Information Technology Specialist - Associate of Applied Science

Current Compliance Year: 2024-2025
Full review

Resources

Before completing this form:

- Review the resources available to assist you.
- The link in WorkZone directs you to your program's folder for this year's review, which includes:
  - A full copy of your previous report with the SLOA of record attached.
  - A folder with previous SLOAs as individual documents.
- The Resources folder contains:
  - Templates for creating or updating SLOAs.
  - Training materials from the SLOA and Program Review Training held in August.
- Additional tools and information can be found on the Academic Program Review Website.

If you have questions or concerns during this process, please reach out to mailto:uaf-accreditation@alaska.edu

Recent Recommendations

Feedback will include recommendations from the last Expedited Review or from your most recent review by your school or college. You may not see any feedback or recommendations until you have completed your first full or mid-cycle review.

No overall feedback was provided during your last review. No response is necessary.

Response to Previous Recommendations (if any):

No previous recommendations are available to respond to.

Student Learning Outcomes

The previous Student Learning Outcomes Assessment has been submitted as its own report. Going forward you will use the following prompts to discuss the success of your most recent SLOA plan and address your assessment activities since your last SLOA report (typically the past two years or since your last program review).

Learning outcomes feedback from last review:
Strong alignment with SLOA plan

The committee would like to thank you for including the updated 2022-23 SLOA plan. Good SLOA plan. After perusing both SLOA plans for the Certificate and AAS, it is obvious how students are building their learning experiences from one program to the next. Professional skills are assessed on a 4-

levels of performance using a rubric. The committee wonders what the differences are between score data sheets and rubrics used differently. This may be interesting additional discussion during your upcoming full program review.

Discuss your SLOA findings, changes you are making and what you hope to see as a result:

Each year, the program collects data through its ITS Certification Review process. For the AAS degree, this process consists of a hands-on scenario and a portfolio of tasks focused on technical skills and professional practices. The semester students apply for graduation, they perform a hands-on scenario and present a portfolio of work to program faculty. Faculty analyze evaluation forms from student presentations and evaluation checklists from student performance in the hands-on scenario.

Score data sheets and rubrics are used together, not separately. Copies of the portfolio preparation guide, the hands-on scenario, rubrics, and score data sheets have been uploaded to the program review folder for this review. This information has been provided to help reviewers better understand the relationship between score data sheets and rubrics.

Since COVID and the program's transition to 100 percent online delivery, the hands-on scenario has been adapted to enable all tasks to be performed remotely. This adaptation required changes in the process used to evaluate student performance. Students now create documentation of each configuration task rather than faculty sitting at the student's system to verify configuration tasks. If a student improperly documents a configuration, faculty cannot determine whether the error is a configuration error or a documentation error. This is important because a configuration error points to a weakness in student learning related to a specific technology area. In contrast, a documentation error points to a weakness in professional practices.

As we've analyzed our data related to the hands-on scenario, we have discovered the current process used to evaluate student performance is lacking, and are working to address this issue.

Discuss the curricular changes made based on assessing your SLO. If you haven't made any curricular changes, please explain why not and address what you did notice in the review, including strengths of your curriculum through the assessment of your outcomes:

The program has made curriculum changes at the assignment level to CITS F281 Professional Practices based on the assessment of our SLO. In past years, students completed key assignments, received feedback, and built their portfolios outside the context of any class with little or no instruction. The creation of the student's professional portfolio is now integrated into CITS F281 as a scaffolded project in which students complete key assignments and use instructor feedback to create a portfolio artifact that includes revisions and written reflection on each assignment. Students then compile portfolio artifacts into a portfolio as a final project and receive instructor feedback. This change aims to provide the opportunity to provide additional feedback to improve learning and the quality of student portfolios for use during the job search process after graduation.

Supporting Documents

Please ensure that all relevant supporting documents, such as artifacts, rubrics, and student data, are uploaded to your designated Google folder in WorkZone or directly into Google Drive. *Note: Do not include any information that may identify students in your data.*

Updated SLOA?
If you are updating your SLOA document, please include it with your report and other supporting documents in your designated folder. It does not need to be filed separately in the "SLOA" folder.

