reflected in the SLO's and PLO's. The department has met or exceeded all FAA requirements. The FAA audits the program every year and the department continues to pass these audits every year. Recent accomplishments include: (1) Completed a new facility in San Martin. (2) Updated classes to reflect industry changes. Updates include electronics, turbine engine simulator, piston engine labs and composite construction. (3) 85+% completion rate. (4) 95+% passing rate for graduates who take FAA certification test. (5) Created a new drone/Unmanned Aerial Systems (UAS) classes/degree/certificate/program.

The aviation programs student racial diversity is a good representation of the college's population. These students have the ability to pursue certificates of achievement and A.S. degrees from Gavilan College and can participate in the 2 + 2 Aviation and Technology program between the college and San Jose State University if they wish to earn a B.S. degree. Opportunities for students to enrich their social potential include mentorships between industry groups/employers and students. Picnic tables have been installed so students can meet and eat on campus. For those students that complete the FAA certification tests, there is 100% employment rate in aviation related jobs.

Response and follow-up to previous program reviews

On the [PIPR website](#), locate and review your previous program plan and review (self-study) and subsequent program plan updates. After studying, please complete the following questions:

2. Briefly describe the activities and accomplishments of the department with respect to
- Each goal since the last program plan and review and
 - PIPR recommendations.

To add additional rows, click in the bottom cell on the right and push 'tab' on the keyboard.

IEC Recommendation or PIPR Program Goal	Accomplishment
As stated in the IEC 2017-18 Self Study report: 1. Continue high student completion rate while maintaining standards that exceed the FAA requirements.	For those students that take the final FAA certification tests, Gavilan students have 100% success rate for oral/practical portion and 95+% on written portion. This is for first attempts at the tests and based on FAA data.
2. Grow enrollment.	Fall 2019 enrollment for AMT 100 (General Aircraft Technology) and AMT 110 (Airframe Maintenance Technology) classes are FULL, with AMT 120 (Aviation Powerplant Technology) showing healthy enrollment. Drone course enrollment continues to struggle.
3. Develop a strategy for long-term staff development and retention.	The department has been working with local employers to help find qualified part-time instructors. To date, no luck. The aviation faculty members have presented, to the administration, plans for developing instructors from alumni. No action has yet been taken by the administration. The staff is overloaded; additional qualified

	staff must be found; the current staff must find the additional staff. This is currently not working. The department is continuing to work with college department chairs and Academic Senate to implement a five-year full-time faculty hiring plan to ensure that 60% to 62% of credit courses are taught by full-time faculty.
4. Maintain, refurbish and upgrade lab equipment as funds become available.	Yearly requests continue to be made through the Program Plan budget process. VTEA and CE grant funds are being used to update our labs and their equipment.
5. Update classes once the FAA releases their new requirements.	Updated classes to reflect industry changes. Updates include electronics, turbine engine simulator, piston engine labs and composite construction.

3. Have the services of your program changed over the past three years? Please explain (300 words or less).

Created a new Drone/Unmanned Aerial Systems (UAS) program. Starting in Fall 2017 an introductory course (AMT 225) was offered with 2 more classes added in Spring 2018 (AMT 226 and AMT 227). Fall 2018, 2 additional courses were offered (AMT 228 and AMT 229). AMT 230 was introduced in Spring 2019. In addition, a new Drone A.S. degree and Certificate of Achievement were developed (Spring 2018).

Fall 2016, opened a new facility at the San Martin airport. With our move, we have reduced our footprint by a few thousand feet.

C. Program Overview

1. List program degrees and certificates under this department according to the [college catalog](#).

To add additional rows, click in the bottom cell on the right and push 'tab' on the keyboard.

Aviation Maintenance Technology A.S.
Aviation Maintenance Technology Certificate of Achievement
Airframe Certificate of Achievement
Powerplant Certificate of Achievement
Drone/Unmanned Aircraft (UAS) Technology A.S.
Drone/Unmanned Aircraft (UAS) Technology Certificate of Achievement

2. List any collaboration you have had with external community stakeholders, for example – advisory committees, articulation agreements, community partnerships, etc. If this does not apply, enter N/A. (200 words or less).

