ABET/CSAB Accreditation of the Computer Science & Engineering Program

Presentation to faculty: Take two!

Note: This is the abbreviated version. Copy of full version available at http://www.cis.ohio-state.edu/~neelam/abet/

The self-study document is also available there.

ABET and CSAB have specific criteria that the program must meet.

The self-study document makes the case that the program meets these criteria.

During the site-visit, the evaluators will check that the self-study description of the program is accurate; and look for information they need but is not provided by the self-study.

In the meetings with individual faculty, you can expect questions about the (CSE) curriculum, especially (but not only) the portion you are most involved with; about the department in general; about the objectives of the program, the processes used, the assessment mechanisms etc.

Important Items:

Well-defined objectives and outcomes.

Well-defined processes (for setting objectives etc).

Assessment mechanisms.

Improvement in the program (on the basis of results of the assessments).

Curriculum.

General policies (and atmosphere) in the department, college, and university.

Objectives:

Published in the college bulletins, and on-line. Included in the full version; please take a *good* look at them.
Detailed objectives and outcomes were established following extensive discussions among faculty and in the UGSC. Input from industrial advisory board was also obtained.

Example objective:

To provide graduates with a thorough grounding in the key principles and practices of computing, and in the basic engineering, mathematical, and scientific principles that underpin them.

Example outcome:

Students will demonstrate proficiency in the areas of software design and development, algorithms, operating systems, programming languages, and architecture.

Processes:

UGSC, CC, Computer committee (all with student reps).
Undergrad forum.
Discussions on student newsgroups.
Exit survey (importance question).
Course group reports (available on the web).

The self-study details how all of the input gathered from these various mechanisms are used to improve the program.

Assessment mechanisms:

Assignments and exams in individual courses.
SETs.
Surveys (exit, alumni, supervisor).
Outside consultants (Drs. Conry and Turner).

Example improvements:

Increase in focus on oral communication skills in CIS 601.

459.23 (Java); 694V (multi-media).

Curriculum:

For details, see complete version of this.

For even more details, see self-study.

In brief, the following items are required by ABET:
Specific number of hours of math, science, etc.
Capstone design course.
GEC component.
Plus, the program must address Criterion 3 requirements such as ability to communicate effectively.
Plus, the curriculum must ensure achievement of our objectives.

See Section B.2.3, B.3.2, B.4 for details of how our program meets these requirements.

CSAB requirements:

CSAB requirements are similar to ABET's, but they have some additional specific computer science requirements. These are addressed in the 'CSAC supplemental questionnaire for review' portion of the self-study.

Example: CSAB requires that the core portion of the program focus on algorithms, data structures, software design, etc.

Plus, CSAB tends to be interested in questions like whether faculty have support for travel to conferences, etc. These questions are likely to come up in the one-on-one meetings with faculty.