Are communication outcomes embedded in the SLOA Plan?
As of 2017 all Baccalaureate programs were required to embed the communication outcomes within their SLOA Plans, this is optional for non-Baccalaureate programs. Please mark the appropriate box below.

Embedded:	
Not Embedded:	X

Student Success

To access the Student Success Dashboard please sign into a UA computer with VPN connection (if not on campus). You will need your UA credentials and it is best accessed with the most updated version of Chrome, Edge, Firefox or Safari browsers; Internet Explorer is not supported. You will need to filter the data to see your programs. If you need assistance in finding the data for your programs, please contact your data liaison or Julia Manfredini in the PAIR office.

Data Liaisons
Each school or college has a team of Data Liaisons to help you analyze the data provided in the portal and may be able to help you see your data in multiple contexts. You can find a list of data liaisons on the resources page for Program Review.

The college or school level committee will also have access to this data with the goal that by providing these visualizations data availability will be increased.

Data supplied within the dashboard linked below is intended for Academic Program Review and not for any other purpose.

Student Success Data Dashboard

Previous Feedback
It would be helpful to see some discussion of the tags regarding student success that you have chosen.

The committee feels it would be interesting to see discussion on how the program plans to address equity gaps and finds it confusing to see that the program plans to address equity gaps but also states there are not any identified.

Student Success Data Trends:

Trend	Increase	Decrease	No Change
Persistence	x		
Pass Rates	x		
Student Credit Hours			x
Majors	x		
Degrees Awarded			x
Other Trends (Explain in narrative below)			

Equity Gaps

Please discuss any equity gaps identified in your disaggregated student success data and explain how you plan to address them. Please contact your data liaison or make an appointment with Julia Manfredini to learn more about analyzing your data.

The student population for the program is too small to provide enough data to determine if an Equity Gap exists within the program. There is no baseline for comparison, and from the data provided, no equity gap is evident.

Optional Data Explanation

Feel free to share more of your thoughts on the data provided.

Comparing the data provided for the percentage of [redacted] within the program to the percentage of [redacted] working within the industry it is clear that the program has a higher percentage of [redacted] students when compared to the percentage working in industry. Our program maintains an average of 30 percent [redacted] while the industry has a 27 percent employment rate.

High Impact Practices

According to the AAC&U, High-Impact Educational Practices "have been widely tested and have been shown to be beneficial to college students from many backgrounds." UAF is particularly interested in Undergraduate Research and/or Scholarly Activity because it is one of our mission fulfillment indicators, but all of these researched High-Impact Educational Practices should be reflected in your program's student learning outcomes and curriculum.

Previous Feedback

The committee recognizes that collaborative learning assignments are a positive high-impact practice. Internships and the capstone course and project are others. These intentional activities support students being ready to enter the workforce as well as the AAS level program.

High-Impact Practices Used in this Program

Please select all high-impact practices your program is currently using from the list below. For any practices you select, provide details in the corresponding narrative section. In the narrative, discuss how your program is implementing these practices, including any successes, known issues, and solutions. If you are considering incorporating any of these practices in the future, share your plans. If your program is not using any of the listed high-impact practices, please use the 'Other or None of These' field to explain how your program supports student success.

Capstone Courses & Projects	x	Research (Graduate Level)	
Collaborative Assignments & Projects		Writing-Intensive Courses	
Diversity/Global Learning		Publications	
ePortfolios	x	Communications	
First-Year Seminars & Experiences		Publications	
Internships	x	Scholarly Activities	
Service or Community-based Learning		Other (Please describe in box below)	x
Undergraduate Research			

Collaborative Assignments & Projects

N/A

Undergraduate Research

N/A

Diversity/Global Learning

N/A

ePortfolios

Students create a portfolio in their CITS F281 Professional Practices class. Students then add to and present their portfolios during the program's Certification Review process. Students have created and presented portfolios since the inception of the program. Recently, the portfolio has been added to CITS F281 as a structured project to provide additional opportunities for instructor feedback with the goal of improving the quality of student portfolios. In CITS F281, the portfolio is built around key assignments students complete throughout CITS F281. After receiving feedback on key assignments, students make revisions and write a reflective narrative related to the assignment to produce a portfolio artifact. Students then combine each portfolio artifact to create a portfolio.