The department participates in mentoring programs and employer recruiting committees sponsored by industry groups and employers. During these activities, the department listens to what the community needs from the college and shares how the community can help our students. An example would be NBAA (National Business Aviation Association).

Hold advisory committee meetings every semester.

Gavilan participates in San Jose State University's Aviation and Technology 2 + 2 program where aviation students can use their Gavilan training to help them earn B.S. degrees in aviation at San Jose State University.

We have implemented web applications and spreadsheets to track student's academic success so we are able to meet the college's and the FAA's requirements.

Aviation lab equipment is very expensive and aviation technology is continually moving forward. For example, the smallest new turbine engine is over \$500,000. The department has been creative in using the funds available and seeking donations from industry and aircraft owners. This is the nature of the program and the efforts to obtain the best lab environment with continue for the foreseeable future.

D. Student and Program Outcomes

College Goal for Student Achievement

Increase Scorecard Completion Rate for Degree and Transfer

The College has a primary aspirational goal of increasing the Completion rate from 46% to 53.5% on the **CCCCO Scorecard Completion Rate for Degree and Transfer** [\[view\]](#) by 2022. The completion rates in the Scorecard refers to the percentage of degree, certificate and/or transfer-seeking students tracked for six years who completed a **degree, certificate, or transfer-related outcomes (60 transfer units)**.

As you answer the questions below, please consider how your program is helping the college complete this aspirational goal of increasing the Gavilan College Degree, Certificate, and Transfer Completion rate by 7.5 percentage points on the CCCCCO Scorecard by 2022.

Success

The following questions refer to data regarding student achievement.

Path: [GavDATA](#) → Program Review/ Equity → D1. Course Success Rates by Group

Find your discipline's course success information. Consider your department success rate trends over the last three years. Compare your overall-success to the college average.

1. Are these rates what you expected after comparing with the college average? Are there any large gaps? Is there anything surprising about the data? What trends are suggested by the data (200 words or less)?

Fall 2016: AMT Success Rate 90%/College Average 67%; Fall 2017: AMT Success Rate 83%/College Average 69%; Fall 2018 AMT Success Rate 81%/College Average 68%.

For those students that take the final FAA certification tests, Gavilan students have 100% success rate for oral/practical portion and 95+% on written portion. This is for first attempts at the tests and based on FAA data.

By Group:

Gender – The AMT programs success rate for males was equal to the colleges. The success rate for females for the AMT program was 100% (2018-19) and 92% (2017-18) while the colleges was 70% and 72% respectively.

Age – The college appears to be more successful with 18-20 year-olds while the AMT program shows more success with all other age groups.

Ethnicity – Generally the AMTs program success rates were higher than the colleges for both years. Two groups that were higher are African-Americans and White.

Now find your division persistence information. Consider your retention rate trends over the last three years. Compare your overall retention to the college average.

Path: [GavDATA](#) → Program Review/ Equity → D2. One Year Persistence Rate

2. Are these rates what you expected after comparing with the college average? Are there any large gaps? Is there anything surprising about the data? What trends are suggested by the data (200 words or less)?

Fall 2016: CE Persistence Rate 48%/College Average 48%; Fall 2017: CE Persistence Rate 50%/College Average 47%. CE Program persistence rates are equal to or slightly above the college.

Eight years ago, we had approximately 1/3 of first semester students failed or dropout because of academic reasons. The average, for the last three years, is about 10% of first semester students failed/dropout for academic reasons. This now represents about 1 to 2 first semester students per semester failed or dropout. Over the past three years, one second semester student passed the college's standards but didn't meet the FAA's standards. That student is retaking the class. No third or fourth semester student has failed/dropout for academic reasons.

Students do withdraw because of personal/family reasons. If we can get the students past the first semester, 80% of the students complete both years of the program and that includes those withdrawing for personal/family issues which are out of the college's control. Of those students that successfully complete the first semester, over 85% complete both years of the program. If the student completes two semesters, the number is over 95%. (Data source is semester grade summaries for students still enrolled after the NRS day.)

