

ECE ABET Outcome Assessment Principles

[10/14/03]

Assessment of whether the ECE program as a whole is graduating students satisfying each ABET outcome will be based on a set outcome metrics tailored to each outcome.

- For most if not all outcomes, a “core metric” will be designed to directly assess whether graduating students have a given ability.
 - Core metrics will be computed as weighted combinations of numerical ratings derived from educational activities, which in most cases will be courses.
 - Separate ratings of achievement will be derived, for each outcome, for each course offering contributing significantly to the outcome's achievement.
 - For a given course and outcome, the rating will reflect the performance of the class as a whole on that portion of the course directly related to the outcome.
 - Written descriptions of the processes by which each semester's contributing courses, weightings, and each courses' outcome ratings, are derived will be maintained.
- Each program outcome core metric will have a “competency threshold” or level at which a conclusion that the program is meeting its outcomes is warranted.
- Associated with the set of metrics for each outcome will be a program outcome goal that will be used to draw conclusions about whether progress is being made with respect to that outcome.

The faculty as a whole will be responsible for determining:

- The set of program outcomes to be assessed.
- The courses and educational activities contributing significantly to an outcome's core metric.
- The weightings of the ratings derived from educational activities contributing to a core metric.
- The outcome competency thresholds and goals.

Individual faculty will be responsible for:

- Determining, for each offering of each course deemed to contribute significantly to one or more outcomes, and for each outcome, an ABET defensible numerical rating of student performance on that portion of the course contributing to the outcome.
- Providing, for each of these ratings, a description of the ABET defensible process used to derive the rating, including a description of the course activities related to achievement of the outcome.

The DEO will be responsible for:

- Seeing that the program outcomes, contributing courses, metric weightings, and outcome competency thresholds and goals are defensible and well documented.
- Seeing that all instructors' course outcome ratings are defensible, well documented and timely.
- Certifying whether the outcome competency thresholds are being met.

It is understood that while implementation of these principles will require significant faculty effort, this effort will ultimately be offset by substantial streamlining of our current COW/CIEW course assessment process, which, due to its diminished importance to ABET outcome assessment, can be refocused on maintaining and improving course quality.

Motion:

That the principles in the document *ECE ABET Outcomes Assessment Principles* dated 10/14 be adopted.