

Comments from the 1997 ABET Visit

The aerospace engineering program was well organized and extremely responsive in its interactions with the visiting team. The involvement of selected constituents in the visit preparation and conduct was good. All deficiencies identified in the previous visit appear to have been addressed. Of particular note is the improvement in the quality of both the undergraduate laboratories and student advising.

Students are well qualified and enthusiastic. They appear to be aware of the educational objectives of the program. They report that advising by the faculty has shown improvement.

The program educational objectives were developed utilizing input from key constituencies. These objectives are well articulated to the public. Processes appear to be in place to allow for the involvement of constituents in the ongoing assessment and refinement of these objectives. Most recently these processes were utilized to enhance the outcome of the program's curriculum redesign effort associated with the semester conversion.

A reasonable system is in place to assess achievement of objectives, but evidence of thorough analysis of the assessment information and evidence of the resulting systematic improvement in program effectiveness as required by criterion 2(d) was lacking. Similarly, while tools for assessment of key program outcomes appear to be in place, evidence was lacking as to how the results of these outcomes measures were being applied to further develop and improve the program, as required by Criterion 3. The program is encouraged to continue its efforts to refine these tools, particularly in the area of student portfolios.

It appears that students are developing the desired attributes of both Criterion 3 and the aerospace engineering program criteria. Students corroborated that later course work consistently builds upon outcomes of earlier work. Evidence in the form of course work and outcomes survey results demonstrate student abilities to communicate effectively. Students expressed a desire to have access to the required technical writing course earlier in the curriculum. There was also some suggestion that coordination among the controls courses is not always consistent.

The professional component of the curriculum is well designed and is responsive to the needs of the various constituencies. The design component is exceptionally strong and is reflective current industry trends and needs. Aerospace student teams are consistently high achievers in various engineering design competitions. This level of performance amongst peers is certainly viewed as an important outcomes measure for which continued emphasis is encouraged. The synergy between the graduate program in design and the undergraduate design experience is a strength of the program and worthy of further development.

Program faculty display a breadth of competency across the important sub-disciplines of aerospace engineering. They appear knowledgeable with respect to EC 2000 and, in general, seemed to be supportive of the continuous improvement process. Interaction between the faculty and aerospace industry is very strong. Involvement with external bodies, such as the Boeing led industry-university-government roundtable, appear to be very valuable to the program.

The facilities of the program are good. Ongoing efforts to upgrade undergraduate laboratories are applauded. Computer resources are a short-term concern for students who do not yet own a computer. Plans are in place to provide backup computer access to students.