3. What are your set goals for course success? Do your individual course and department rates meet this goal? Helpful Question: If your rates for success are lower than your goals, what are your plans to improve them (200 words or less)?

Path: [GavDATA](#) → Program Review/ Equity → D3. Course Rates by Unit

To meet FAA requirements (70% success rate). In fact, all students who complete the courses exceed FAA requirements. For those students that take the final FAA certification tests, Gavilan students have 100% success rate for oral/practical portion and 95+% on written portion. This is for first attempts at the tests and based on FAA data.

The CE course rates by unit for 2017-18 and 2018-19 were not lower than the overall college's rate, they were about equal to them. The AMT program's success rate for the category African-American, Latinx, and Filipinx students was 13% points higher in 2017-18 and 16% higher in 2018-19 than the college. For Asian, Native American, Pacific Islander, White, and Decline to State they were also higher. AMT 87%/College 76% (2017-18) and AMT 82%/College 75% (2018-19).

4 – 6: N/A



Consider addressing success goals in your Three-Year Program Plan at the end of this document.

Equity

Gavilan College has identified the following populations as experiencing disproportionate outcomes: Males (African American, Asian, White, Two or More Races, and First Generation), Students with Disabilities, Veterans and Foster Youth.

7. Using the path above, locate your program in GavDATA. Examine your equity results over the last three years. If there are differences in success rates and/ or retention across groups, comment on any differences in success rates across groups. Helpful Questions: What current factors or potential causes can be connected to these areas of disproportional impact? How might your program or department address student equity gaps (200 words or less)?

Path: [GavDATA](#) → Program Review/Equity → D7. Disproportionate Impact with Margin of Error by Year. Locate your department. Filter by Year

Contact your support team for any needed assistance in using GavDATA.

As is shown in earlier data, the AMT program has been successful with some of the identified populations. Some of the populations, which the data was reviewed over 3 years, was for African Americans, Asians, Foster Youth, Veterans, and Females. For African Americans the AMT program has gone from 0 in 2016-17 to +18 in 2018-19. Unfortunately, for Foster Youth they have gone from +14 in 2016-17 to -15 in 2018-19. While for the Veteran group they have gone from -4 to +18. And for Females, +14 to +7 to +18.

The AMT program should continue their outreach into the different sectors of our district communities to target the identified populations. Working with Dean Carr on the larger CE outreach efforts will be a part of this plan.

The students enrolled in the aviation program are almost all male and the racial diversity is a good representation of the college's population. The range of students' age is very wide at 17 to 72. (Data source is fall semester grade summary for each first-year class.) As reported in the 2017-18 Aviation Department IEC Self Study report.

8. [BP 3420](#) (Equal Employment Opportunity) states:

The Board supports the intent set forth by the California Legislature to assure that effort is made to build a community in which opportunity is equalized, and community colleges foster a climate of acceptance, with the inclusion of faculty and staff from a wide variety of backgrounds. It agrees that diversity in the academic environment fosters cultural awareness, mutual understanding and respect, harmony and respect, and suitable role models for all students. The Board therefore commits itself to promote the total realization of equal employment through a continuing equal employment opportunity program.

How does your department align with the District's Equal Opportunity Board Policy? Helpful Question: How do you plan to address EEO outcomes in your employee hires (300 words or less)?

The department has been working with local employers to help find qualified instructors – no luck so far. The faculty members have presented, to the administration, plans for developing instructors from alumni.

9. Find your Distance Education success information. If distance education is offered, consider any gaps in success rates between distance education and face-to-face courses. Do you notice any trends? Do these rates differ?

Path: [GavDATA](#) → Program Review/ Equity → D9. Course Success Rates → Locate your department. Filter by Delivery Methods

Helpful question: If disparity exists, how do you plan on closing the achievement gaps between distance education and face-to-face courses (300 words or less)?

