



Academic Program Review

Program Name: Powerplant - Certificate
Academic Year 2025/2026

Recent Recommendations

Using your most recent review, please respond to all feedback and recommendations.

Response:

The comment was made that the program reviews appeared identical between Airframe, Powerplant and Airframe AND Powerplant certificates. That was accurate and will be again. There is a difference in the course collection that leads to each with much overlap as is evident by their names. It's simply unavoidable and students are all assessed in a similar manner although on slightly different FAA subjects. This is differentiated in 14cfr65.

The majority of the recommendations were surrounding the SLO and SLOA. SLO changes have not been implemented as of yet but the department agrees these are needed. The program faculty have focused on the curriculum rewrite and implementation post-FAA rule change in 2023. As things are now settled out, the faculty can begin the needed major overhaul of its SLOs.

Student Learning Outcomes

Describe the assessment of your student learning outcomes (SLOs). Discuss your findings, changes you are making, and what you hope to see as a result.

Response:

FAA Test Pass Rate well above national norms, per the FAA. 100% Employment Rate. High employer satisfaction. Student success and program performance remain consistently outstanding. The faculty will update the SLOs per the previous recommendations. That said, as students are increasingly likely to struggle with math and writing, the department has instituted admissions requirements for at least math placement. As the department is advising students nearly a year in advance, the hope is that this will serve as an early intervention tool to get them the needed foundational math skills so they can focus more on the content of the classes, and not the math operations.

Did you make any curricular changes based on your most recent SLOA? If so, discuss what changes were made. If no changes were made, please discuss the strengths of your curriculum based on the assessment of your outcomes.

Response:

The recent curricular changes were made after years of small corrections being needed, but hampered by the difficulty in making revisions under the FAA rules. As soon as those rules changed, the faculty modernized the documentation but also made tweaks to the order of instruction and grouping of FAA subjects that made for a smoother student experience. It wasn't in a response to the SLOA per se, but more from direct student feedback and observations by the program faculty.

As of 2017, all Baccalaureate programs are required to embed communication outcomes within their SLOA Plans. This is optional for non-Baccalaureate programs.

Communication outcomes in the SLOA plan are: **Embedded**

Check the checkbox to certify completion of the following tasks:

☐ Upload supporting documents to the Supporting Documents folder. This includes artifacts, rubrics, and other documents related to your SLOA.

☒ Upload your most recent SLOA to the Supporting Documents folder, even if no changes have been made since the last review.

Have changes been made to your SLOA document since your last review? **No**

If so, please summarize what changes were made.

Response:

High Impact Practices

Please indicate which high impact practices are currently being implemented in relation to the program's student learning outcomes.

- | | |
|--|--|
| ☒ Capstone Courses & Projects | ☐ Graduate Level Research |
| ☒ Collaborative Assignments & Projects | ☐ Writing-Intensive Courses |
| ☐ Diversity/Global Learning | ☐ Publications |
| ☐ ePortfolios | ☒ Communications |
| ☐ First-Year Seminars and Experiences | ☐ Scholarly Activities |
| ☐ Internships | ☐ Studios |
| ☐ Service or Community-Based Learning | ☐ Practicum |
| ☐ Undergraduate Research | ☐ Other |
| ☒ Labs | ☐ None of these |

Discuss how the HIPs in the program are reflected in the SLOA. If you have identified HIPs that are not included in the SLOA, please consider an update. Response:

Student Success

Please reference the [Resources tab](#) for information on accessing the Student Success Data Dashboard and contacting your designated data liaisons.

Student Success Data Trends

Persistence: No Change
Pass Rates: No Change
Student Credit Hours: No Change
Majors: No Change
Degrees Awarded: No Change

Other Trends (if applicable):

The PAIR data in the Dashboard doesn't drill down to the actual program level – only the department. Without that, the faculty rely on their own observations given the cohorted nature of the program. For example, while the demographics and successes are very similar across the aviation maintenance programs, the piloting AAS will likely have different trends as that program is offered in an entirely different structure.

Achievement Disparities

Discuss any achievement disparities identified in your disaggregated student success data and explain how you plan to address them.

Response:

Closing the Loop

Please discuss how your student learning outcomes are reflected in high impact practices and student success data.

Response:

. Much of the assessment of Aviation Maintenance students is done during the last 4 classes - Airframe Inspection, Engine Inspection, Airframe Testing and Powerplant Testing. The Inspection Classes serve as a capstone class in that it encompasses a large majority of the practical skills learned throughout the program. Testing classes serve as large assessment of the knowledge gained by testing students via written, oral and practical exams. Nearly all courses in the program involve collaborative projects in the shop (aka lab) environment. Nearly every course includes projects that have a written or oral communication component or both. These are strong characteristics of this program that helps UAF CTC Produce not only great aircraft mechanics, but great employees.

