

Activity: Determine the alignment between ABET SLOs and Mānoa undergraduate Institutional Learning Outcomes (ILOs)

ABET SLOs	Indicate the related undergraduate ILO(s) (or leave blank)
a) an ability to apply knowledge of mathematics, science, and engineering	1a, 1b
b) an ability to design and conduct experiments, as well as to analyze and interpret data	2a, 2b, 1a
c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability	1b, 3a, 3c, 3d
d) an ability to function on multidisciplinary teams	2c
e) an ability to identify, formulate, and solve engineering problems	2a, 2b
f) an understanding of professional and ethical responsibility	3a, 3b, 3c
g) an ability to communicate effectively	2c
h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	3b, 3c
i) a recognition of the need for, and an ability to engage in life-long learning	3a
j) a knowledge of contemporary issues	2b, 3d, 3c
k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.	2a, 2b

Which of the Mānoa undergraduate ILOs are not related to any of the ABET SLOs?

1c,

Mānoa ILOs for Undergraduates

1. Know—Breadth and Depth of Knowledge

- 1a. General education (liberal arts: arts, humanities, sciences, languages, social sciences, technology)
- 1b. Specialized study in an academic field
- 1c. Hawaiian culture and history

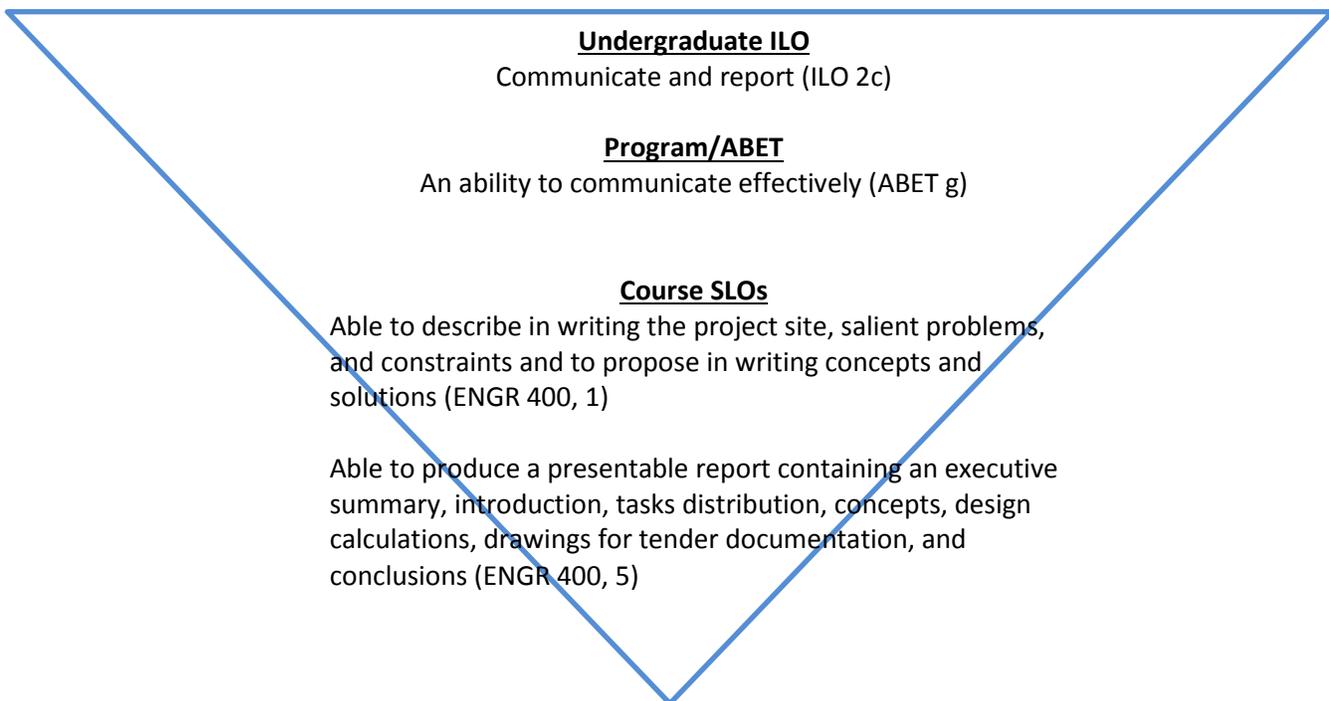
2. Do—Intellectual and Practice Skills

- 2a. Think critically and creatively
- 2b. Conduct research
- 2c. Communicate and report

3. Value—Personal and Social Responsibility

- 3a. Continuous learning and personal growth
- 3b. Respect for people and cultures, in particular Hawaiian culture
- 3c. Stewardship of the natural environment
- 3d. Civic participation in their communities

Example of alignment



ILO Assessment Overview: Example

1. ILOs assessed: think critically and creatively (2a); communicate and report (2c)
2. Student learning evidence: senior capstone project report
3. Evaluation tool: scoring rubrics
4. Evaluation: Capstone course instructor scores his/her students and a random sample are scored by faculty on the ILO Assessment Team
5. Reporting: aggregate results are reported to faculty, administrators, and WASC
6. Use: aggregate results are used by faculty groups to improve overall campus effectiveness