

COMMITTEE RECOMMENDATION FOR COMPUTER SCIENCE

STRENGTHS:

- Three degrees offered: BS Computer Science; MS Computer Science; Combined Bachelors/Masters Program; most masters classes are stacked with undergrads.
- Provides 6 courses for the Computer Engineering BS.
- Many students go on to prestigious positions worldwide.
- Many remain at UAF, getting jobs with OIT, e.g. 50% of the OIT Systems Engineers and Enterprise Applications Services departments are UAF alumni.
- Highly active and successful student clubs.
- Graduate student numbers are up by 31%; Masters course has only 2 dedicated graduate classes, the rest are stacked.
- Faculty engage in world-renowned research.
- Enrollment in the BS Computer Science major is increasing.

WEAKNESSES:

- Since FY2015, FTEs are down while overall enrollment is up: faculty are reaching maximum capacity.
- Subject remains arcane to the majority of the population: it can be difficult to communicate the importance of the program.
- Only 12% of majors are women and there are no female instructors.
- Research is published irregularly and more often at conferences than in journals.
- Student retention is low, with a 10-30% drop rate from one class level to the next.

OPPORTUNITIES:

- Improve alignment with UAA allows for course-sharing and reinvigoration of the curriculum.
- Increase in distance learning opportunities to appeal to students beyond Alaska.
- The development of Alaska-geared software development projects which could grow Alaska's software developer population.
- Software development is and will continue to be the most lucrative industry in the nation with continuing high demand.

THREATS:

- The ABET accreditation draft statement lists only one unresolved concern: "However, given present budget circumstances, the potential exists that future institutional support for faculty professional development will not be available which may reduce faculty's opportunities to maintain currency and their expertise."

- The continued year-on-year budget cuts make it difficult to retain qualified faculty, staff, and students.

CENTRALITY TO MISSION:

- Computer Science is essential to the modern world; Alaskan communities are geographically isolated and especially need the expertise provided by the department's graduates.

INDICATORS OF QUALITY:

- Alumni go on to high paying and high prestige jobs around the nation and world.

COST-EFFECTIVENESS:

- Unrestricted salaries and benefits FY19 were approximately \$825,000. There are ~3.5 FTEs for 160 students.

	MAJORS	DEGREES
Computer Science BS	FY15: 117/ FY19: 143	FY15: 10/ FY19: 21
Computer Science MS	FY15: 13 / FY19: 17	FY15: 4/ FY19: 4

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Computer Science BS:

RECOMMENDATION:	ADDITIONAL COMMENTS:	DATE FOR FOLLOW-UP:
Continuation w/ improvement plan (8 votes)	Improvement should include: Improving retention and graduation, developing online options for working students, exploring curricular revisions to make degree more attainable. Develop a plan to increase gender diversity.	One year

Computer Science MS:

RECOMMENDATION:	ADDITIONAL COMMENTS:	DATE FOR FOLLOW-UP:
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