UNIVERSITY OF WASHINGTON Industrial Engineering

A Community of Innovators

September 24, 2008

Graduate School Council Members The Graduate School Office of Academic Programs Box 353770

Subject: IE Response to the Program Review Committee Report

Dear Graduate School Council Members:

The program review committee provided a thorough and comprehensive review of the Industrial Engineering Program. The findings and recommendations are an accurate reflection of the program and the potential for improvement in the future. It is notable that all three degree programs (BSIE, MSIE and PhD) are mentioned in the strengths category.

IE has already begun to respond to the challenges mentioned in the report and is in the process of revising its strategic plan to reflect these directions. Actions are underway to follow many of the recommendations presented.

First, IE has submitted a request for departmental status to Dean Matthew O'Donnell for his consideration and referral to higher administrative levels.

Second, IE has begun to address faculty size. An offer letter for a new faculty hire is under consideration by a prospective candidate at the mid career level (beginning Associate Professor). This position is 75% IE and 25% Civil and Environmental Engineering. This candidate has research interests that combine a basic IE area (human factors), with both key strategic research directions recommended by the review committee. Her research is related to transportation (automobile safety from the perspective of driver distractions) and health systems (traumatic brain injuries resulting from automobile accidents). She will be a collaborator with the transportation group in the Department of Civil and Environmental Engineering and also with the trauma center at Harborview Medical Center. She would also have a natural potential for collaboration with the Department of Environmental Health and Safety. Additionally, IE has received permission from the College of Engineering to begin a search for a mid career academic leader for a health systems engineering research focus. This search will involve consultation with many from the list of potential external invitees proposed by the review committee. IE will aggressively pursue opportunities to partner with other units around campus to support new faculty positions. These will include School of Medicine, UW and Children's Hospital, the Department of Global Health (see below) and others.

Third, IE is partnering with the Department of Global Health in research projects and proposals to support collaborative work. IE is also continuing collaboration with School of Medicine units, including the Departments of Radiology and Echocardiography and Children's Hospital. One IE faculty member will be teaching a course in the Master of Health Administration program (both the on campus and executive degrees) for the Department of Health Services. It is hoped this will lead to additional collaboration in research.

Fourth, IE is beginning to develop a proposal to extend the GISE program to an executive Masters of Systems Engineering.

IE will continue its strong interaction with local industry, through the Visiting Committee, undergraduate senior design projects in local companies, the internship program for undergraduate and graduate students and the student professional society activities. The demand for IE graduates by local, national and international companies and Universities remains strong.

Alumni and industry have joined to help support IE in the past year by funding a Student's First scholarship endowment. An additional graduate student endowment fund has been developed.

The GPSS report presents a description of graduate student perceptions. Some are a function of the size of IE (both good and bad situations). The sense of community, approachability of faculty and small class sizes are all among the positives of small size. Lack of graduate courses and availability of only one faculty member per general area of research are negatives associated with small size. IE has reached into the local professional community to provide additional graduate classes. This can have varying levels of teaching quality. However, IE monitors and mentors affiliate faculty in teaching and either works to improve courses before they are offered again, or does not offer them again.

Research funding levels for IE faculty around the country typically average \$100K per year, even at the top institutions. The funding levels at UW IE are in this range. The fact that all PhD students have been funded is a strength. Funding of Master's students is less common in all IE programs.

Two specific actions are underway to address issues raised in this report. First, in addition to the CIDR TA mentoring program, IE has instituted a graduate student peer to peer TA mentoring session. It has also arranged for a regular TA workshop series, run by the assistant director of CELT, to be provided to graduate students, beginning this academic year. Second, IE will finalize and publish a graduate student grievance procedure.

It is my belief that IE has grown in quality over the past 5 years and is firmly established as a high quality operating unit of the University. The three degree programs are strong, successful and in high demand. Research output is both increasing and developing a focus that will help increase our visibility internally and externally. Collaborative research work is being conducted by every member of the faculty. IE has shown it is fully capable of supporting and running its three degrees. I request that the Council recommend continuation of the three degrees, with the next review scheduled at the normal 10 year cycle.

Sincerely,

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Richard Lee Storch Professor and Director