

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

EP.05.22

Office of the Provost and Vice Chancellor
for Academic Affairs

Swanlund Administration Building
601 East John Street
Champaign, IL 61820



March 3, 2005

Abbas Aminmansour, Chair
Senate Committee on Educational Policy
Office of the Senate
228 English Building, MC-461

Dear Professor Aminmansour:

Enclosed are copies of a proposal from the College of Engineering to Transfer the Industrial Engineering Program from the Department of Mechanical and Industrial Engineering to the Department of General Engineering and Rename the Two Departments.

This proposal has been approved by College of Engineering; it now requires Senate review.

Sincerely,

Keith A. Marshall, Ph.D.
Assistant Provost

Enclosures

c: C. Livingstone

RECEIVED

FEB 17 2005

PROPOSAL TO THE UIUC SENATE COMMITTEE ON EDUCATIONAL POLICY
February 16, 2005

OFFICE of the PROVOST

TITLE OF THE PROPOSAL:

Transfer the Industrial Engineering Program from the Department of Mechanical and Industrial Engineering to the Department of General Engineering, and Rename the Two Departments

SPONSOR:

David E. Daniel, Dean
College of Engineering

BRIEF DESCRIPTION:

Request to the Senate: (1) Transfer the Industrial Engineering (IE) Program from the Department of Mechanical and Industrial Engineering (MIE) to the Department of General Engineering (GE); and (2) as a consequence of this transfer, change the name of the MIE Department to the Department of Mechanical Engineering (ME) and the name of the GE Department to the Department of Industrial and Enterprise Systems Engineering (IESE).

The goal of this proposed reorganization is to strengthen our College of Engineering and better position it to sustain long-term excellence. The reorganization will enable the College to enhance the excellence and impact of what is today the GE Department and the IE Program for the future advancement of these programs and the College.

There will be no immediate change in degree programs. A new degree program, Bachelor of Science in Industrial and Enterprise Systems Engineering, which will combine the best characteristics of the two current degrees in separate tracks, is expected to be developed later by the IESE unit, but is not a part of this proposal.

All faculty members in the GE Department and IE program will be invited to join the IESE unit, and those who do will be on an equal footing. Those IE faculty members from the MIE Department who choose to remain in the ME Department may do so, and anyone who wishes to be relocated to a different department will be assisted in the transition.

JUSTIFICATION:

The proposed reorganization addresses several issues with respect to our current organization: (1) the historic small size of the existing IE program (by joining forces with what is now GE in a Department of IESE, the size of the IE faculty and student body should grow significantly over time, which will enhance excellence, recognition, and impact); (2) the "general engineering" name lacks national recognition and association with a recognized discipline (by joining forces

with the IE program in a unit with industrial engineering in its name, this limitation would be minimized); (3) there is a natural convergence of GE with IE already in progress – most of the latest faculty hires in GE, for instance, have been of people with IE degrees, and the reorganization will tend to promote efficiency and enhance impact; and (4) the intersection of industrial engineering with enterprise systems engineering creates a natural environment for a single academic department that will establish national and international preeminence. This proposal requests approval for an administrative change that will, along with other steps, position the IESE Department to become a powerhouse in “industrial and enterprise systems engineering.”

The Case for Reorganizing Industrial Engineering. The IE program has a rich tradition of quality and productivity within the MIE Department. The IE program’s work in manufacturing, in close collaboration with ME, has been particularly significant. However, the IE program has always been relatively small, and, as a result, has had difficulty competing with top-ranked IE programs. We have about 8 faculty members in IE, whereas the top-ranked IE programs typically have at least 20 to 30 faculty members. The proposed reorganization will place the IE program in a unit whose name begins with “industrial engineering” and immediately create a department of about 24 faculty members (preliminary indications are that about 24 of the 28 current faculty members in GE and IE will choose to be faculty members in the IESE Department). Over time, it is expected that the IESE unit will compete successfully with the very best industrial engineering programs. Reorganization is a key component of a strategy to empower our IE program to achieve the level of preeminence and national impact expected of all programs in Engineering.