N/A

10. N/A

Conferred Award Trends

11. Review the number of certificates and/ or associate degrees awarded in your program. Please supply the number of degrees and certificates awarded for the past three years. For reference, review the "[Majors by Program, 2008-2019](#)" for declared majors by year, unduplicated headcount.

Path: [GavDATA](#) → Program Review and Equity → D11. Count of Degrees and Certificates Awarded

To add additional rows, click in the bottom cell on the right and push 'tab' on the keyboard.

Year	Degree/ Certificate	Goal for Completion	Actual Degree Completion
2018-19	43		
2017-18	32		
2016-17	38		

12. What is your set goal for degrees and certificates awarded? Do your totals meet this goal? Helpful question: If your totals for degrees/ certificates awarded are lower than your goals, what are you plans to improve them (200 words or less)?

The past 3 years shows a continual increase. In fact, a review of all the reported years available show a steady increase – 11 (2008-09), 19 (2011-12), 32 (2013-14). And now 38 (2016-17) and 43 (2018-19).



If your totals for degrees/ certificates awarded are lower than your goals, consider addressing this in your Three-Year Program Plan at the end of this document.

[curriQunet](#)

Click Link above and go to Intranet page in My.Gav

13. Are your SLOs, PLOs and ILOs mapped in [curriQunet](#)?

Yes:

No:

14. Are your SLOs and PLOs up to date in [curriQunet](#) AND on the [reporting website](#) (←requires your email log-on)?

Yes:

No:

15. Have all of your SLOs and PLOs been assessed in the last five years?

Yes:

No:

16. Have you reviewed all of your SLOs to ensure that they remain relevant for evaluating the performance of your program?

Yes:

No:

17. If you answered no to any of the above questions, what is your plan to bring SLOs/ PLOs into compliance (200 words or less)?

The only thing that needs to be completed is to map the PLOs for each of the degree/certificate outcomes. As all outcomes are assessed each fall semester this can be completed when they are assessed at the end of this semester.



Consider addressing this in your Three-Year Program Plan at the end of this document.

Learning and Outcomes Assessment

Review Learning Outcomes data located in the Course and Program Reports for your area (path below).

After you have examined your results, reflect on the data you encountered. Please address the student learning outcomes (SLO), program outcomes (PLO), and institutional outcomes (ILO) in your analysis.

Student Learning Outcomes (SLO)

Path: Gavilan College Intranet → [curriQunet](#)

18. What are your individual course goals for SLO success? If you don't have set goals, what should they be? Helpful question: If your SLO results are lower than your goals, what are your plans to improve them (200 words or less)?

SLO assessment in 2018 – 19 for AMT 100, 101, 110, 111, 120, and 121 meet FAA requirements (70%). The department's SLO assessment goal is to exceed FAA requirements. The % success rate for each SLO has increased since they were first assessed in 2011 – 12.

SLO assessment for drone courses AMT 225, 226, and 227 indicate a 90% and above success rate for the year 2017 - 18.

SLO Disaggregation

19. How do your SLO results vary across your courses? Are there any patterns that stand out (200 words or less)?

AMT 100, 101, 110, 111, 120, and 121 meet FAA requirements. In fact, all students who complete the courses exceed FAA requirements.

Fall 2018's assessment of AMT 100 and 110 show there is a high dropout rate at the beginning of class. Assessment helped determine the students need additional classes before starting AMT. Instructor worked with the counselors to help them understand what the class requirements are.

Assessment for drone courses AMT 225, 226, and 227 indicate a 90% and above success rate for their SLOs.

Program Learning Outcomes (PLO)

Path: [Gavilan College Intranet](#) → Program Planning → Student Learning Outcomes Assessment Reporting → Program Level SLO (Far left) → Instructional → Select program

20. What is your set goal for PLO success? Helpful question: If your PLO results are lower than your goals, what are your plans to improve them (200 words or less)?

See information provided to question #18.

Institutional Learning Outcomes (ILO)

21. How aligned are your SLOs and PLOs to the ILOs (200 words or less)?

They are not yet aligned. As the college recently revised the ILOs this will be something that can be done the next time the department updates their courses/programs.

