

UNIVERSITY OF ILLINOIS
AT URBANA - CHAMPAIGN

EP.10.41

Office of the Provost and Vice Chancellor
for Academic Affairs

Swanlund Administration Building
601 East John Street
Champaign, IL 61820



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MAR 10 2010

OFFICE OF THE SENATE

March 10, 2010

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

Dear Professor Aminmansour:

Enclosed is a copy of a proposal from the College of Engineering to revise the BS in General Engineering in the Department of Industrial and Enterprise Systems Engineering (IESE).

This proposal has been approved by the College of Engineering Executive Committee. It now requires Senate review.

Sincerely,

Kristi A. Kuntz
Assistant Provost

KAK/dkk

Enclosures

c: I. Adesida
R. Dennis
S. Kamin
C. Livingstone
J. Pang
M. Rood
R. Srikant
C. Tucker

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

College of Engineering
Executive Committee
306 Engineering Hall, MC-266
1308 West Green Street
Urbana, IL 61801



RECEIVED
FEB 25 2010
OFFICE of the PROVOST

February 24, 2010

Andrea Golato
Associate Dean
Graduate College
204 Coble Hall
MC-322

Via: Ilesanmi Adesida, Engineering College

Dear Ms. Golato:

The College of Engineering Executive Committee has reviewed and approved the following:

Revised Programs: **Revision to the Undergraduate Curriculum in Industrial Engineering**
Revision to the Undergraduate Curriculum in General Engineering

Attached is a copy of the request.

Sincerely yours,

Samuel N. Kamin, Secretary
Executive Committee

Approval Recommended:

Ilesanmi Adesida, Dean
College of Engineering

2/24/10
Date

SNK/rd
Enclosure

c: Jong-shi Pang
R. Srikant
Mark Rood
Chuck Tucker
Michael Pleck
Robin Dennis

Proposal to the Senate Educational Policy Committee

PROPOSAL TITLE: Revisions to the B.S. Degree in General Engineering, Department of Industrial and Enterprise Systems Engineering, College of Engineering.

SPONSOR: Jong-Shi Pang, Professor and Head, Department of Industrial and Enterprise Systems Engineering, 116 Transportation Bldg, 244-5703, jspang@illinois.edu

COLLEGE CONTACT: Charles Tucker III, Associate Dean, 206 Engineering Hall, 244-3822, ctucker@illinois.edu

BRIEF DESCRIPTION: It is proposed to change the requirements for the B.S. degree in General Engineering (GE) as summarized below. The revised program will have 128 credit hours, a reduction of 3 hours from the existing curriculum.

1. Orientation and Professional Development (reduced from 1 to 0 credit hours)

Revision:

GE 100—Introduction to IESE (0 hr) – revised from current 1-hour version titled Intro to General Engineering

2. Foundational Mathematics and Science (increased from 30 to 31 credit hours)

Addition: (+2 hr)

PHYS 213—Univ Physics: Thermal Physics (2 hr)

Subtraction: (–2 hr)

PHYS 214—Univ Physics: Quantum Physics (2 hr)

Replacement: (+1 hr net change)

MATH 415—Applied Linear Algebra (3 hr) – in place of MATH 225—Introductory Matrix Theory (2 hr)

3. General Engineering Technical Core (reduced from 54 to 51 credit hours)

Subtraction: (–3 hr)

GE 400—Engineering Law (3 hr)

Replacements: (no net change)

IE 300—Analysis of Data (3 hr) – in place of GE 331—Analyt Methods for Uncertainty (3 hr)

IE 310—Operations Research (3 hr) – in place of GE 330—OR Methods for Profit & Value (3 hr)

4. Social Sciences & Humanities, Composition, and Free Electives. (no change, 28 credit hours)

ACP certification will be sought for GE 494 to fulfill the General Education requirement. Currently, it is met by GE 400

JUSTIFICATION:

The Industrial and Enterprise Systems Engineering (IESE) Department has periodically revised its undergraduate curricula with the goal of delivering contemporary and relevant programs of study. The main impetus for this revision is the recommendation by the College of Engineering Executive Committee, Ad-hoc Subcommittee on Undergraduate Education (February 8, 2008), that all engineering undergraduate programs target 128 hours for graduation while ensuring strength in basic sciences as well as interdisciplinary concepts and engineering systems design. An equally important driving force is the goal of developing a common first two years in the Industrial Engineering (IE) and General Engineering (GE) undergraduate programs, which is also compatible with many other undergraduate programs in the College. This will facilitate transfers between programs in IESE and others in the College of Engineering. As a corollary to this is the development of maximum cohesiveness between IE and GE undergraduate programs in the 3rd and 4th years, while retaining the strongest and most successful characteristics of each.

General Engineering is a comprehensive and interdisciplinary program in basic sciences, engineering sciences, and engineering design that emphasizes problem solving with a unique orientation toward real-world partnerships with industry. The Program provides a broad background in mechanics and structures, control systems, and decision-making that supports a systems approach to engineering that includes technical and commercial feasibility. The curriculum offers opportunities to develop a strong emphasis on integrated engineering and business principles such as product valuation, process control, entrepreneurship, engineering economics, project management and teamwork,

Within the context of these broad objectives, the rationale for the specific changes is as follows:

1. Orientation and Professional Development

Prior to the formation of the IESE department, GE 100 served as the orientation to the then GE department and GE curriculum. With the IE program now administered by the new IESE department, the title change is logical. The credit reduction of one hour to zero is appropriate since GE 100 is a partial-semester course, is only attendance-based, and no longer has a lab component.

2. Foundational Mathematics and Science

PHYS 214 is being replaced with PHYS 213 because PHYS 213 was found to be core knowledge essential to both GE and IE undergraduate programs, including later course work and the capstone senior engineering project course. On the other hand, PHYS 214 was found

to be non-essential to later courses and project work. In a companion proposal, a component of the IE undergraduate program revision is to retain PHYS 213 as a required course and no longer require PHYS 214. In sum, this change is one of the key elements in attaining the goal of a common first two years in the IE and GE curricula.

MATH 225 is being replaced with MATH 415 primarily because MATH 415 will provide a more comprehensive coverage of linear algebra and matrix analysis essential for courses encountered later in the curriculum. In addition, this change helps to achieve the goal of attaining maximum cohesiveness in the third and fourth years of the IE and GE curricula.

3. General Engineering Technical Core

In this proposal GE 400—Engineering Law is being dropped as a required course in the Technical core and added to the 12-hour track in the GE curriculum called a "Secondary Field of Concentration." The primary reason for this change is that it enables the goal of a 128-hour curriculum to be met, while at the same time it permits any GE student to take GE 400 within the 128-hour curriculum if he or she wants to. This is done through the following opportunities: (1) GE 400 will become a mandatory course in the three most popular business-related Secondary Fields, which together account for about one-third of GE students; (2) GE 400 will be permitted to be taken as an elective in *any* Secondary Field, if desired; (3) GE 400 will be permitted to be taken as a free elective; (4) GE 400 will be permitted to be taken as a College of Engineering "liberal education elective." With these four options available, it is expected that the majority of GE students will still take GE 400. However, students in technical or other non-business Secondary Fields will not be required to take GE 400 if they prefer to take an additional course in that field.

Since the IE program came under IESE's administration, IE 300 and IE 310 have been taught in 'meets-with' mode with GE 331 and GE 330 respectively, which are required in the GE curriculum. Having a common course in each case streamlines management and abides by the common sense rule of not having cross-listed or meets-with courses within the same department. Under this proposal, the IE versions will prevail since the subject areas are more closely aligned with the IE field; GE 330 and 331 will be discontinued.

