

Table 4.1 Outcomes Assessment Implementation Summary for BSGE

	Academic Year		
	2007-08	2008-09	2009-10
Assessment information collected	<ul style="list-style-type: none"> • Course assessment based on faculty self-evaluation, pre- and post-course surveys for an assigned set of ABET outcomes; • Exit interviews; • Review by advisory board • Reviews of alumni and employer surveys; • FE exam results; and • Student’s presentation in professional meetings such as the annual AEG meeting. 	<ul style="list-style-type: none"> • Course assessment based on faculty self-evaluation, pre- and post-course surveys for an assigned set of ABET outcomes; • Peer review by students in class; • Exit interviews; • Reviews of alumni and employer surveys; • Review by advisory board • FE exam results; and • Student’s presentation in professional meetings such as the annual AEG meeting. 	<ul style="list-style-type: none"> • Course assessment based on faculty self-evaluation, performance indicators for each ABET outcomes and pre- and post-course surveys for an assigned set of ABET outcomes; • Peer review by students in class; • Exit interviews; • Review by advisory board • Reviews of alumni and employer surveys; • FE exam results; and • Student’s presentation in professional meetings such as the annual AEG meeting.

<p>Conclusions drawn from the information collected above and how are faculty collectively involved in drawing conclusions</p>	<p>Each of the GE faculties is tasked to make certain that the contents of his/her courses are consistent with the ABET program outcomes. The following summarizes the conclusions drawn by the GE faculty group from the assessment results:</p> <ul style="list-style-type: none"> • Inclusion of permafrost science and engineering in several of the GE courses is suggested. • Reassignment of teaching load due in part to new faculty hire and faculty buyout time is made. • The performance indicator-based assessment method to better document the results of the course and program outcomes is introduced. 	<p>Each of the GE faculties is tasked to make certain that the contents of his/her courses are consistent with the ABET program outcomes. The following summarizes the conclusions drawn by the GE faculty group from the assessment results:</p> <ul style="list-style-type: none"> • Instruction of technical report writing at the beginning of each semester for GE courses is needed, due in part to some of the students' writing skills. • ABET Outcomes B (ability to conduct experiment) and K (ability to use modern engineering tools) require changes of the field lab requirements in several courses. • Emphasis of the Alaska-related class projects is needed to incorporate the suggestions by the advisory board and alumni. 	<p>Each of the GE faculties is tasked to make certain that the contents of his/her courses are consistent with the ABET program outcomes. The following summarizes the conclusions drawn by the GE faculty group from the assessment results:</p> <ul style="list-style-type: none"> • ABET Outcomes F (professional and ethic responsibility) and I (life-long learning) will need additional assessment from employers. • ABET Outcomes H (ability to understand the impact of engineering solution) requires continual refinement of modification of the GE261 lab.
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<p>Curricular changes resulting from conclusions drawn above</p>	<p>Based on the assessment results the following changes are made to better meet the program educational objectives.</p> <ul style="list-style-type: none"> • Dr. Darrow is assigned to teach GE261, GE 365, GE 375, and GE381/382. • An optional outcome (outcome L) “A knowledge of engineering applications as related to geological resources and geo-hazards in Alaska and an ability to practice engineering in arctic-related projects” was adopted to replace the three optional outcomes used in the previous ABET review cycle in 2008. 	<p>Based on the assessment results the following changes are made to better meet the program educational objectives.</p> <ul style="list-style-type: none"> • The Alaska-related class projects are included in most of the GE courses. • The project-oriented instruction with emphasis of engineering design is offered in GE405 and GE440. 	<p>Based on the assessment results the following changes are made to better meet the program educational objectives.</p> <ul style="list-style-type: none"> • The group team activities to meet ABET Outcome D (an ability to function on multi-disciplinary team) are useful and more are planned for GE261. • Refinement and modification of GE261 Lab will continue. • The project-oriented instruction is planned for GE375. • New questionnaires are planned for the next cycle of alumni and employer surveys.
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