First Year-Seminars & Experiences

N/A

Writing-Intensive Courses

N/A

Service-Learning and/or Community-based Learning

N/A

Internships

CITS F284 Independent Project is a required class to earn the AAS degree. In this class, instructors work with students to identify an experience or project appropriate to the student's career goals. An internship is one of the options available to students enrolled in this class. This option is most appropriate for students who are new to the field and planning to start a career in IT after graduation. Students who select this option work with faculty to identify an internship opportunity and then document their learning through weekly reports in which students reflect on how their experience is similar or different from what they have learned through their classroom experience.

Capstone Courses & Projects

CITS F284 Independent Project is a required class to earn the AAS degree. In this class, instructors work with students to identify an experience or project appropriate to the student's career goals. Developing, planning, and implementing an IT project is one of the options available to students enrolled in this class. This option is most appropriate for students who already work in the field. Students who select this option develop a project proposal that defines project goals, tasks, and a timeline for task completion. Students then document their projects through weekly reports that include status updates and reflections on what they learned and how it relates to past classes.

Other or None of these (explain)

Hands-on Learning is the primary high-impact practice used within the IT Specialist program. Through the Associates degree program students complete over 1,000 hours of hands-on learning related to

implementing, configuring, and troubleshooting; client and server operating systems, network, security, and cloud computing systems. The program delivers these hands-on activities through its virtual lab environment (NETLAB+) and software simulation (Cisco Packet Tracer and TestOut Hands-on Technology Courseware). This practice is essential for students to understand how to apply the knowledge, theory, and concepts students are taught throughout the program.

Program Profile and Financial Data

The program review elements in this section usually stay consistent for departments. Any responses you provide will be saved for your next review. Please carefully review the information below and make any corrections or updates as needed to ensure accuracy for the next program review cycle. If any sections are incomplete, please ensure that you provide the necessary information. This will allow you to start from an updated baseline when you revisit these elements in future submissions.

Financial Data Resources

The Board of Regents shapes program review, through BOR Policy 10.06, to support budget increase advocacy in the state legislature. The standardized financial data template should be analyzed with your data liaison to assess your program's capacity and resource status.

To keep integrity and remain standard across all of UAF it is very important that you do not provide any additional or alternative data.

Financial Template

Your data liaison may have uploaded your template to the Google folder for this program, or you may do so now.

Previous Financial Feedback

Feedback will be provided once you have completed a full review.

Previous Profile Feedback

Feedback will be provided once you have completed a full review.

Cost Effectiveness (250 Word Limit)

How does your department/program approach being cost effective?

In FY24, the program's Total Unrestricted Expenditures were [redacted]. It generated [redacted] in tuition and fees and received [redacted] in state appropriation revenue, which resulted in [redacted] in total revenue. The program's approach to being cost-effective is focused on a strategy that maximizes tuition and fee revenue through strategic scheduling. These strategies are implemented by scheduling courses required for degree completion based on an advising roadmap and creating advising plans with students that align with this roadmap. This strategy results in predictable course enrollment that produces strong tuition revenue while minimizing instructional costs. The program also maintains a course fee structure that enables it to maintain the equipment necessary to provide students with a quality learning environment. The program's advising roadmap and course fee structure are reviewed regularly and adjusted when necessary to remain cost-effective.

Program's Value to Mission (250 Word Limit)

The IT Specialist program provides value to UAF's mission by preparing students for technical and professional careers in the field of information technology. The primary focus of our faculty is to disseminate knowledge through teaching and advising. We teach students knowledge and skills that are current, relevant, and valued by IT employers. Many of our students are non-traditional. We carefully

advise and guide those students, sometimes through multiple developmental courses, towards student success. We regularly educate vocational rehabilitation students by teaching them the skills necessary to re-enter the workforce. These students often require special advising to assist them in transitioning to the academic environment. Also, many of our students are [redacted] facing a similar challenge.