Academic Program Profile

The following questions help show how your program supports the university's mission, connects with other UA programs, engages with the community, contributes through service courses, and supports student success after graduation. Please use this section to highlight the value your program brings to students, the university, and beyond.

UAF's Mission:

The University of Alaska Fairbanks is a Land, Sea, and Space Grant university and an international center for research, education, and the arts, emphasizing the circumpolar North and its diverse peoples. UAF integrates teaching, research, and public service as it educates students for active citizenship and prepares them for lifelong learning and careers.

In what ways does your program advance UAF's mission?

Response:

UAF CTC Aviation prepares people for careers in Aviation Maintenance serving all categories and types of aircraft that serve Alaskan communities and beyond.

How is your program related to others in the UA system?

Response:

UAA CTC has a similar Aviation Maintenance program that is offered in a completely different schedule format. UAF CTC Aviation Maintenance is an intensive. With both Airframe and Powerplant FAA certificates attained (whether through school or experience) students can be awarded credit towards the AAS in Aviation Maintenance Technology.

Who are your key community or external partners?

Response:

Alaska Airlines, Everts Air Alaska

What role do your services courses play, if any?

Response:

How do your graduates succeed after leaving the program?

Response:

Instant employment working on whatever type of aircraft they desire. Graduates make [REDACTED] year their first year of employment.

Submitter and Collaborator Names:

Kevin Alexander, Professor of Aviation Maintenance Technology

Submitter Email:

kwalexander

Committee Review

Program Name: Powerplant - Certificate

Academic Year 2025/2026

Overall Recommendations

The college or school committees set the tone for helping each program feel seen during this process. We have provided you with feedback tags to attach to this program review. Please select as many as applicable.

- | | |
|--|---|
| ☒ Insufficient Narratives | ☒ Report Incomplete |
| ☐ Address Achievement Gap | ☐ Consider Curricular Revisions |
| ☐ Develop Online Offerings/Options | ☐ Improve Time to Degree |
| ☐ Increase Enrollment | ☐ Increase Graduates |
| ☐ Increase Retention/Persistence | ☐ Strengthen Advising Practices |
| ☐ May be asked to share Effective Practices | ☒ Recommendation to University-Wide Committee |

Explanation of Overall Recommendations

Response:

It is difficult to ascertain how the student learning outcomes are reflected in the high-impact practices given that the student learning outcomes were not updated based on past recommendations. It is recommended that the faculty take the time to review the recommendations from the past program review, assess student success data provided through the data website, and develop strategies to close the loop based on these reviews and assessments. The faculty outlined that a review of student learning outcomes, the assessment process, and making changes based on recommendations from the past program review will be underway and at that time, the faculty should be able to implement strategies for improvement. It does appear that the narrative is responsive to student needs as they have high success rates of employment upon graduation. Additionally, the program did implement a math placement requirement which is believed to increase student success in the program.

Student Learning Outcomes Feedback

- | | |
|--|---|
| ☐ Strong | ☐ Developing |
| ☐ Requires Minor Revision | ☒ Requires Major Revision |

Student Learning Outcomes Assessment Feedback

- | | |
|--|--|
| ☐ Strong Alignment with SLOA Plan | ☐ Clear, Concise Presentation of Findings |
| ☐ Compelling Learning Story | ☐ Missing a Direct Measure |
| ☐ Missing Active Verbs | ☐ Missing Curricular Connection |
| ☐ Missing Collaboration within Department | |

SLOA Feedback Narrative:

. Given that the student learning outcomes were not reviewed, analyzed and updated by faculty, current reviewers could not determine if assessment clearly connects to stated outcomes, which direct measures are being used, and have determined that no results have been used to inform changes. Reviewers appreciate that curriculum changes are highly tied to industry regulations and recognize that a strong student learning outcomes assessment is needed and recommended based on past recommendations on student learning outcomes from the past review.

Student Success and Equity Feedback

Narrative:

. Faculty noted that there were no changes in any of the student success and equity data as a result of program data not being available. However, in a quick review of the data website, it appears that the data is available for the specific program. According to APRIE data, this certificate program has one student who is specific to this program. However, other students are taking the courses as a part of their Aviation degrees. The Aviation program consists of various cultural backgrounds and age groups, and about 80 % of the program are [REDACTED]. The average course pass rate has been above 80 % since 2022. The total number of Aviation program students has slightly increased. It is difficult to assess how to improve the graduate rate for this certificate program since there was only one student who graduated in 2024.

High Impact Practices Feedback

Narrative:

The list of HIP, capstone courses, collaborative assignments and projects, and lab prepare students to take the FAA test that supports students. However, these high-impact practices are clearly described and faculty have not outlined how they align with the student learning outcomes assessment. This is mainly the result of student learning outcomes not being updated s the last review. It appears that students are engaged in meaningful experiences demonstrated by high employment and employer satisfaction. It also reflects that “communication” is list HIP. This program offers “nearly all courses” that involve collaborative projects in the lab environment. These hands-on lessons and experience provide students gaining communication in writing and oral that would also prepare them to take written, oral, and practicum exams.

