Department Advisory Council: Chemical and Biological Engineering

February 19, 2008, 330 Cobleigh Hall

In attendance for the Department Advisory Council were:

John Berg, CHS

Karl Graham, UniField Engineering

Jim Hall, Hall Controls

Julie Morman, 3M

Rod Ray, Bend Research

Report to Faculty

The Chemical and Biological Engineering Department Advisory Council (DAC) met on Tuesday, February 19th with faculty and students to review and comment on planned changes and potential opportunities. Further, the Council completed ABET assessments for the program. This report summarizes the findings and recommendations of the DAC.

- The DAC recommends that a single council continue to advise the department for both Chemical Engineering and Biological Engineering curriculums. The DAC encourages additional members be added to the council with a Biological Engineering background.
- The DAC recommends that the department consider the creation and maintenance of a Montana high school ambassador program for the Chemical and Biological Engineering Department. This would help recruit graduating seniors with an interest in Chemical Engineering.
- The DAC recommends that a 200 level course on contemporary issues in science (energy, sustainability, green engineering) be offered as soon as possible to MSU students. This course would benefit the departments funding, educate students on current and future energy alternatives, and serve as a department outreach to potential engineering students. Guest speakers from the regional energy industry could be used as a resource for this course. A more advanced upper level technical elective on the same subject may be appropriate as resources permit.
- Concerning the potential opportunities for the ChE and BioE dual degrees, BioE minor, and seamless MS degrees; the DAC ranks the following options from most attractive to least attractive from a potential employers standpoint:
 - Seamless MS degree in ChE, Environmental, or BioE.
 - Dual degree in ChE and BioE.
 - Minor in BioE.

Report to Faculty (continued)

ABET Assessment Results

- The DAC found that the Department is meeting the outcomes based on the
 evidence in the CHBE 411 Design Reports, FE Exam results, and survey results
 (alumni, employer, and senior exit). The 411 Design reports were useful in
 assessing program outcomes. The assessment rubric was a good tool to
 perform the outcome assessments.
- The DAC recommends that the department send out the ABET assessment material in advance of next years council meeting. This would allow much of the assessment activity to be done in advance of the meeting.
- The DAC compliments the Chemical and Biological Engineering faculty and staff on delivering a high quality engineering program to MSU students. The assessment results show impressive evidence of the high technical skill level and preparedness of MSU Chemical Engineering graduates.