The Case for Change in General Engineering. The Department of General Engineering has a large and successful undergraduate program, and a rich tradition of educating students broadly. The GE Department has articulated a clear vision to develop the business side of engineering and recently created new MS and PhD degrees in “Systems and Entrepreneurial Engineering (SEE).” The GE Department’s vision for the future has similarities with current trends in many leading IE Departments, which are expanding into non-industrial systems including supply, distribution, information handling, medical care, financial services, and safety. By combining with IE in a Department of IESE, the GE Department will gain a recognizable disciplinary name from association with “industrial engineering,” a larger mass of faculty and students, improved national visibility and impact, and new synergy between “enterprise systems engineering” and “industrial engineering.” Reorganization is a key component of a strategy for GE to build on its strengths and increase its national visibility and impact.

The Case for the College. Building strong capability in industrial and enterprise systems engineering is essential to the economic vitality of the nation. Excellence in these disciplines is very important for any top-quality engineering school. The proposed reorganization would strengthen the national impact of what is today GE and IE, and would simultaneously strengthen the College of Engineering. The impact will not be instantaneous – it will take time for programs to coalesce and for new faculty to be hired into the main thrust areas of the unit.

What Would Happen If We Preserve the Current Organizational Structure? The IE program, if left in the MIE Department, is unlikely to attain the critical mass needed to move into the top group of IE programs. The GE Department would likely request a name change to “Systems and

Entrepreneurial Engineering” or something to that effect. If this occurs, the GE Department would likely continue to expand into and develop the enterprise systems engineering area, probably hiring additional faculty members with IE backgrounds. Thus, with the status quo, we can anticipate a significant duplication of effort at the intersection between the GE Department and the IE Program. We would not be able to achieve the desired impact or efficiency with a diluted organization and resources.

Alternative Reorganization Plans. An alternative plan proposed by the MIE Department is to expand the IE program within the MIE Department, and when it reaches critical mass, split it off into a new IE Department. While this is theoretically possible, it is not a practical strategy for two reasons: (1) we are in a period of declining budgets and reduced resources, and we simply do not have the money to expand IE within MIE and meet the numerous pressing needs elsewhere in the College, including needs in mechanical engineering; and (2) it does not account for the GE Department, which has a large body of undergraduate students and rapidly growing capabilities in areas that interface with industrial engineering. It is far less expensive and far more efficient to build IE through combination with GE because when combined with GE, the faculty size is around 24, and with anticipated retirements in GE in the larger faculty base, there is an internal resource pool to draw upon now and in the longer term that would not drain other departments. Further, GE is hiring IE faculty anyway, and it would be expensive and wasteful to duplicate these investments in separate units. Finally, there is significant overlap in courses, with GE and IE faculty teaching very similar and perhaps duplicative courses. By combining IE and GE, significant cost reductions and efficiencies are realized that simply would not exist were we to invest in IE within the MIE Department. To build IE within MIE would be very costly to other units in the College, would be inefficient and wasteful, and would still not address the inevitable need to combine these units at some point. Thus, the only practical and fiscally responsible way to achieve critical mass and national preeminence in IE is through the proposed reorganization.

Summary. There are only two practical options: preserve the status quo, which will not generate the critical mass necessary to position us to compete successfully with the nation’s best IE programs, or reorganize, which will be stressful and disruptive in the short term but which will create the necessary critical mass. The Dean of Engineering feels a responsibility to lead our College toward excellence and national leadership in all its programs and, accordingly, despite the near-term disruption, strongly recommends in favor of the proposed reorganization for the long-term benefit and success of these programs and the College.

SUMMARY OF PROCESS:

In 2003 the Dean of Engineering formed a GE-IE Reorganization Committee to explore three options: status quo, IE form own department, or a new/combined department. The committee reported on the advantages and disadvantages of reorganization, and the College’s Executive and Administrative Committees recommended proceeding with reorganization planning.

Later in 2003, a second committee was formed to study reorganization in greater detail. The GE and IE faculty groups did not reach consensus, and the Committee outlined two separate views about a new department. The IE faculty envisioned a department that operates primarily within a

traditional IE discipline. The GE faculty was in favor of a department that would encompass a broader scope, including areas currently covered by the GE Department. The facilitators of the Committee (who were not GE or IE faculty members) outlined a plan for creating the combined department, taking elements from both group's position. A faculty meeting was held to discuss the reorganization and to provide faculty input to the College of Engineering Executive Committee. The proposed reorganization was brought to a vote at the Executive Committee in April, 2004, and the vote was 12-1 in favor of reorganization.

