ABET/CSAB Accreditation of the Computer Science & Engineering Program

ABET: Accreditation Board for Engineering Technology
CSAB: Computer Science Accreditation Board.

Since we are an Engineering program *and* a Computer Science program, we need to be accredited by both.

This will be a quick summary. Details in
http://www.cis.ohio-state.edu/~neelam/abet/

Three Steps to Accreditation

1. Meet all the requirements.

2. Prepare self-study document
   Completed (June '99).

3. Site-visit
   Scheduled: Nov. 7, 8, 9.
   Team:
   ABET evaluator:
     Dr. Murali Varanasi, Univ. of South Florida.
   ABET observer:
     Dr. James Smith, NASA.
   CSAB team chair:
     Dr. Henry Bauer, III, Univ. of Wyoming.
   CSAB evaluator:
     Dr. Lynn Carter, SEI.

ABET Criteria (Summary)

2.1 Detailed, published, objectives.

2.2 Process for determining, and periodically evaluating them.

2.3 Curriculum and processes to achieve them.

2.4 Evaluation to measure achievement and improve program.

Complete details are in the web page and in the self-study document.

Briefly, the process consists of collecting and disscussing ideas in UGSC and Curriculum (and Computer) committee meetings, (including student reps), meetings with students (spring of each year); on the basis of these, UGSC and Curriculum committees bring proposals to the faculty on a regular basis, etc.

Collecting feedback from students via SETs, and via exit surveys; also collecting feedback from alum surveys, supervisor surveys, and using these to guide the discussions.

One important mechanism: Course group reports; take a look at the web page for several examples.

Early next quarter we will re-examine our objectives, and discuss objectives for the other programs.

3 Graduates must have:
- Knowledge of math, science, engineering;
- Ability to design and conduct experiments, and analyze and interpret data;
- Ability to design systems to meet specific needs, and work in teams;
- Understanding of professional and ethical issues, and ability to communicate effectively.

4.1 Professional component: specific curricular requirements, such as 45 hours of math and basic sciences, etc.

4.2 Culminating design experience ('capstone design course')

5, 6, 7. Strong faculty; Suitable facilities; Proper instituional support.

The self-study document details how we meet each of these requirements.

CSAB Criteria (in addition to the ABET criteria)

- 60 hours of CS topics.
- 45 hours of mathematics and science topics.
- 45 hours of GEC.

The CSAB criteria specify more detailed requirements for CS topics and mathematics and science topics.

Examples:
- Discrete mathematics is required.
- Oral and written communication skills must be developed and applied in the program.

The self-study details how the program meets each of these requirements.

Site-Visit

1. Check course materials (Nov. 7, Sunday).

2. Overview of engineering (dean).

3. Overview of CSE program (Stu).

4. Meet with several CSE faculty
   One-on-one meetings; appr. 20 minutes each.

5. Talk to a group of CSE students
   4 pm - 5 pm, Nov. 8, DL480.
   Pizza and pop will be provided.

6. Facilities tour.

7. Talk to administrators, faculty from other departments (maybe).

8. Visit library (maybe).

November 9:

9. Follow-up visits with faculty.

10. Summary reports
    To chair, dean, provost.

Later:

11. Preliminary report (late November?)

12. Final action (June '00?)