
UAS Pre-Engineering Program Assessment Plan

April 1, 2011

Goal 1. Increase the number of engineering majors in the state of Alaska by recruiting and retaining students in the UAS Pre-Engineering Certificate Program

- a. Annual Assessment of Recruiting:
 - i. Track the number of students taking 1 or more ENGR courses at UAS
 - ii. Track the number of new Pre-engineering majors
- b. Annual Assessment of Retention:
 - i. Track the number of Pre-Engineering certificates awarded
 - ii. Track the number of students who transfer to a baccalaureate engineering program (in-state and out-of-state)
 - iii. Track the number of Pre-Engineering students retained at UAS through a change of major
 - iv. Track the number of UAS Pre-Engineering students who complete a BS in engineering at UAA or UAF

Goal 2. Foster an interest in and understanding of the engineering profession and opportunities in Alaska with an emphasis on Southeast Alaska.

- a. Annual Assessment:
 - i. Track number of student internships/employment with local engineering firms
 - ii. Track the number of students who complete the engineering seminar

Goal 3. Prepare students academically for transfer into the 2nd year of a 4-year baccalaureate engineering program, with emphasis on UAA and UAF.

- a. Student learning objectives: Develop skills in problem solving, teamwork, engineering ethics, and communication
 - i. Review student design projects from ENGR 151
 - ii. Review programming projects from ENGR 161
 - iii. Review final papers from ENGR seminar
- b. Student transfer objectives: Ensure a fluid transfer of individual courses and pre-requisites so that students can begin taking 2nd year engineering courses immediately upon transfer
 - i. Exit surveys (upon transfer from UAS to an engineering BS program, and upon completion of their first year post-UAS) with a focus on preparedness, course transfer and course sequencing
 - ii. Annual meeting with UAA and UAF faculty to discuss an areas of concern with academic preparedness and course transfers specific to UAS transfer students