4. Composition

Currently, both GE 400—Engineering Law and IE 470—Senior Engineering Project are ACP-certified. Since the IE program came under IESE's administration, IE 470 has been taught in 'meets-with' mode with GE 494+495—Senior Engineering Project I+II. Having a common ACP-certified senior design project course streamlines management and abides by the common sense rule of not having cross-listed or meets-with courses within the same department. Under the proposal, the GE versions will prevail since the additional credit awarded is deemed appropriate; IE 470 will be discontinued.

In addition to the rationale as outlined above, the proposed changes will also maintain a GE undergraduate curriculum with the following additional desirable features:

- Preparation for advanced study and research at leading engineering institutions
- Preparation for professional employment in industry in a wide variety of industrial engineering fields
- Satisfaction of accreditation requirements by the appropriate board (ABET)

BUDGETARY AND STAFF IMPLICATIONS:

a. Additional staff and dollars needed

Since the proposed curriculum results in a reduction in credit hours (from 132 to 128), no additional staff or dollars will be needed. Everything required to implement the revised program is already in place. With the stated goal of better meshing the GE program with the IE program in a way that is consistent with the strategic directions of the recently merged IESE department, economies of scale will result.

b. Internal reallocations

The change of status of GE 400, described in subsection 3 of the Justification, is expected to result in a decrease in GE 400 enrollment of about 40 GE students annually. This will not significantly affect the course, since it enrolls large numbers of non-GE students from all departments in the College of Engineering. The reduction is estimated as follows: More than one-third of GE undergraduates currently choose Secondary Fields of Concentration that will require GE 400, and the remaining students take Secondary Fields that will permit it as an elective. Assuming that about 50% of students with the option will elect to take GE 400, then about two-thirds of GE students will take GE 400 and about one-third will not. Therefore the course will see a reduction of about 40 GE students annually. No internal reallocations are expected as a result of this change.

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

The Physics department will see a shift of about 125 GE students enrolling annually in PHYS 213, who had previously taken PHYS 214. This redistribution will not impact the total number of course lab and discussion sections across the two courses, and won't affect the number of lecture sections.

d. Impact on the University Library

We expect no significant change since this is not a new program.

e. Impact on computer use, laboratory use, equipment, etc.

We expect no significant change in computer use since this is not a new program, and since no new facilities or equipment requirements have been added.

DESIRED EFFECTIVE DATE: Fall, 2010

STATEMENT FOR PROGRAMS OF STUDY CATALOG: See Appendix.

CLEARANCES:

Signatures:

Jonq. Sl. PAK
Unit Representative:

Feb. 04, 2010
Date:

[Signature]
College Representative:

2/24/10
Date:

Graduate College Representative:

Date:

Provost Representative:

Date:

Educational Policy Committee Representative:

Date:

Appendix: Statement for the Programs of Study Catalog

Reviewer Remark: The *Overview of Curricular Requirements* section shown with Track Changes markup to the existing 2009-10 Programs of Study statement to facilitate comparison with the *Brief Description* section of the proposal narrative. The *Suggested Sequence* shows how the changes would be incorporated into the typical eight-semester completion of the curriculum requirements.

Industrial and Enterprise Systems Engineering

iese.illinois.edu

Head of Department: Jong-Shi Pang

Department Office: 117 Transportation Building, 104 South Mathews, Urbana, (217) 333-2731

Curriculum in General Engineering

iese.illinois.edu

Undergraduate Program Office: 209 Transportation Building

Fax: (217) 244-5705

For the Degree of Bachelor of Science in General Engineering

General Engineering is a comprehensive, interdisciplinary program emphasizing real-world problem solving through a unique orientation toward partnerships with industry. It brings together basic sciences, engineering sciences, and engineering design. The curriculum offers flexibility through the Secondary Field Option, while providing a broad background in mechanics and structures, control systems, and decision making that support a systems approach to engineering.

General Engineers understand how to apply business fundamentals to promote utilization of new technology, engage in entrepreneurship, and succeed in engineering and nonengineering careers. The curriculum emphasizes the integration of engineering and business principles, preparing students to apply both functions to bring a product from invention to market.