Because there were still disagreements between IE and GE, the Dean allowed several months for faculty representatives to talk about some of the specifics of reorganization. These discussions provided useful input but did not lead to consensus agreement. In December, 2004, the Dean consulted with both the Executive and Administrative Committees, and the verbal responses from both indicated unanimous or near unanimous support for continuing with the reorganization process, even though some people in the affected units might not agree with the reorganization.

PREVIOUS DEPARTMENTAL REORGANIZATIONS:

The last time the College reorganized units was about 15 years ago when the Department of Ceramics and the Department of Metallurgy were merged into Materials Science and Engineering (MatSE). The merger was contentious. However, the merger evolved from an acrimonious situation 15 years ago to yield the nation's No. 1 ranked MatSE program today. Maintaining separate ceramics and metallurgy units would have been easier at the time, but the decision would have crippled our ability to compete with the nation's best programs today.

The MatSE situation 15 years ago is similar in some respects to the IE-GE situation today. The national trend then was to merge ceramics and metallurgy units into a MatSE unit with broader scope, e.g., to include polymers and biomaterials. The national trend today is away from general engineering programs (no other leading engineering college has a GE department) and toward IE programs with a more broadly defined scope.

Perhaps the best example of a similar merger at a peer institution is the merger of three engineering departments at Stanford University. In 2000, Stanford merged three departments (Industrial Engineering and Engineering Management, Engineering-Economic Systems, and Operations Research) into a new Department of Management Science and Engineering. The Department was formed with 32 faculty members and without divisions. The merger was not without considerable disagreement. Today, Stanford's IE program is ranked in the top 10, and the Department has become one of the most popular and successful engineering departments at Stanford.

BUDGETARY AND STAFF IMPLICATIONS:

a. Additional Staff and Dollars Needed

No new staff or financial investment is required to implement the proposed reorganization. Any investments made are not required for the proposed reorganization, but, instead, are part of the College's strategy to take advantage of this reorganization to increase the national impact of what are today's GE and IE programs.

The most immediate strategic need is to increase the number of industrial engineering faculty, which is sub-critical with respect to the number necessary to compete with top-ranked IE programs. More IE faculty positions are needed. Additional resources will be made available by the College to expand the faculty in critical areas of core research in IESE. This expansion and resource allocation is already occurring naturally; the GE Department has recently hired several new faculty members with IE degrees to replace faculty members with other backgrounds, reflecting its shifting emphasis toward entrepreneurial engineering. Several additional retirements will occur fairly soon within GE, which provides further opportunity to augment the IE component of the IESE Department without additional cost to the College or other units within the College. The College will augment the transition process with several additional faculty slots, as needed. These additional slots are too few in number and spread over too long a time period to impact significantly the overall budget. Further, in the long run, each Department in the College must compete for faculty slots based on needs and opportunities. Thus, budget requirements from the College for faculty slots in IESE are viewed as transition costs to accelerate the pace of positive impact associated with reorganization.

A commitment is made to replace any faculty losses from MIE to the IESE unit. About four such transfers are anticipated. It will likely take at least two years to replace these positions. The number and timing are too few to impact significantly the overall budget of the College, which hires about 20 new faculty members each year. Again, in the long run, each Department must compete for faculty slots based on needs and opportunities, and ME's faculty count will be adjusted up or down depending on its case for resources. The faculty slot commitment a transition cost designed to accelerate the pace of positive impact from reorganization and position all to be even more successful in the future.

Additional College resources may be needed in other areas, as well, such as space and staff. As soon as department formation is imminent, the College will launch a fund raising campaign to develop resources that can assist the Department in achieving excellence.