Duplicative Programs (250 Word Limit)

The IT Specialist program at UAF is approved as a statewide program that is offered fully online. Our program serves students located in Fairbanks, throughout the State of Alaska, and across the Lower 48. The majority of students who graduate from our program find employment in their local community.

UAA offers a similar program that prepares students for employment in information technology. UAA's program primarily offers in-person classes that serve the Anchorage and Matsu area. UAS offers technology classes but not a certificate or degree program in information technology.

Community or Other Partnerships (250 Word Limit)

Our faculty maintain contact with leaders in industry and business information technology departments many of which have taken our classes. Our relationships with the numerous OIT departments at the University are especially close, and many of our students hold internships there and in the community. Fairbanks Memorial Hospital, Fairbanks Native Association, and the Alaska Department of Transportation are a few of the industry partners that hire our graduates and provide essential program feedback.

Value of Service Courses (Optional) (250 Word Limit)

N/A

Post-Graduate Success (250 Word Limit)

Since shifting the program 100 percent online. Tracking post-graduate success (employment) has proven to be difficult. The program has been working to develop strategies to assist in the tracking of this data, such as having all students create a LinkedIn profile in their CITS F281 Professional Practices class; however, this area continues to be a struggle.

Submission

Submitter & Collaborator Names

Mel Denning & Keith Swarner

Submitter Email

mrdenning@alaska.edu

UNIVERSITY OF ALASKA FAIRBANKS
2024-2025 Student Learning Outcomes Assessment Plan Information Technology Specialist, A.A.S.

Community and Technical College

Expanded Statement of Institutional Purpose	Intended Outcome / Objectives	Assessment Criteria and Procedures	Implementation (Who What When)
MISSION STATEMENT: Prepare individuals to implement, support, and troubleshoot computer and information technology systems and obtain employment as an IT professional. **GOAL STATEMENT:** Students earning the IT Specialist A.A.S. will develop technical and professional skills in the following areas related to computers and information technology systems: • Computer Technology Support and Troubleshooting • Network and Systems Administration • Cybersecurity • Cloud Computing • Independent Thinking and Research • Human Relations and Technical Support	1 ITS A.A.S. graduates will have the technical skills required to implement, support, and troubleshoot computer and information technology systems in the following areas: • Client and Server Operating Systems • Computer and Network Security • Network Infrastructure • Cloud Computing • Troubleshooting	Students must successfully complete the following associatelevel ITS Certification Review requirements: • Perform a hands-on scenario task to demonstrate proficiency in the technical skills required to implement, support, and troubleshoot computer and information technology systems. Performance on the hands-on scenario will be evaluated using a completion checklist of configurations required within the hands-on scenario task.	What: Completed score sheets for portfolio tasks and handson scenario task completion checklists for each student being evaluated. When: Every fall and spring semester. Who: ITS Faculty
	2 ITS A.A.S. graduates will have the professional skills required to implement, support, and troubleshoot computer and information technology systems in the following areas: • Independent Thinking and Research • Human Relations and Support Skills • Professional Practices	Students must successfully complete the following associatelevel ITS Certification Review requirements: • Develop a portfolio demonstrating the professional skills required to implement, support, and troubleshoot computer and information technology systems • Present their portfolio to ITS faculty. • Create documentation templates and document work	What: Completed score sheets for each student being evaluated. When: Every fall and spring semester. Who: ITS Faculty

• Professional Practices • Communications, Computation, and Human Relations	3. Students will have the communication, computation, and human relations skills required of an IT support professional.	accomplished in a hands-on scenario Professional skills will be evaluated using a rubric that defines four different levels of performance and a score sheet. Communication skills will be assessed by evaluating written communication related to portfolio tasks and the student's portfolio presentation. Computation skills will be assessed by evaluating computation related to portfolio tasks. Human relation skills will be assessed by evaluating student responses to questions asked during the student's portfolio presentation	