Design experience and project management are emphasized and integrated across the core with a focus on establishing critical problem-solving skills applied across disciplines, strong communication skills, and the ability to work effectively and get results in a team environment.

The capstone experience for General Engineering undergraduates is the Senior Design Project Course. Students work collaboratively with industry and a team of faculty members on a real-world problem during their final semester. The results are documented in a final written report and a formal presentation at the end of the semester to the company so that the student recommendations may be implemented.

Overview of Curricular Requirements

The curriculum requires ~~128~~¹³¹ hours for graduation and is organized as follows.

Orientation and Professional Development

These courses introduce the opportunities and resources your college, department, and curriculum can offer you as you work to achieve your career goals. They also provide the skills to work effectively and successfully in the engineering profession.

Hours	Requirements
0	ENG 100—Engineering Orientation ¹
0 1	GE 100— Introduction to IESE Intro to General Engineering ¹
0	GE 390—General Engineering Seminar
0 1	Total

1. External transfer students take ENG 300—Engrg Transfer Orientation instead.

Foundational Mathematics and Science

These courses stress the basic mathematical and scientific principles upon which the engineering discipline is based.

Hours	Requirements
3	CHEM 102—General Chemistry I
1	CHEM 103—General Chemistry Lab I
4	MATH 221—Calculus I ¹
2	MATH 225—Introductory Matrix Theory
3	MATH 231—Calculus II
4	MATH 241—Calculus III
3	MATH 285—Intro Differential Equations
3	MATH 415—Applied Linear Algebra
4	PHYS 211—University Physics: Mechanics
4	PHYS 212—University Physics: Elec & Mag
2	PHYS 213 214 —Univ Physics: Thermal Quantum Physics
3 130	Total

1. MATH 220—Calculus may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.

General Engineering Technical Core

These courses stress fundamental concepts and basic laboratory techniques that comprise the common intellectual understanding of general engineering.

Hours	Requirements
3	CS 101—Intro Computing: Engrg & Sci
4	ECE 110—Intro Elec & Computer Engrg

2	ECE 211—Analog Circuits & Systems
3	GE 101—Engineering Graphics & Design
1	GE 161—Business Side of Engineering
3	GE 310—General Engineering Design
3	GE 311—Engineering Design Analysis
1	GE 312—Instrumentation and Test Lab
4	GE 320—Control Systems
3	GE 330—OR Methods for Profit & Value
3	GE 331—Analyt Methods for Uncertainty
3	GE 400—Engineering Law
3	GE 424—State Space Design for Control
3	GE 494—Senior Engineering Project I
2	GE 495—Senior Engineering Project II
3	IE 300—Analysis of Data
3	IE 310—Operations Research
3	TAM 211—Statics
3	TAM 212—Introductory Dynamics
3	TAM 251—Introductory Solid Mechanics
4	TAM 335—Introductory Fluid Mechanics
5154	Total

Secondary Field Option Electives

These courses enable the student to tailor the studies to one's interests and career goals in both technical and nontechnical areas.

Hours	Requirements
12	Secondary field option electives selected from lists established by the department or by petition to the department. See the Secondary Field Options section below .

Technical Electives

The design elective augments a student's knowledge in one or more subdisciplines of mechanics and structures, control systems, and decision making that support a systems approach to engineering. The engineering science elective extends the knowledge of that area.

Hours	Requirements
3	Design elective selected from the list of Design Electives established by the department.
3	Engineering science elective selected from the list of Engineering Science Electives established by the department.
6	Total

Social Sciences and Humanities

The social sciences and humanities courses, as approved by the College of Engineering,

Hours	Requirements
3	ECON 102—Microeconomic Principles or ECON 103—Macroeconomic Principles
15	Electives in social sciences and humanities approved by the College of Engineering and satisfying the campus general education requirements for social sciences and humanities, including cultural studies western and non-western.
18	Total

Composition

These courses teach fundamentals of expository writing.