Thus, overall, while no direct budget requirements are associated with the reorganization, the College views this reorganization as creating an opportunity for increasing national impact. While there is a small transition cost planned to accelerate positive impact from reorganization, the proposed reorganization will ultimately create a more efficient organization with much less overlap between the GE and MIE Departments in the IE arena, and make more efficient use of resources. Any short-term costs will be more than offset by long-term efficiencies. Like nearly all aspects of this reorganization, it is the long-term benefits (both impact and budget) that make this reorganization compelling.

b. Internal Reallocations (e.g. change in class size, teaching loads, student-faculty ratio)

The proposal recommends that the existing undergraduate and graduate degree concentrations in both General Engineering and Industrial Engineering continue unchanged in the renamed department. No immediate impact on class size, teaching loads, or student-faculty ratio is envisioned.

c. Effect on course enrollment in other departments and implications of discussions with representatives of those departments

Both Industrial Engineering and General Engineering have developed significant collaborations with other units in the College and across campus. These collaborations will continue unchanged since no impact is proposed nor anticipated on current academic programs or course offerings.

d. Impact on library, computer use, laboratory use, equipment, etc

No immediate impact on library, computer, or laboratory use is envisioned.

e. Other Parameters

Various issues concerning reorganization have been discussed and, although not truly part of this request, are presented below for informational purposes to document the College's expectations and commitments in several important areas:

- 1) All current GE and IE faculty will have the option to join the IESE Department. Those faculty members currently in GE or IE who do not wish to be part of IESE, or whose interests are not aligned with the research thrust areas of the new department, as outlined below, may request to be relocated to units in which their interests are better aligned. Any IE faculty member who prefers to remain in the ME Department will be allowed to do so. The Dean of the College of Engineering will assist all faculty members in finding the best home for each individual. Affiliate, 0% time, and split appointments will be considered, as appropriate, to meet the needs of individual faculty members and units.
- 2) Initial research thrust areas in the IESE Department are expected to include the following:
 - Decision Systems and Engineering Statistics
 - Engineering Design
 - Financial and Entrepreneurial Engineering
 - Human Behavior and Ergonomics
 - Large Scale & Complex Systems
 - Manufacturing Systems
 - Modeling, Simulation and Control of Dynamical Systems

- Operations Management
- Operations Research and Optimization
- Robotics and Automation

Faculty members in the IESE Department may associate themselves with any number of the above thrusts based on their current interests and activities. The above list does not preclude the addition or deletion of research thrust areas in the future. We expect the thrust areas to evolve over time. It is expected that the IESE Department will develop preeminence with focus on the specific core areas of industrial engineering and enterprise systems engineering.

- 3) The faculty will work as soon as possible to draft bylaws for Department governance. There will be no formal division in the Department. Area Committees may be created for the sole purpose of coordinating staffing of required and elective courses and preparing the PhD Qualifying exam.
- 4) Following approval of the new department by the Faculty Senate, the College will begin a comprehensive national search for a Department Head. The head of GE will not automatically or necessarily become the Head of IESE. Rather, a comprehensive national search will be conducted. The search committee will involve faculty who wish to be a part of IESE, as well as faculty from other units as is customary in the College. The expectation is that the Department Head will be an eminent scholar fully capable of leading a Department of Industrial and Enterprise Systems Engineering to national preeminence. The expectation is that the department head would be identified in time to become the founding Department Head on August 16, 2006.

GUIDELINES FOR UNDERGRADUATE EDUCATION:

The new unit will begin initially with no change in degrees to minimize disruption to existing students and courses. A new degree program is expected to be developed, to be called Bachelor of Science in Industrial and Enterprise Systems Engineering, as quickly as possible, but is not part of this proposal. The IESE Department will administer the BS in Industrial Engineering and the BS in General Engineering when the reorganization becomes effective (August, 2006, is the planned date). The two undergraduate degrees may be modified to create a common curriculum during the first two years and a common senior design course in the final year. Students not on probation may transfer freely between the two degree programs. The modified GE and IE degrees will be offered until such time as the new degree receives ABET accreditation, at which point they will be phased out.

FREQUENTLY ASKED QUESTIONS:

1. *Will anyone lose his or her job as a result of reorganization?* No.
2. *Will any student's ability to pursue his or her IE or GE degree be affected?* No.
3. *Why "Industrial and Enterprise Systems Engineering" for the Department name?* This name was recommended by the Executive Committee of the College. "Industrial" was selected for obvious reasons, since the IE degree will be housed in the department. The less clear part of the name is "enterprise systems engineering." The GE Department recently created a degree in "Systems and Entrepreneurial Engineering" to reflect its emphasis on the business side of engineering. Thus, capturing "systems" and something related to business was desired. The table below lists the names of the top-ranked IE programs (*U.S. News* rankings for graduate programs). The IESE name is different from other institutions. However, selection of a unique name can be positive. For example, Stanford's recently created (from merger) Department of Management Science and Engineering has a different name that has proven to be very attractive; the Department has drawn large numbers of students to the Department, which offers an IE degree. The IESE name could be changed in the future if a better name emerges. Some of the more popular alternatives mentioned in recent months are "Industrial and Systems Engineering" and "Industrial and Management Systems Engineering."