22. N/A



Consider addressing LOs in your Three-Year Program Plan at the end of this document.

E. Curriculum and Course Offerings Analysis

Curriculum Analysis

1. Are there plans for new courses or educational awards (degrees/certificates) in this program? If so, please describe the new course(s) or award(s) you intend to propose (200 words or less).

Not at this time. However, Gavilan does participate in San Jose State University's Aviation and Technology 2 + 2 program where aviation students can use their Gavilan training to help them earn B.S. degrees in aviation at San Jose State University.

2. Provide your plans to either inactivate or teach each course not taught in the last three years (200 words or less).

N/A

Course Time, Location and Delivery Method Analysis

Using the copy of the Master Schedule from [Argos](#), find the information regarding when, where, and in which method the courses in this program are taught.

Path: Gavilan Intranet→Argos→Gavilan Schedule→Schedule by Division and Department→Select term, division and your department then press 'run dashboard'.

To Create a PDF of your results above: After obtaining results, go to the top of the screen: Reports→Schedule Reports by Division and Dept svc→Run

Location/Times/Delivery Method Trend Analysis:

3. Consider and analyze your location, time, and delivery method trends. Are classes offered in the appropriate sequence/ available so students can earn their degree or certificate within two years? Are courses offered face-to-face as well as have distance education offerings? Are they offered on the main campus as well as the off-site areas? Different times of day? (300 words or less).

N/A for AMT 100, 101, 110, 111, 120, and 121 courses.

The Drone program first offered all their courses face to face and at the Coyote Valley site. As enrollment has been a concern, some classes have been modified to allow them to be taught via distance education. In addition, drone courses have been offered at Live Oak High School as well as in Gilroy.



Consider goal creation around more efficient and beneficial locations, delivery method and/or time of day trends in your Three-Year Program Plan at the end of this document.

F. Program and Resource Analysis

Program Personnel

1. Please list the **number** of Full and Part Time faculty in this program for the past **two** years

* **Path:** [GavDATA](#) → Program Review/ Equity → F1. Faculty workload (FTEF) by Full-time/ Part-time → Find Program

Academic Year	Number of Full Time faculty	Number of Part Time faculty	Faculty Workload* FT PT	Overall FTEF*
2017-18	2	2	FT: 4.9 PT: 1.2	10.9
2018-19	2	2	FT: 6.0 PT: 4.0	13.6
			FT: PT:	

How have and will faculty with reassigned time, grant commitments and activity, projected faculty retirements and sabbaticals affected personnel and load within the past in the next three years? What future impacts do you foresee (200 words or less)?

Worth noting: The full-time instructors have retired from their original careers with Gavilan being their second career. The current instructors will reach retirement age in 5 to 7 years.

Departmental Productivity Measurements

2. Use the Enrollment Trends section of your Program Review Data Sheet to determine information for below. Please review and enter data for the past three years.

* **Path:** [GavDATA](#) → Program Review/ Equity → F2. Enrollment Variables and Trends → Find Program

Year	Total FTEF	Total FTES*	Productivity *(WSCH/FTEF)	Total Dept. Allocated Budget	Total Departmental Spending
2016-17	Not Available on GavDATA	Not Available on GavDATA	Not Available on GavDATA	\$416,652.00	\$404,373.88
2017-18	3.88	60	92	\$420,632.00	\$431,839.55
2018-19	6.47	69	85	\$451,578.30	\$505,550.52

Your Program Cost per FTES average is: 2018-19 \$7,326.82 and 2017-18 \$7,197.33

College-wide Cost per FTES average is: \$7,203.44

Statewide Funding per FTES: \$3,727.00

3. Evaluate your program cost per FTES. Is your cost in alignment with your FTES generation? If not, what improvements can be made (200 words or less)?

The program overspent their budget in 2018-19 by \$50,000 and that is an area for improvement. They were about even with the College-wide Cost per FTES average.

