Department Advisory Council: Chemical and Biological Engineering
March 9, 2009, 330 Cobleigh Hall

In attendance for the Department Advisory Council were:

John Berg,	CHS
Karl Graham,	UniField Engineering
Jim Hall,	Hall Controls
Dick Zollars,	Washington State University
Ben Mossman,	BP

Report to Faculty

The Chemical and Biological Engineering Department Advisory Council (DAC) met on Monday, March 9th with faculty and students to review 2008 goals and comment on future 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 evaluated the following ABET accreditation categories
  Students will have:

  B. The ability to design and conduct experiments as well as to analyze and interpret data

  C. The ability to design a system, component, or process to meet desired needs

  D. The ability to function on multi0disciplinary teams

  G. The ability to communicate effectively

  H. Broad education necessary to understand the impact of engineering solutions in a global / societal context

  I. Recognition of the need for and ability to engage in lifelong learning

  J. Knowledge of contemporary issues

- The DAC found all the areas listed above to be performing at, or well above average. The lowest performing area was “C”, the ability to design a system, component, or process to meet desired needs. The committee felt Senior Capstone reports to be weak in the areas of process related safety issues and communication through the use of process flow diagrams.

- The DAC felt both staff and students both demonstrated exceptional research ability as evident in Final Design Reports, Senior Lab Results, Coursework, and discussions with students.

- The DAC recommends the following to demonstrate competency in the area of multi-discipline teams

    - The DAC felt the assessment rubric presented by Dr. Carolyn Plumb for ENGR 310 was a good measure and should be maintained

    - The DAC felt the selection of projects carries a very important role in the learning opportunity for ENGR 310. The committee recommends addition of pre-defined structured problem statements, so members from each engineering discipline can contribute to the technical design.

    - The DAC recommends internship evaluations be continued and encouraged (in addition to ENGR 310) as a 3rd party evaluation of program.

- 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 complements the Chemical and Biological Engineering faculty and staff on delivering a high quality engineering program to MSU students.

Non-ABET Related Feedback from DAC

- The DAC recommends the College of Engineering and the Chemical and Biological Engineering Department consider the use of Alumni as ambassadors / marketing tools for engineering within Montana's High Schools.

- The DAC recommends incorporation of personnel with experience outside of academia into the program through direct employment and/or guest lecturers.