Hours	Requirements
4	RHET 105—Principles of Composition
	Advanced Composition (satisfied by completing GE 494 400 in the General Engineering Technical Core)
4	Total

Free Electives

These unrestricted electives, subject to certain exceptions as noted at the [College of Engineering advising Web site](#), give the student the opportunity to explore any intellectual area of unique interest. This freedom plays a critical role in helping students to define research specialties or to complete minors.

Hours	Requirements
6	Free electives. Additional unrestricted course work, subject to certain exceptions as noted at the College of Engineering advising Web site , so that there are at least 128 ¹³¹ credit hours earned toward the degree.

Secondary Field Options

Secondary field options are of two types: preapproved and customized. Preapproved secondary fields have designated titles and a specified list of courses, from which several may be selected.

Approval for the substitution of a course for one on the specified list may be requested via a petition form submitted to the department. Customized secondary fields may be created to achieve goals in areas not provided by preapproved fields. To do this, a suitable title and all the courses must be petitioned for acceptance by the department. Petition approval is based on the merit of the secondary field and the coherence of the courses within it relative to the student's goals.

Pursuit of campus minors, dual degrees, and James Scholar contracts may be integrated with customized secondary field options. Courses taken may be applied to minors, dual degrees, or contracts as well as secondary field options.

Preapproved Secondary Fields

Preapproved secondary fields are listed below. Approved courses for each are specified at the department's [secondary field Web site](#). The following course substitutions may be used interchangeably to comply with prerequisites of specified courses in some of the secondary fields:

- CEE 202, GE 331, IE 300, STAT 400/MATH 463
- CEE 201, GE 330, IE 310
- MSE 406/ME 330, CEE 300/TAM 324
- ECE 486, GE 320, ME 340

Students may petition to the department for inclusion of a course in the secondary fields listed below. The most likely classes to be accepted are nonpermanent and experimental offerings relevant to the various fields. A current list of these may be found at the department's [secondary field Web site](#).

- [Automotive Engineering](#)
- [Bioengineering¹](#)
- [Business Systems Integration and Consulting](#)
- [Civil Engineering Structures](#)
- [Communications and Computer Systems](#)
- [Computer-Aided Design and Manufacturing \(CAD/CAM\)](#)
- [Computer Science¹](#)
- [Construction](#)
- [Control Systems](#)
- [Engineering Administration](#)
- [Engineering Marketing](#)
- [Environmental Quality](#)
- [Manufacturing Engineering¹](#)
- [Nondestructive Testing and Evaluation](#)
- [Operations Research](#)
- [Quality Control](#)
- [Rehabilitation Engineering](#)

- [Robotics](#)
- [Theoretical and Applied Mechanics](#)

1. Students fulfilling the corresponding Campus Minor may simultaneously use some courses to complete the requirements of this General Engineering secondary field option.

Customized Secondary Fields

Customized secondary fields differ from preapproved ones in that no sets of specified courses to choose from have been predefined. For all customized secondary field options, a course list must be constructed and submitted for approval by the department.

The following list contains examples of over sixty titles of customized secondary field options which have been approved. The complete list may be found at the department's [secondary field Web site](#). Additional titles beyond those listed may be proposed.

- A foreign language (several)
- An engineering discipline (several)
- Biology
- Business
- Chemistry
- Economics
- Finance
- International Studies
- Mathematics
- Military Science
- Pre-Law
- Pre-Med
- Religious Studies
- Renewable Energy

Suggested Sequence

The schedule that follows is illustrative, showing the typical sequence in which courses would be taken by a student with no college course credit already earned and who intends to graduate in four years. Each individual's case may vary, but the position of required named courses is generally indicative of the order in which they should be taken.

