

Date: February 2, 2020:

To: John Stalvey, Interim Provost

From: Denise Runge, Dean

Re: AY20 Expedited Program Review Findings

Program/s in this review: Advanced Welding (OEC), Nondestructive Testing Technology (OEC), Welding & Nondestructive Testing Technology (AAS), Welding (OEC), Welding Technology (UC), Welding (UC)

Specialized accrediting agency (if applicable): none, but the Anchorage facility is AWS accredited as described in the report

Campuses where the program is delivered: Anchorage, Kenai Peninsula, Kodiak

Members of the program review committee:

- Gregory Russo, Instructor
- Jacob Kiesling, Assistant Professor (KPC)
- Darrin Marshall, Director, Transportation & Power Division

Centrality of Program Mission and Supporting Role The Welding programs are aligned with the mission of UAA and of CTC. These programs meet a clear workforce need, preparing individuals who obtain employment across a wide range of employers. Demand for welders is high in Alaska. The median salary for welders is \$63,000 in Alaska. A few of the program's courses are routinely taken by students in related majors such as Diesel Power Technology.

Program Demand (including service to other programs), Efficiency, and Productivity Demand for these programs has declined noticeably since 2017, and is below the seven-year average of 76 majors combined across all of the programs. The programs are tightly aligned, with portions of the coursework available at all three campuses. Examining the enrollment and graduation data closely, we see that the Occupational Endorsement Certificates (OEC) and certificate programs are preferred overall to the AAS. Across the review period the multi-campus program averaged only eight AAS graduates but twenty-seven certificates or OECs awarded per year. Disaggregating by campus, Kenai has averaged just under three graduates per year in its certificate, Kodiak had only one graduate, in 2014, and Anchorage has had an average of twenty-one OEC awards per year, and only eight graduates of the AAS. The programs are fairly expensive to operate, and productivity is somewhat problematic, given the declining enrollments. Due to the nature of the labs where instruction takes place, course capacities are limited to 18 or fewer students, depending on the lab. A few sections fill to capacity, but across all campuses sections are on average about one-half to two-thirds full. For 2019, the student credit hours per full time equivalent faculty member, or SCH/FTEF was 236.1

and average class size was 8.8. The tuition revenue per credit hour is \$158.4 and the cost per credit hour is \$239.9, for a ratio of .66, indicating the program is covering about two-thirds of its instructional costs. Looking only at the Anchorage campus, the tuition per credit was slightly higher at \$168.7, but the instructional cost per credit also rises to \$249.7. Overall, the programs have experienced declining enrollment, with excess or unused capacity, at relatively high cost.

Program Quality, Improvement and Student Success The program in Anchorage has been recognized as an accredited facility by American Welding Society (AWS). The UAA facility is the only AWS accredited testing facility within a training/educational institution in Alaska. This is a clear indication of its quality, and its focus on utilization of industry-recognized certifications. Recent improvements have focused on aligning the programs across campuses, as well as providing optimum support for enrolled students. Faculty at all campuses provide options for out-of-class support (akin to individual practice time in the arts) to allow students to strengthen and maintain the skills learned in Welding courses. Faculty have worked closely with advising staff to offer course schedules that meet students' needs.

Program Duplication / Distinctiveness Duplication: Both UAF and UAS offer Welding OECs, as do a number of Community and Rural Campuses across the state. Welding training is also provided at several state-funded training centers, and through other programs such as apprenticeships. Welding programs are, by their nature, characterized by relatively small numbers of students, due to the intensive, hands-on nature of the education. Employment for graduates of these programs is primarily local; relatively few students would move to another area to be trained as a welder. While the existence of multiple programs in the state appears to be justified, it may be that new arrangements for remote delivery, course sharing, faculty sharing, or other approaches are needed to more closely align delivery with demand. Several colleges in other states have begun experimenting with blended or hybrid delivery modes, which often work well for working adults and career-changers. The UAA Anchorage program is distinct in three ways: it offers the only AAS degree, it is the only AWS-accredited facility within a post-secondary institution, and it offers the only training in Nondestructive Testing.

Commendations and Recommendations Commendations: The program is commended for its intensive work on curricular alignment including the various UAA campus programs and with secondary and other training providers. Recommendations: The program faculty from all campuses should work closely with their local admissions and advising staff and local secondary faculty to recruit additional students into Welding programs. The program faculty should continue to explore alternative modes of delivery for some courses, where appropriate, in order to further enhance productivity and efficiency.

Decision *Suspension, with intent to Delete, the AAS;* While decisions relative to the program are made, admissions to the program are suspended. *Continued Review of the UCs and OECs offered on all UAA campuses.* Programs are required to address specific issues and to undergo another review within the next two academic years.