

EXPECTED OUTCOMES	ASSESSMENT CRITERIA	IMPLEMENTATION PROCEDURES (what, when, who)	IMPROVEMENTS	
			IDENTIFIED	IMPLEMENTED
1. Students will achieve proficiency in calculus, discrete math, and statistics.	a) Completed Math 307 (Discrete Math), Math 200 and 201 (calculus sequence), STAT 300 (Statistics) and a 300 or 400 level mathematics elective with a C or better. b) Question(s) on exit survey. c) Question(s) on alumni survey. d) Question(s) on employer survey. e) Review by CSIAC	a) Checked automatically by graduation office. These classes are offered by the mathematics and statistics programs and are separately assessed. b) Each spring in CS 402 class. c) In spring of odd-numbered years. d) In spring of even-numbered years. e) Yearly, at CSIAC meetings.	None. Standard met.	None
2. Students will achieve proficiency in Computer Science skills (fundamentals of programming, computer organization, architecture, operating systems, algorithms, theory, software engineering)	a) ETS Major Field Test in Computer Science scores. b) Question(s) on exit survey. c) Question(s) on alumni survey. d) Question(s) on employer survey. e) Student completion of CS portion of curriculum f) Review by CSIAC	a) Each spring in CS 402 class. b) Each spring in CS 402 class. c) In spring of odd-numbered years. d) In spring of even-numbered years. e) Checked automatically by UAF Graduation Office after student application for degree. f) Yearly, at CSIAC meetings.	More & earlier software-engineering content needed.	<ul style="list-style-type: none"> CS 201 (Computer Science I) and CS 202 (Computer Science II) texts switched to one with integrated software-engineering content [Fall 2004]. CS 471 (Software Eng.) added to CS degree requirements [Fall 2003].
3. Students will demonstrate the ability to communicate effectively both orally and in writing.	a) Review of CS 402 project notebooks. b) Completion of English and Communications portions of the UAF Baccalaureate Core and ENGL 314 (Technical Writing).	c) Each spring in CS 402 class and CSIAC meetings. a) Checked automatically by graduation office. These classes are separately assessed at the University level.	Need for better written communication skills.	ENGL 314 (Technical Writing) added to CS degree requirements [Fall 2003].
4. Students will demonstrate the ability to work effectively as part of a team.	a) Review of CS 402 project notebooks.	a) Each spring in CS 402 class and CSIAC meetings.	None. Standard met.	None
5. Students will understand the need for continuing life-long learning and will continue to educate themselves throughout their careers.	a) Question(s) on alumni survey. b) Question(s) on employer survey.	a) In spring of odd-numbered years. b) In spring of even-numbered years.	None. Standard met.	None
6. Students will gain a broad background in liberal arts, fine arts, science and ethics.	a) UAF Baccalaureate Core requirements fulfilled.	a) Checked automatically by graduation office. These classes are separately assessed at the University level.	None. Standard met.	None
7. Students will demonstrate the ability to apply their knowledge to practical problems.	a) Review of CS 402 (Senior Project and Professional Practice) project notebooks.	b) Each spring in CS 402 class and CSIAC meetings.	None. Standard met.	None
8. Students will be employed in a computing-related industry or go on to graduate school.	a) Question(s) on alumni survey. b) Question(s) on exit survey	a) In spring of odd-numbered years. b) Each spring in CS 402 class.	None. Standard met.	None

Implementation of CS Program Objectives is assessed using eight measurable Outcomes. To measure the Expected Outcomes, we will use the following Assessment Resources:

- CSIAC. The Computer Science Industry Advisory Council is composed of employers of our graduates. It will meet twice yearly to review collected material (see below), and to advise the department on curricular changes and strengths and weaknesses of recent graduates. CSIAC recommendations will be recorded in the meeting minutes and included in the end of year report prepared by the Assessment Committee. A summary will be distributed to all CS Faculty.
- Alumni Survey. A survey of alumni will be distributed in February of odd numbered years. Alumni that are reachable will be surveyed twice: either one or two years after their graduation and either five or six years after their graduation. (Due to changes in the assessment plan, some alumni may not be surveyed exactly on this schedule.) The survey will gather information including job placement, graduate school information, and strengths/weaknesses in the program. Results will be compiled and summarized by the CS Assessment committee. The summary will be distributed to all CS Faculty and to the CSIAC.
- Employer Survey. A survey of employers of UAF CS graduates will be distributed in February of even numbered years. Each alumnus's employer will be surveyed in the year following the year the alumnus received an alumni survey (see above). The survey will gather information about strengths/weaknesses of the program, as reflected in the job performance of graduates. Results will be compiled and summarized by the CS Assessment committee. The summary will be distributed to all CS Faculty and to the CSIAC.
- Exit Survey. A survey of all students in CS 402 (Senior Project and Professional Practice) will be administered every spring. The survey will gather information including student employment plans and student opinion of curriculum. The results will be summarized by the CS Assessment committee and distributed to all CS Faculty and the CSIAC.
- The University of Alaska's assessment of core classes. This assessment is performed outside of our department.
- ETS Major Field Test in Computer Science. This test will be administered to all graduating students in CS 402 (Senior Project and Professional Practice) every spring. Summary results will be reviewed by the CS Assessment committee and the CSIAC.
- Individual Course Assessment. Should the Field Test results indicate a weakness in a particular subject area, the course related to that subject area may be individually assessed. Such assessment would be performed by the CS Assessment committee and the teaching professor.
- CS 402 Project Notebooks. CS 402 (Senior Project and Professional Practice) students complete a software engineering team project. Deliverables from this project include a written report and an oral presentation. A notebook consisting of the report, a videotape of the presentation, and other supporting documentation, including instructor comments, is prepared for each project. Each year two of these notebooks will be selected to be reviewed by the CS Assessment committee and the CSIAC.