First year

Hours	First Semester
3	CHEM 102—General Chemistry I
1	CHEM 103—General Chemistry Lab I
0	ENG 100—Engineering Orientation
0+	GE 100— Introduction to IESE Intro to General Engineering

3-4	GE 101—Engineering Graphics & Design or RHET 105—Principles of Composition ¹
4	MATH 221—Calculus I ²
3	Elective in social sciences or humanities ³
14- 15 15-16	Total

Hours	Second Semester
3	CS 101—Intro Computing: Engrg & Sci
4	ECE 110—Intro Elec & Computer Engrg
2	MATH 225—Introductory Matrix Theory
3	MATH 231—Calculus II
4	PHYS 211—University Physics: Mechanics
4-3	RHET 105—Principles of Composition or GE 101—Engineering Graphics & Design ¹
18- 17 17-16	Total

Second year

Hours	First Semester
3	CS 101—Intro Computing: Engrg & Sci
1	GE 161—Business Side of Engineering
4	MATH 241—Calculus III
4	PHYS 212—University Physics: Elec & Mag
3	TAM 211—Statics
3	Elective in social sciences or humanities ³
15 14	Total

Hours	Second Semester
3	IE 300—Analysis of Data GE 330—OR Methods for Profit & Value
3	MATH 285—Intro Differential Equations

2	PHYS 213 214 —Univ Physics: Thermal Quantum Physics
3	TAM 212—Introductory Dynamics
3	TAM 251—Introductory Solid Mechanics
3	Elective in social sciences or humanities ³
17	Total

Third year

Hours	First Semester
2	ECE 211—Analog Circuits & Systems
3	GE 310—General Engineering Design
4	GE 320—Control Systems
3	MATH 415—Applied Linear Algebra
3	Secondary field option elective ⁴
3	Elective in social sciences or humanities³
15	Total

Hours	Second Semester
3	GE 311—Engineering Design Analysis
1	GE 312—Instrumentation and Test Lab
3	GE 331—Analyt Methods for Uncertainty
0	GE 390—General Engineering Seminar
3	GE 424—State Space Design for Control
3	IE 310—Operations Research
3	Secondary field option elective ⁴
3	Elective in social sciences or humanities ³
16	Total

Fourth year

Hours	First Semester
3-5	Elective in social sciences or humanities³ GE 400—Engineering Law⁵ or⁶⁵ GE 494—Senior Engineering Project I ⁵⁶ and GE 495—Senior Engineering

	Project II
4	TAM 335—Introductory Fluid Mechanics
3	Design elective ⁷
3	Engineering science elective ⁸
3	Secondary field option elective ⁴
16-18	Total

Hours	Second Semester
5-3	GE 494—Senior Engineering Project I ⁵⁶ and GE 495—Senior Engineering Project II or ⁶⁵ <u>Elective in social sciences or humanities³</u> GE 400—Engineering Law⁵
3	Secondary field option elective ⁴
3	Elective in social sciences or humanities ³
6	Free electives
17-15	Total

1. RHET 105 may be taken in the first or second semester of the first year as authorized. The alternative is GE 101.

2. MATH 220—Calculus may be substituted, with four of the five credit hours applying toward the degree. MATH 220 is appropriate for students with no background in calculus.

3. Each student must satisfy the 18-hour social sciences and humanities requirements of the College of Engineering, including ECON 102 or 103, and satisfy the campus general education requirements for social sciences and humanities. It is highly recommended that ECON 102 or 103 be taken before the fourth semester.

4. To be selected from the [lists of Secondary Field Option Electives](#) established by the department or by petition to the department.

5. GE 494 and GE 495 may be taken in the first or second semester of the fourth year as authorized. The alternative is an elective in social sciences or humanities. ~~Satisfies the General Education Advanced Composition requirement.~~

6. Satisfies the General Education Advanced Composition requirement. ~~GE 494 and GE 495 may be taken in the first or second semester of the fourth year as authorized. The alternative is GE 400.~~

7. To be selected from the [list of Design Electives](#) established by the department.

8. To be selected from the [list of Engineering Science Electives](#) established by the department.

Draft Minutes
College of Engineering Executive Committee (EC) Meeting
Tuesday, 1:00 p.m., February 23, 2010
301 Engineering Hall

Present:

M. Bragg (Admin)**	B. Heuser (NPRE)	C. Tucker (Admin)
N. Cheng (MNTL)	D. Jones (ECE)	B. Vojak (Admin)**
V. Coverstone (Admin)	S. Kamin (CS)	M. Wong (CSL)
B. Cunningham (BioE)	M. Rood (CEE)	S. Zehr (Admin)**
G. Dullerud (MechSE)	R.S. Sreenivas (IESE)	H. Zhao (ChBE)
R. Gates (ABE)*	C. Thompson (Admin)**	

Absent:

I. Adesida (Admin)	P. Goldbart (Phys)	J. Weaver (MatSE)
B. Conway (AE)	P. Kalita (ABE)	

* = alternate, ** = guest

1. The meeting was called to order at 1:00, Mark Rood presiding.

2. Approval of the Draft Minutes from February 16, 2010.
The minutes were approved unanimously (one abstention).

3. New/Old Business

Discussion of Draft Bylaws for Bioengineering Graduate Program – Brian Cunningham
This topic was postponed to the next meeting.

Final Report on Climate Study for Students – Brent Heuser
This topic was postponed to the next meeting.

Executive Committee Communications with College of Engineering – (1:30 p.m.) –

Bruce Vojak, Sarah Zehr, Charles Thompson, and Mike Bragg

Brian Cunningham gave a brief overview of his and Paul Goldbart's subcommittee report on improving communication between the EC and the rest of the college. Sarah Zehr explained what the college is doing in this area. Chuck Thompson showed how the web pages are set up and discussed the "wiki." This is a space for internal communication in the COE (in contrast to the public, "outward-looking" website); the advantage is that it can be edited directly, while allowing fine control of access. Chuck showed how this could be used for EC documents. The discussion centered on how to ensure appropriate access to each posted document – making sure that the right people can see it and the wrong people can't. Mike Bragg asked the EC for guidance on what kinds of information should be made available to COE faculty from the COE website, on the "additional resources" link (<http://engineering.illinois.edu/faculty-staff/additional-resources>). Sarah asked what would be the best way to communicate from the COE to faculty – email or phone. The consensus was to use email, but Doug Jones opined that faculty members are not necessarily interested in general information about what is happening at the COE; they become engaged when they are personally interested, or when they are being asked to contribute something personally. In conclusion, Bruce Vojak summarized the administration's problem thusly: "How do we find out the 'word on the street'?"

4. Course and Program Proposals/Reports

a. New/Revised Course and Program Proposals

- Phys 100 _Revision "Thinking About Physics"

The EC voted not to send this proposal to an ad hoc committee, and **approved it unanimously.**

- ECE 460 _Revision "Optical Imaging"

The EC voted not to send this proposal to an ad hoc committee, and **approved it unanimously.**

b. Subcommittee Report

- GE Revision to B.S. Curriculum

The ad hoc committee's positive recommendation was endorsed unanimously.

5. The meeting adjourned at 2:25.

The minutes have not yet been approved.

Respectfully submitted,



Sam Kamin, Secretary

cc: Robin Dennis
Michael Pleck

**Senate Educational Policy Committee
Proposal Check Sheet**

PROPOSAL TITLE (Same as on proposal): Revision To The B.S. Degree In General Engineering, Department Of Industrial And Enterprise Systems Engineering (Iese), College Of Engineering

PROPOSAL TYPE (Please select all that apply below):

A. ☒ Program and degree proposals

1. This proposal is for a graduate program or degree

☐ Yes ☒ No

2. **Degree** proposal (e.g. B.S.A.E., M.S.C.E.)

