Report on Program Review & Assessment

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February
ogram Review Cycle

l Poly, we practice a continuous cycle of review and assessment. For
ms it is a 6-year cycle; for some accredited programs it is a 5- or 7-ye
Summary for 2014-15 Academic Year

NG: All graduate and ABET accredited engineering programs within CENG

ED: Architectural Engineering (ABET accredited)

FES: BioResource & Ag Engineering (ABET accredited)

OB: Industrial Technology (ATMAE)
Assessment Trends

Following trends can be seen in Engineering program-level assessment:

- Engineering assessment plans range from developing to highly evolved (based on the WASC rubric).

- There is effective use of direct and indirect assessment methods across CENG programs.

- Industry Advisory Boards and employer survey results indicate levels of satisfaction and achievement tied to the 11 ABET-required learning outcomes being measured.
Following examples showcase best practices within the programs.
The committees reexamined course objectives and course content and implemented changes in the mode ofstruction in several courses to gainciencies.

number of other courses were added, dified or eliminated to achieve sired results.
Medical Engineering

Findings revealed students needed solid modeling experience and familiarity with topics in 3F Professionalism and Ethics.

To address this, BMED faculty added a solid modeling class ME 228, now required for all students; and improved coverage of 3F Professionalism and Ethics with more emphasis in BMED 450.
The program was able to identify several issues for program improvement, including the Senior Project design experience, student retention of formation, and variability of faculty teaching effectiveness, and 3F Ethics and Professionalism improvement.
Computer Engineering

e addition of CPE 123 has shifted attitudes towards finding computing more creative and increased 2-yr persistence rates from 73% to 82%.

Another curricular improvement was to move a Discrete Structures course (CSC/CPE 141) to upper division for improved retention of the material.
ent results revealed improvements cused on the ability to design and experiments and analyze and et data. To address this issue, a CSC al Project with rubric was introduced.
er Surveys indicate the MfgE program highly valued by employers.

ent findings identified ethics, cturing engineering programming nd large-scale enterprise IT/IS s as areas for targeted improvement.

ustrial and Manufacturing Engineering
The Cane Framework Engineering MATE program targeted 4 program learning outcomes by assessing the capstone Senior Project, which consists of oral presentation, a written report and poster presentation at a college-wide exposition.

Findings indicated that all of the PLOs measured were being achieved at the expected level.
Based on lower FE Exam scores, BRAE faculty identified several ways to help students prepare for the exam and pass rates have improved dramatically to 66%.
Program Review Goals

Continue to use feedback from the review process into the planning process for the department.

Goal: integrate outcomes/findings of program reviews into the campus planning and budgeting processes, e.g., through negotiating formal action plans with mutually agreed-upon commitments.
Questions or Comments?