Evaluation of Resource Allocations

4. List the resource allocations from all sources (e.g., annual college budget request appropriations, Guided Pathways funds, grant funds, etc.) received in the last three years. For annual college budget request appropriations, reference your previous three-year plan and annual updates.

Please evaluate the effectiveness of the resources utilized for your program. How did these resources help student success and completion? For college budget request appropriations, list the result of the evaluation strategy outlined in your previous three-year plan and annual updates. For all other sources of funding, list the results of the evaluation strategy contained within the program or grant plan.

To add additional rows, click in the bottom cell on the right and push 'tab' on the keyboard.

Resource Allocated	Funding Source	Academic Year	Purpose of Funding	Result
\$5,600	SWP (Strong Workforce Program)	2016-17 (courses) 2017-18 (degree)	Hire curriculum specialist to write new drone course/program curriculum.	Courses/degree/certificate were moved through the curriculum approval process in a timely manner and the program was able to be offered without delay.
\$131,300	SWP	2016-17	Purchase equipment for new drone courses, program.	Allowed the aviation program to expand. Generated enrollment by a new student population. Initially provided another program to be offered at the new Coyote Valley site.
\$9,900	VTEA (Vocational Technical Education Act)	2017-18	Computerized jet engine performance evaluation and communication antenna testing equipment. Manuals, tools, and equipment for lab.	The aviation industry is constantly adding new technologies. Therefore, the department needs to update labs and equipment to stay current and to assure that students are able to pass the FAA exam. 95+% passing rate for graduates who take FAA certification test.

Integrated Planning and Initiatives

5. What other areas is your program partnering with (i.e. guided pathways, grant collaboration) in new ventures to improve student success at Gavilan College? What is the focus of this collaboration? Helpful question: What are the department and your Integrated Planning/ Guided Pathways partners' plans for the next three years (200 words or less)?

The department participates in mentoring programs sponsored by industry groups and employers. Student mentoring can be one avenue to helping improve student success.



Consider addressing this in your Three-Year Program Plan at the end of this document.

Other Opportunities and Threats

6. Review for opportunities or threats to your program, or an analysis of important subgroups of the college population you serve. Examples may include environmental scans from the [Educational Master Plan](#), changes in matriculation or articulation, student population, community and/ or labor market changes, etc. Helpful Question: What are the departmental plans for the next three years (200 words or less)?

Inability to hire qualified instructors. Continuing effort to purchase aviation lab equipment and provide the student with the most current aviation technology as it is continually moving forward.



Consider addressing this in your Three-Year Program Plan at the end of this document.

G. Career Education Questions

External Regulations

1. Does your program have external regulations and/ or accreditation requirements? If yes, list the regulatory body. What is your current status? When is your next renewal **(200 words or less)?**

The Aviation Department's AMT program is certified under Code of Federal Regulations Title 14 part 147. The program must operate under the standards outline in the FAA's AC 147-3 – Certification and Operation of Aviation Maintenance Technician Schools. As part of the certification process, Gavilan must submit and have an approved "Policies and Operations Manual". Gavilan's manual is over 300 pages and covers things like what will be taught; how things are taught; how students are evaluated; how student results are reported to the FAA, classroom requirements; lab requirements; safety requirements; and standards for instructors. The FAA uses the above listed standards to audit the program annually. The program has passed the FAA audit every year.

Full-time faculty members hold FAA Inspection Authorizations. To maintain these authorizations, they must attend FAA sponsored training annually and authorization review every two years.

Employment

The following questions can be answered using the labor data from Cal-PASS Plus on [Launchboard](#). **You will need to create an account before accessing [Launchboard](#).**

Path: Once you have a Launchboard account, go to the main page, hover over the Community College tab, and from the drop down menu select 'Launchboard'. On the next screen, scroll down to 'Doing What Matters' and press on the 'Explore' button under Strong Workforce Program. Now enter Gavilan College, your program TOP code, and the latest academic year in the cells provided to gather information regarding your program.