Profile Feedback

- | | |
|---|---|
| ☒ Mission-Centric to College and/or UAF | ☐ Unique within UA |
| ☐ Collaborative with other UA Programs | ☐ Provides Job Placement for Graduates |
| ☐ Strong Post-Grad Success for Students | ☐ Strong Service Teaching Component |
| ☒ Strong Ties to Community or Industry | |

Financial Feedback

- | | |
|--|--|
| ☐ High Tuition Revenues | ☐ High Grant Revenues |
| ☒ Operates at Low Cost | ☐ Productive Faculty |
| ☐ Opportunities to Increase Revenue | ☒ Low Enrollment |

Reviewer Names:

Yoko Kugo, Jackie Hatley, Laurel Keyer

Dean Review

Program Name: Powerplant – Certificate

Academic Year 2025/2026

Dean Feedback

Overall feedback narrative:

As noted under the AAS review, the Dean's office will work with the Aviation Program to revise its SLOs in light of the deficiencies pointed out. Please see the Dean's feedback on the AAS degree for more detail regarding the program demographics, structure etc.

Recommendation to University-Wide Committee

Vice Provost Review

Program Name: Powerplant – Certificate

Academic Year 2025/2026

Vice Provost Feedback

Overall feedback narrative:

The reviews for the Airframe, Powerplant, and Airframe and Powerplant Certificates and the Aviation Maintenance and Professional Piloting AAS programs remain nearly identical to the 2023 mid-cycle review because recommended revisions have not yet been implemented. The most critical need is to differentiate the SLOs between programs; otherwise, they appear redundant. The program currently lists three SLOs, but one is a program-level outcome rather than a true SLO and should be removed from the SLO list, though retained internally for documentation. SLO #2 should be revised to clearly define the skills and knowledge assessed, and additional SLOs should be developed to meet NWCCU's recommendation of 3–6 SLOs. Assessment procedures are noted, but the program must provide artifacts, data, and narrative analysis showing whether students meet the SLOs. For the 2027 mid-cycle review, the program should include evidence of closing the loop, document curricular strengths and any changes, and ensure all materials—including the SLOA/SLO document—are included in the supplementary folder. The current SLO assessment is incomplete and needs significant revision.

The program demonstrates strong employment and licensure outcomes, with FAA test pass rates above national norms and 100% employment for graduates. Capstone inspection and testing courses serve as summative assessments, and math placement requirements and early advising reflect proactive measures to support student success. Labs, collaborative projects, and communication components provide hands-on learning opportunities. However, the program does not analyze equity or achievement gaps, and success outcomes by gender, age, or race/ethnicity are not addressed. The program reports “no change” across indicators without citing PAIR data, which reviewers note is inaccurate. Future reviews should include disaggregated data and outline strategies to support underrepresented or nontraditional students.

High-Impact Practices are present, but the report lacks sufficient detail for meaningful feedback. Future reviews should include specific examples and evidence of HIP implementation and integration into the curriculum to demonstrate their impact on student learning.



Department Profile and Financial Data

Department Name: **Aviation**

Last updated: **2025/2026**

Department Profile and Financial Data

This section aligns with Board of Regents Policy 10.06 and supports systemwide consistency in academic program review. Responses are maintained across review cycles and may not need to be updated annually. Please review your previous answers and update only if necessary.

When answering the following questions, refer exclusively to the standardized Financial Data Template provided by UAF. Work with your data liaison to interpret the template accurately. Do not include any additional or alternative data — consistency across programs is essential. To maintain integrity and standardization across all of UAF it is very important that you do not provide any additional or alternative data from this template.

Confirmation of Review

Have you reviewed the information in this section and made any necessary updates? **Yes**

Financial Data Spreadsheet

☒ I have reviewed the Financial Template for updates and accuracy.

Cost Effectiveness

Please describe strategies such as instructional efficiency, shared resources, cross-listed courses, or other ways your department uses resources thoughtfully.

Response:

This program core recently went through a major rewrite in response to FAA Regulatory changes. This resulted in the program major comprising 60 credits, up from 49. This allows for a more sustainable financial model for the program as technical faculty become increasingly difficult to recruit and retain. A 25% tuition surcharge was also added eff Fall 25 to aid in maintaining the specialized instructional space at the airport. Maintaining the separate Airframe, Powerplant and combined Airframe AND Powerplant certificate represents zero added cost (over the combined cert alone which 99% of students seek) while allowing CTC to meet the needs of the occasional Airframe or Powerplant only students.