Rank	Institution	Department Name	No. of Faculty
1	Ga. Tech	Industrial and Systems Engineering	61
2	Michigan	Industrial and Operations Engineering	27
3	Purdue	Industrial Engineering	31
4	Penn State	Industrial and Manufacturing Engineering	26
5	Berkeley	Industrial Engineering and Operations Research	21
6	Texas A&M	Industrial Engineering	21
7	Northwestern	Industrial Engineering and Management Sciences	17
7	Stanford	Management Science and Engineering	33
9	Virginia Tech	Industrial and Systems Engineering	28
10	Wisconsin	Industrial Engineering	28

4. *How will promotion and tenure of faculty be handled?* Those faculty members who choose to join in the IESE unit will have their appointment in that unit. Promotion and tenure processes in the unit will follow normal procedures. With reorganization, we will be expanding the number of IE faculty and will recruit senior faculty with tenure to serve as mentors, and utilize other senior faculty members in the College to serve as mentors for more junior faculty members.
5. *Will faculty be forced to join the IESE Department?* No. The current IE faculty members in MIE may join the IESE Department if they wish, or remain in the ME Department. All current GE faculty members may remain in the renamed IESE Department or request transfer to a different department, if they so desire. Preliminary

conversations with faculty members in the GE and IE programs indicate that few desire to transfer to another Department, and no problems are anticipated for those who might wish to transfer.

6. *Will the IE's be outnumbered by the GE's?* Initially, yes. The GE faculty size is currently 20, and the IE faculty count is 8. Nearly all the GE faculty members and roughly half the IE faculty members are expected to become part of the IESE Department. However, several faculty members in GE have IE degrees, and the College is committed to hiring additional IE faculty members immediately to support rapid development of the new unit. The goal is that the groups be of roughly equal size as quickly as possible to create a balanced department. The funds for faculty positions will come partly from retirements in these units (several GE faculty members are approaching retirement age) and partly from an infusion of College dollars, as a transition investment. Over the long term, each department will have a size determined by need and opportunity. Further, there will be considerable efficiency of instruction achieved as courses are cross-listed or combined, and the faculty members work together in curriculum development, which will free up resources.
7. *Will all the GE faculty members choose to join the IESE Department?* Preliminary indications that most (perhaps all) probably would.
8. *Will all the IE faculty members in MIE choose to join the IESE Department?* Preliminary indications are that roughly half of the 8 IE faculty members will join the IESE Department. Some faculty members who do not wish to join IESE have degrees in mechanical engineering and have close ties and strong collaborations with mechanical engineers. Remaining in ME makes more sense for such people. Some may choose not to join because they disagree with the proposed reorganization or are not convinced that the new department will be strong in the areas of industrial engineering that are most important to them.
9. *How will courses be taught if some IE faculty members do not join the IESE Department?* Several (about 5) of the required IE courses are essentially identical to GE courses, but are taught separately now. These courses could be cross-listed and taught by GE faculty. Some courses can be taught by other faculty members. Remaining courses can be taught by IE-trained faculty in the IESE Department or covered during the transition period by those faculty members who choose not to join the IESE Department. We are committed to building a preeminent program and will hire faculty as necessary to build core areas. Although some finesse may be required, all the courses can be covered.
10. *Is there a commitment to merge graduate degrees into a common degree?* Not at this time. As the IESE Department begins to evolve and mature, the merger of separate graduate degrees into a single degree is a possibility, if not probability.
11. *Won't we lose the special character of the GE degree when we go to a single undergraduate degree?* No. The expectation is that the combined IESE degree, to be developed later, will have two tracks: an IE track and an "enterprise systems

engineering (GE)" track. The current IE and GE degrees are essentially identical today in the first two years. We expect that one track would closely mimic the current GE degree, and the other the IE degree. While there may be some modifications from current degrees in the two tracks, the expectation is that these tracks will preserve the special qualities that make both current degrees so valuable. A single degree works extremely well in other departments with diverse tracks. For example, the Department of Civil and Environmental Engineering has just one degree (civil engineering), but many tracks; the first two years of the tracks differ little. But in the last two years, tracks such as structural engineering and environmental engineering offer an entirely different set of courses. There are tremendous efficiencies in offering a single degree with multiple tracks. And everyone in the unit benefits from the fact that our CEE Department is often ranked No. 1 in the nation. The Department draws strength from the single degree, but the special character of the different tracks is clear and preserved. It is the expectation that those who value the current GE or IE degree will find that value enhance, not degraded, from a combined IESE degree.