2. Are students obtaining and keeping gainful employment in their field **(100 words or less)?**

Path: Under the Strong Workforce Program Metrics page (path listed above), click 'Job Closely Related to Field of Study' AND 'Employed in the Fourth Fiscal Quarter after Exit' for information.

Not enough information available.

For those students that complete the FAA certification tests, there is 100% employment rate in aviation related jobs – based on post-graduation surveys. (2017-18 IEC Self Study)

Gavilan's CE/Strong Workforce Senior Program Specialist reaches out to businesses and looks for job opportunities in all fields, including aviation. They were just in contact with a company called So Cal Jet Services that has a job opportunity for an aviation mechanic. Those opportunities are sent directly to the instructors and their assistant. The company is also asked to post it to our online job board College Central Network.

3. What percentage of students is attaining a living wage **(100 words or less)?**

Path: Under the Strong Workforce Program Metrics page (path listed above), click 'Attained a Living Wage' for information.

Not enough information available.

The demand for aviation technicians is very hot. United Airlines, the largest employer of aviation technicians in the bay area, predicts they will need 200 to 400 new technicians per year for the next 8 to 12 years. This high demand is consistent with other employers in the area. (Aviation Department 2017-18 IEC Self Study Report)

The program is "producing skilled, in-demand technicians who can earn upward of \$72,000 annually, straight out of the two-year program. Work is plentiful, compensation is generous, and there aren't enough candidates to fill positions." (Gilroy Life, October 16-29, 2019)

Appendix

Optional Questions

Please consider providing answers to the following questions. While these are optional, they provide crucial information about your equity efforts, training, classified professional support, and recruitment. **All replies should consist of 100 words or less.**

1. What training does your program provide for faculty and/ or classified professionals regarding professional development?

Flex hours are used to update curriculum. Monthly staff meetings which include discussions on group communications/dynamics, activity planning and resource allocations.

The department participates in mentoring programs sponsored by industry groups and employers. An example would be NBAA (National Business Aviation Association). As members of the local NBAA mentoring committee, our instructors convinced the organization to put more emphasis on the mechanic shortage. The number of internships offered by the local organization has grown by 150%.

2. Is there a need for more faculty and/ or classified professional support in your area? Please provide data to justify this request. Is there a need for expanded support services (i.e. counseling, security, tutoring or math lab at the off-sites, in the evening, etc.) in your area? Indicate how it would support the college mission and college goals for success, and completion.

Staffing – All the full-time instructors are working close to double the normal load. In addition to their classroom activities, the instructors are maintaining their lab equipment and actively recruiting additional students. For many years, the college has had openings for part-time instructors but there have been no qualified applicants. Complicating the situation, the full-time instructors have retired from their original careers with Gavilan being their second careers. The current staff will reach retirement age in 5 to 7 years.

Faculty members have presented, to the administration, plans for developing instructors from alumni. No action has been taken by the administration.

3. What, if anything, is your department doing to assist the District in attracting and retaining faculty and classified professionals who are sensitive to, and knowledgeable of, the needs of the continually changing constituencies, and reflect the make-up of our student body.

Working with college department chairs and Academic Senate continue to implement a five-year full-time faculty hiring plan to ensure that 60% to 62% of credit courses are taught by full-time faculty.

4. Provide any additional information that has not been mentioned elsewhere in this program plan, if necessary.

Review Process Feedback

1. Please share any recommendations for improvements in the Program Integrated Plan and Review process, analysis, and questions. Your comments will be helpful to the PIPR Committee and will become part of the permanent review record.

The red exclamation icon with “**Consider addressing this in your Three-Year Program Plan at the end of this document.**” was helpful. Although it was not always easy, having a word limit is a good idea.

Setting up a work around account for GavDATA was great. Thanks.

The PIPR site had a lot of valuable information. The Exemplary PIPR Document was helpful to review but there was only a Student Services program example. Having an example of an Instructional program, for those working with that document would be nice.

Sydney was available and provided help as needed and that was appreciated.

Example Three-Year Program Plan Goal Setting Worksheet

To add additional rows, click in the bottom cell on the right and push 'tab' on the keyboard.