Associated Programs

Program Name	Degree Type
Aviation Maintenance	AAS
Airframe & Powerplant	Certificate
Powerplant	Certificate
Unmanned Aircraft	OEC
Aviation Technology	Minor
Airframe	Certificate

Collaborator Name(s):

Kevin Alexander, Professor of Aviation Maintenance Technology

Collaborator Email(s):

kwalexander



Financial Data

Department Name: **Aviation**

Academic Year 2025/2026

	FY2023	FY2024	FY2025	For Data Entry Staff	For Programs and Review Committees
Total Student Credit Hours (SCH)	1331	1196	1446	Provided in SCH tab in the student success data provided by PAIR.	
Service SCH				Sum rows labeled as "In unit, outside department, Service" and "Outside unit, Service" in the SCH tab of the data provided by PAIR.	
Department FTEs	4.064416667	3.366666667	4.599916667	FTE = Full-time equivalent employee. This field will auto-populate from the FTE Worksheet below.	
Total SCH per Department FTE	327.48	355.25	314.35		
Service SCH per Department FTE	0.00	0.00	0.00		

Majors in Programs	76	70	74	Sum for all programs from the Majors Total tab in the data provided by PAIR.	
Department FTE's	4.064416667	3.366666667	4.599916667	This field will auto-populate from the FTE Worksheet below.	
Majors per Department FTE	18.70	20.79	16.09		

Total Unrestricted Expenditures				Total Expenditures made from budgets with an F1 or F7 fund type designation, from provided cycle report data filtered by Data Liaison	
Total Restricted Expenditures				Total Expenditures made from budgets with revenue of the F2 or S2 fund type designation, from provided cycle report data filtered by Data Liaison	
Total Unit/Central Support Allocated to Program(s)				Expenses incurred for direct support of instruction within orgs identified as central or academic support, if applicable	
Total Expenditures					

Tuition Revenue				Receipts to college from tuition generated by the department/program (F1). NOTE: under the current 80/20 percent tuition distribution model generating units receive 80%. PLEASE USE PAIR REPORTED SCH.	Receipts to college from tuition generated by the department/program, based on the campus's active tuition distribution model, which determines how much the unit receives of their generated tuition, and how much the campus keeps (in addition to the out-of-state surcharges) to support central offices/functions. The current distribution model is 80/20, where the unit/college receives 80% of their generated in-state tuition.
State Appropriation Revenue				Appropriations for current funds operation of the university from the general fund of the State of Alaska through the annual budget cycle. This category also includes TVEP and State Mental Health Trust funds, if allocated to the department. (F1)	Appropriations for current funds operation of the university from the general fund of the State of Alaska through the annual budget cycle.
Restricted/Sponsored Project Revenue				Revenue from external sponsors; includes grants, contracts, sponsored projects & restricted (grant) accounts funded by UA Foundation funds (F2/S2)	Revenue from external sponsors; includes grants, contracts, sponsored projects & restricted (grant) accounts funded by UA Foundation funds
Fees				Course Fees (9159)	
Other UA Receipts/Revenue				e.g. Performance and Sales Receipts, Space Rental Revenue, Indirect Cost Recovery (F1/F7); NOTE: COURSE FEES (9159) REPORTED ABOVE	
Total Revenue					

Workload Allocation	FY2023	FY2024	FY2025	
Teaching Units	98.57	78.87	62	Department faculty's workload units assigned to teaching
Service Units	18	18.15	18	Department faculty's workload units assigned to service
Research Units	0	0	0	Department faculty's workload units assigned to research

Full-Time Equivalent Worksheet*	FY2023	FY2024	FY2025	
Faculty FTEs	2.625	2.25	3	Base assumption: 12-month full-time = 1.0 FTE. 9-month = 0.75 FTE. Split appointments are multiplied by the % of effort assigned to this department. Part-time are multiplied by the % of effort assigned. P9 faculty on sabbatical count as 67% of one 9-month 0.75 FTE (or 0.50 FTE).
Adjunct FTEs	0.52275	0.2	0.68325	Base assumption: 40 units/credits = 1.0 FTE. Total # of credits taught by adjuncts in a year divided by 40 = the FTE of adjuncts in that year.
Staff FTEs	0.92	0.92	0.92	Base assumption: 12-month full-time = 1.0 FTE. 9-month = 0.75 FTE. Split appointments are multiplied by the % of effort assigned to this department. Part-time are multiplied by the % of effort.
Graduate TA/RA FTEs	0	0	0	Base assumption: 40 hours/week for 12 months = 1.0 FTE. 9-month = 0.75 FTE.
Total Department FTEs	4.064416667	3.366666667	4.599916667	Sum of all employee FTEs

*Note: FTE definitions and calculations for the purpose of Academic Program Review are different than for other institutional reporting processes (e.g. OMB or IPEDS reporting)

Information last updated by: Sheena Tanner / Martha Westphal

Date: 9/18/25