12. *What would be involved in combining the GE and IE degrees into a single IESE degree?* The process of combining degrees is lengthy and requires input from all stakeholders, including alumni. The Department would first propose the change, which would be discussed and vetted, and then presented to various committees (including the Faculty Senate) for discussion and approval. In addition, the degree would have to be ABET accredited. We would not want to stop admitting freshmen to the GE and IE degree programs until we received ABET accreditation and had time to work the change into the system. And anyone already in the GE or IE degree programs would be allowed to complete those degrees. To make these changes and start admitting freshmen to the IESE degree would probably take several years.
13. *How can one be certain that the GE and IE undergraduate degrees will be combined into a single IESE degree in the future?* No guarantee can be made of future decisions, but the expectation for such a combination is clearly stated as part of this proposal. Further, it is expected that the IESE undergraduate degree would capture the best elements of what is currently contained in the GE and IE degrees, building on rather than discarding the strengths of the degree programs.
14. *Why not include the new degree with this proposal?* The process of developing and approving the new degree, and receiving ABET accreditation, will take several years. It is best not to delay reorganization for such a long period. The Department can make great progress while simultaneously working on a combined degree.
15. *Will this change harm ME?* The synergy between manufacturing in IE and ME has been a strong point of our IE program housed in MIE. This synergy can continue. The loss of faculty lines from MIE to the IESE Department will not be allowed to negatively impact ME. Any faculty positions lost from MIE to the IESE Department will be replaced by new faculty lines in ME. We expect about 4 of the IE faculty to transfer to the IESE Department, so the number of faculty lines involved is small. It will likely take 2 to 3 years to replace these positions, so the commitment is spread over time. Since the College controls faculty lines, in the long run, the number of faculty in the ME

Department will be determined by need and opportunity, just like all other departments. The commitment of faculty lines is meant to bridge the transition and accelerate the positive impact of the transition in the near-term, and does not necessarily represent a permanent investment, if the ME Department's performance cannot justify the positions over time. Other steps are being taken to strengthen ME, which has a very large student body and a strong case for more resources. This reorganization presents an opportunity to sharpen the focus in the ME department on mechanical engineering and position it to compete even more effectively with the nation's best ME programs.

16. *Why are resources available to assist with growth of IE with this reorganization, but not for growth of IE within MIE?* Because the IESE unit will combine about 20 faculty members from GE with 4 from IE to create a unit with at least 24 faculty members. This is coupled with 600 undergraduates from GE and 60 from IE, to create a student body of 660 undergraduates. There is budgetary power in these combined numbers. The periodic retirements and turnover from a pool of 24 faculty members is sufficient to ensure an ability to invest from this internal resource base. Most of the needs of the unit in terms of faculty positions can be handled from this existing resource base, rather than requiring reallocation of resources from other units in the College. Also, overlap is minimized, which produces efficiency; courses are combined, producing efficiencies and freeing up resources. Alternatively, if we were to invest in new faculty lines to increase the size of IE within the MIE Department, we would have to take those resources from other units, which would hurt those units and the College. And we would eventually face the same problems of overlap that we face today, only on a larger and more-difficult-to-solve scale. The cost for the College to increase the size of the IE program through combination with GE is significantly less because of leveraged resources and efficiencies.
17. *Will there be a change in department head when the reorganization occurs?* The head of the GE department at the time that the IESE Department begins will not automatically continue as the department head of the IESE unit. Because the IESE Department will have taken on an additional degree program and IE faculty from MIE, the focus has necessarily broadened, and a search for a new department head is appropriate, with involvement by all the faculty joining the IESE Department. A comprehensive national search for the head of IESE is expected to be initiated after the Faculty Senate approves reorganization, with the hope of having that head in place when the reorganization takes effect.
18. *Will the new department head be an IE?* We recruit department heads based on academic credentials, knowledge, vision, and leadership ability, and not based on their degree title. It is not unusual for a department head to have a PhD in a different field than the name of the department (the MatSE or ECE Department Head, for instance, might have a PhD in Physics), but in all cases the person has a deep understanding of the opportunities and challenges in the Department, and has a strong ability to lead that Department. The next department head could quite possibly be an IE because the nation's leading IE departments produce large numbers of highly qualified people in both industrial engineering and "enterprise systems engineering." But IE Departments are not the only ones producing academic experts in these areas. The new head of the