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<p style="text-align: center;">Goal</p> <p>One sentence limit.</p>	<p>Connection of Goal to Mission Statement, Strategic Plan and SAO Results.</p> <p>Use one sentence for each item.</p>	<p>Proposed Activity to Achieve Goal</p> <p>One sentence limit.</p>	<p>Responsible Party</p> <p>One sentence limit.</p>	<p>Fund amount requested.</p> <p>If a collaboration, what % required from each partner?</p> <p>If applicable, list each budget partner / source separately</p>	<p>Timeline to Completion</p> <p>Month / Year</p>	<p>How Will You Evaluate Whether You Achieved Your Goal</p> <p>Two sentence limit.</p>
<p>Increase proportion of EOPS students completing degrees by five percentage points</p>	<p>Mission statement: engages students of all backgrounds. Strategic Plan: Goal 4 SAO Results: Outcome 1; 76% of students completed 3 counseling visits</p>	<p>Increase counseling touch points from three times per semester to five times per semester by restructuring appointment and communication schedule</p>	<p>Dean, Special Programs</p>	<p>None</p>	<p>December 2021</p>	<p>In three years, compare EOPS student graduation rates from before the touchpoint increase to graduation rates after the increase</p>
<p>Eliminate ENGL1A course success rate achievement gap between Foster Youth and general student population</p>	<p>Mission statement: Supports innovate practices Strategic Plan: Goal 4: Improve Equity SLO Results: No direct connection</p>	<p>Partner with EOPS to create a Foster Youth ENGL1A intervention team</p>	<p>Chair, Department of English</p>	<p>None</p>	<p>September 2020</p>	<p>Compare foster youth success rates in ENGL1A before the intervention and after implementation of the intervention</p>

Three-Year Program Plan Goal Setting Worksheet

Aviation Maintenance Technology

****Personnel-related requests must follow the hiring practices of the appropriate area and will not be considered through Program Review**

To add additional rows, click in the bottom cell on the right and push 'tab' on the keyboard.

Goal One sentence limit.	Connection of Goal to Mission Statement, Strategic Plan and SAO Results. Use one sentence for each item.	Proposed Activity to Achieve Goal** One sentence limit.	Responsible Party One sentence limit.	Fund amount requested. If a collaboration, what % required from each partner? If applicable, list each budget partner / source separately	Timeline to Completion Month / Year	How Will You Evaluate Whether You Achieved Your Goal Two sentence limit.
Map the PLOs for each of the degree/certificate outcomes.	Mission Statement: build their full academic potential. Strategic Plan: Goals 1 and 2. SLO Results: No direct connection.	The next time the degrees/certificates are assessed, complete the PLO mapping.	AMT instructors	None	December 2020	Review of PLO site.
Align SLOs and PLOs to the ILOs.	Mission Statement: build their full academic potential Strategic Plan: Goals 1 and 2. SLO Results: No direct connection.	The next time the SLOs and PLOs are updated, complete the ILO mapping.	AMT instructors	None	December 2020	Review of course and program curriculum.
Develop a strategy for long-term staff development and retention.	Mission Statement: engages and enriches students. Strategic Plan: Goals 1 and 3.	Meet with administration and current AMT faculty to develop a staffing plan.	Dean, AMT Program Lead, AMT faculty	None	May 2021	Establishment of a staff development and retention plan.

	SLO Results: There could be an improvement in student success.					
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Signature Page

Program being reviewed: **Aviation**

Date: [Click here to enter text.](#)

How to use form:

Sign off after final review and no later than:
Peer Reviewers: Nov. 27, 2019
Dean: Mar. 6, 2020

Role	Name	Assignments/ research assigned, if any	Initial and Date upon final review
Team Lead/ Chair	Susan Dodd/ Herb Spenner		
Dean			
Peer Reviewer			
Peer Reviewer			
Student			
PIPR Support Team	Sydney LaRose		12-2-19
PIPR Support Team	Simone Reyes		