

## **ASSESSMENT PLAN FOR THE BSEE PROGRAM (Spring 2005)**

### **1. Program Educational Objectives.**

The objectives of the Electrical Engineering Program, as adopted by its constituencies, are:

- a. To provide students with an understanding of the fundamental knowledge necessary for the practice of electrical engineering or graduate study, including scientific principles, rigorous analysis, and creative design.
- b. To provide students with the broad education, including knowledge of important current issues in electrical engineering and a commitment to lifelong learning, as is necessary for productive careers in the public or private sectors.
- c. To develop skills for clear communication and responsible teamwork, and to inculcate professional attitudes and ethics in an innovative program that is rigorous, challenging, open, and supportive.

### **2. Program Constituencies.**

The constituencies of the electrical engineering program are

- a. Students
- b. Employers of Graduates
- c. Graduate Programs (at WSU and elsewhere)

### **3.**

prerequisite material is required. If there are serious deficiencies, the results of the exam are shared with the faculty member who is the monitor for that prerequisite course. The monitor determines what action will be taken and informs the person teaching the follow-on course. Subsequent knowledge probes should reflect an improvement in knowledge in the area that showed deficiencies. The faculty reviews the probe data each semester during a faculty meeting shortly after the start of each semester.

The syllabi of eight courses will be reviewed on a yearly basis by the Industrial Advisory Board (IAB) which will allow examination of all courses by the IAB every five years. New state-of-the-art material can be added as determined by the IAB and faculty.

Inappropriate subjects may be removed or moved to other courses. As new417(d)-0.95617)-10.498(f)2.5011

Course syllabus  
Knowledge probe results and feedback  
Examples of homework, exams and design projects  
Student course questionnaires  
Student performance statistics  
A record of who taught the course the last five semesters.  
Comments from the instructor(s)

This collection of data will be examined on a short term basis each semester by the course moderator (and reported to the faculty). The Syllabi of six courses will be reviewed on a yearly basis by the Industrial Advisory Board (IAB) which will allow examination of all courses by the IAB every five years. The policy also allows any course to be reviewed at any time.

- b. Knowledge Probes: The knowledge probes (see section 3 for details) are fed back to prerequisite courses.
- c. Hour Exams, Homework, Finals, and Reports: The grading statistics for each course will be kept for the previous five semesters where appropriate. The intent is to ascertain that grade inflation is not occurring and that grading quality is maintained. In connection with this data, a running list of those teaching the course will be maintained for five semesters also. This traditional form of assessment will still continue and provide useful information. Efforts will be made to make each of these traditional items more useful in assessing the success in meeting the department's educational objectives.
- d. Peer Reviews for Team Projects: Opportunities for team interaction occur during courses with labs and for a more sustained period and larger team during the two semester senior project (ECE 585 & 595). Each student of a team will have an opportunity to evaluate his team members and to be evaluated.
- e. Faculty Evaluations of Senior Project Oral and Written Presentations: Each senior project team is required to make an oral presentation during both semesters of the project. These formal presentations and presentations of their projects are video taped and available for review by the students and faculty members.
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- g. Senior Exit survey: Each student, at the end of the second semester of the senior project (ECE595) , is required to make an evaluation of the degree program's objectives and effectiveness in meeting the ABET criterion 3 (a through k). A - k areas which the students perceive as not being adequately covered are reviewed by the faculty and plans for increasing emphasis in that area discussed.
- h. Placement Office Analysis of Graduate Employment: Each senior student is enrolled with the campus career/placement office. The placement office tracks