College or School Review Committee

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

Overall Recommendations (tags)

Address Equity 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	X	Recommendation to University-Wide Committee	

Explanation of Overall Recommendations (narrative)

This is a model IT Program, and we recommend recognizing and continuing the many strengths of the program. For example, hands-on, industry-aligned learning with the 1,000+ hours of virtual lab/simulation practice allow students to gain technical competency in network security, cloud computing, and systems administration. The program's focus on online accessibility, hands-on training, and rural workforce development strongly aligns with the college's mission. The preparation directly aligns with employer demands. The capstone project and portfolio requirement integrate technical skills with professional practices of documentation and reflection, preparing students for real-world IT roles. A strength to be commended is the 30% [redacted] enrollment that exceeds the industry average reflecting intentional recruitment of an underrepresented group. Online delivery supports non-traditional students, [redacted], and [redacted], aligning with the college's mission to broaden access. There are many long-time Industry Partnerships such as collaborations with Fairbanks Memorial Hospital, Alaska DOT, and local IT departments. This ensures curriculum relevance and creates job pipelines. The cost-effectiveness and enrollment strategy are outstanding. The strategic scheduling helps with predictable enrollment and maximizes tuition revenue. Statewide online delivery attracts out-of-state students and balances expenses with over [redacted] annual revenue.

Strengthen post-graduate tracking and data of student population.

Reliance on LinkedIn profiles is insufficient for employment data. Consider partnering to track graduate employment via state workforce data. Perhaps add exit interviews to collect immediate post-graduation plans. More data for various populations will assist in knowing underrepresented groups.

Student Learning Outcomes Feedback (tags)

Strong	X	Developing	
Requires Minor Revision		Requires Major Revision	

Student Learning Outcomes Assessment Feedback (tags)

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

Student Learning Outcomes Assessment Feedback (narrative)

The committee appreciates the copies of the many data sets as well as hands-on scenarios, rubrics, and score data sheets. The over 1000 hours of hands-on learning prepares students to apply knowledge, theory and concepts so they are well-prepared. The committee commends your work to improve remote performance evaluation. There is ambiguity in distinguishing technical errors from documentation errors and we acknowledge the program faculty are improving this assessment. Consider using dual rubrics: one for technical accuracy and another for documentation quality. Perhaps integrate screen-recording tools to capture configuration tasks in real time for faculty review.

Student Success & Equity Feedback (narrative)

Students have many diverse learning activities to provide rich learning and success. There is excellent representation of women in IT. Consider urban, rural or veteran student outcomes. Developing effective strategies to track graduation and employment outcomes will be important in the future. Implementing tools and methodologies for examining, and reporting career outcomes data can provide valuable insights.
Other ideas may be appropriate, and the committee makes suggestions of the following: Consider a 1-credit "Professional Branding" module teaching LinkedIn optimization or digital portfolio design. Publish alumni success stories such as veterans in IT roles to attract underrepresented groups. Advocate for state funding by framing the program as critical to bridging Alaska's IT skills gap.

High-Impact Practices Feedback (narrative)

Internships, capstone projects, hands-on learning, e-portfolios bridge classroom learning with workplace application. Portfolio scaffolding provides structured feedback, improving student readiness for job searches. The committee finds your e-portfolio process and your curriculum revisions excellent. The step-by-step active learning in a structured project provides additional opportunities for instructor feedback and increased student learning. Having key assignments with opportunity for revision, a reflective narrative and presenting evidence through artifacts to create a final e-portfolio, is an effective high impact strategy we encourage your program to share with colleagues. Not only do students create e-portfolios, but students also have an opportunity to create and design a project appropriate to career goals. These are well-planned high impact practices.

Profile Feedback

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

Financial Feedback

High Tuition Revenues		High Grant Revenues	
Operates at Low Cost	X	Productive Faculty	X
Opportunities to Increase Revenue		Low Enrollment	