IESE Department will be a nationally recognized scholar and leader who is fully capable of leading the IESE Department to a position of national preeminence in industrial and enterprise systems engineering. We will be looking for a leader who can build bridges and lead all the faculty and students in the Department.

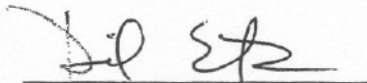
19. *Will the Department head be an external person?* The College has traditionally conducted comprehensive national searches for most department head positions, and selected the best person. Sometimes that person is from within UIUC, and sometimes not. One can expect this same process in the future.
20. *What will happen to gift funds in MIE intended for IE?* We will examine gift fund agreements carefully and adhere to the terms and restrictions of the gift. Where there is some flexibility, we will attempt to direct the gift to the logical use, consistent with the donor's intentions.
21. *What about scholarships, fellowships, professorships, chairs, etc.?* The new IESE unit will initially lack some of the resources of long-established units, such as MIE. The College will use its gift resources to serve as a bridge and to ensure that the IESE Department initially has adequate scholarships, fellowships, faculty scholars, professorships, chairs, etc., to attract and retain the very best students and faculty and to compete with the best programs in the country. Over time, the IESE Department is expected to have its own gift and discretionary resources, consistent with other engineering departments.
22. *Will all the current areas of emphasis in GE and IE be continued in the future in the IESE Department?* No. The same can be said of any department. Areas of emphasis evolve and change over time in all units. The goal is national leadership, and in that context, the areas of emphasis in the future will be consistent with areas of greatest interest in industrial and enterprise systems engineering, which have changed, are changing, and will continue to change. As faculty members leave or retire, the unit will have to weigh its options and hire people in areas of greatest need and opportunity.
23. *How can we be sure that the size of the IE faculty and student body will grow over time?* There is a commitment right now to hire new faculty in IE to speed the transition. The undergraduate student body in IE is small (about 60), while that in GE is quite large (about 600). By bringing the students together in a common department, it seems inevitable that the student participation in IE will increase. Nationwide, IE programs have large enrollments (often larger than more than half the departments in a college), so the fundamentals seem to be solid. The future in the areas covered by IESE looks very bright.
24. *How does the Dean's status affect reorganization?* Dean David Daniel recently announced that he will be leaving the University of Illinois in June 2005 to assume another position. Dean Daniel hopes to get the bulk of the work done in moving this proposal forward before his departure. An interim dean should be named during the Spring 2005 semester, and the two will coordinate the transition and carry the process forward.

25. *What if the interim dean disagrees with this proposal?* Highly unlikely. Verbal feedback indicates that this proposal has the support of all or nearly all the faculty representatives of the College's Executive Committee and the leaders of the College (department heads and laboratory directors). Most or all seem to feel that we should move forward quickly and get this matter resolved as soon as possible. If the interim dean disagrees with the proposal and will not support its advancement, then the Committee on Educational Policy and the Provost's office will need to work with the interim dean to determine the appropriate action.

CLEARANCES:

The proposed reorganization has the support of the College Administrative Committee and the College Executive Committee. Votes will be taken and transmitted to the Educational Policy Committee very soon. Votes will be taken among faculty in the GE Department, the MIE Department, and within the IE Program in the MIE Department, and also transmitted promptly to the Educational Policy Committee. Voting is for informational purposes and for use by the Educational Policy Committee in its evaluation of the proposal.

SUBMITTED BY:

 2/16/05
David E. Daniel, Dean Date

STATEMENT FOR PROGRAMS OF STUDY CATALOG:

Editorial changes throughout the bulletin are included.

EFFECTIVE DATE:

August 16, 2006