☐ New degree - - please name new degree name: _____

☒ Revision of an existing degree - - please name of the existing degree to be revised:
B.S. General Engineering

3. **Major** proposal (disciplinary focus e.g. Mathematics, Mechanical Engineering)

☐ New major - - please name new major: _____

☐ Revision of an existing major - - please indicate the name of the existing major to be revised: _____

4. **Concentration** proposal (e.g. Financial Planning)

☐ New concentration - - please name new concentration: _____

☐ Revision of an existing concentration - - please name the existing concentration to be revised: _____

5. **Minor** proposal (e.g. Cinema Studies)☐ New minor - - please name new concentration: _____☐ Revision of an existing minor - - please name the existing concentration to be revised: _____6. ☐ Proposal for terminating an existing degree, major, concentration or minor

Please name and nature of the existing degree, major, concentration or minor: _____

7. ☐ Proposal for a multi-institutional degree between Illinois (UIUC) and a foreign institution

Please name the existing Illinois degree or program: _____

Please name the partnering institution: _____

B. ☐ **Proposal for renaming existing academic units** (college, school, department, or program)

Please provide the unit's current name: _____

Please provide the unit's proposed new name: _____

C. ☐ **Proposal for re-organizing existing units** (colleges, schools, departments, or programs)☐ Change in status of an existing and approved unit (e.g. change from a program to department). Please indicate current unit name including status: _____☐ Transfer an existing unit

Please provide the current unit's name and home: _____

Please provide the new home for the unit: _____

☐ Merge two or more existing units (e.g. merge department A with department B)

Name and college of unit one to be merged: _____

Name and college of unit two to be merged: _____

☐ Terminate an existing unit. Please provide the current unit's name and status: _____D. ☐ **Other educational policy proposals** (e.g. academic calendar, grading policies, etc.)

Please indicate the nature of the proposal: _____

From Manssour <manssour@illinois.edu>
to Sheldon Katz <katz@math.uiuc.edu>
Michael Pleck <mhpleck@illinois.edu>,
Hall- Brent <w-hall@uiuc.edu>,
cc Pang-Jong-Shi <jspang@uiuc.edu>,
Philip Best <pbest@uiuc.edu>,
"Krassa, Michael A" <krassa@illinois.edu>,
"Tucker-Charles Charles L. Tucker III" <ctucker@uiuc.edu>
date Thu, Apr 8, 2010 at 11:09 AM
subject Re: Letter of concurrence-Phys 213 (GE & IE Revised
Curriculums)

Dear Sheldon --

Thank you for your kind considerations and strong support. Revision of Math sequence in the new GE-curriculum, will greatly enhance our students abilities in the follow-up courses.

With copy, I am informing of Prof. Michael Krassa of your support.

Thank you,
-Manssour

On 4/8/10 10:58 AM, "Sheldon Katz" <katz@math.uiuc.edu> wrote:

> Dear Manssour,
>
> The Department of Mathematics concurs with this change, and strongly
> supports the efforts within the College of Engineering to enhance the
> mathematics preparation of its students.
>
> Thank you for your patience as I secured the additional resources from the
> College of LAS that were required for the delivery of these courses during
> an era of instructional budget reductions.
>
> Sincerely,
> Sheldon
>
> On Fri, 12 Mar 2010, Manssour wrote:
>
>> Dear Prof. Sheldon Katz --
>>
>> We have been in the process of revising the General Engineering (GE)
>> curriculum which has recently been approved by the College of Engineering
>> Executive Committee and it is now under review by the Senate EdPol
>> Committee. In the new GE curriculum, Math 225 has been replaced with Math

>> 415 and moved to first semester junior year.
>>
>> I presume this change should have minimal impact on your overall enrollment
>> as approximately 100 GE students will be shifting from Math 225 to Math 415.
>> Assuming final approval by late summer, we are planning for ?soft?
>> implementation of the new curriculum this fall. However, proposed changes
>> should not impact you until FA 2012.
>>
>> Per Senate EdPol Committee request, I appreciate receiving a letter
>> (e-mail) of your concurrence with these changes and impact assessment. Your
>> kind attention is very much appreciated and attached please find the new GE
>> curriculum proposal. Please let me know if you have any questions.
>>
>> Thank you,
>> -Manssour
>>
>>
>> *****
>> Manssour H. Moeinzadeh
>>
>> Associate Head
>> Dept. of Industrial & Enterprise Systems Engr
>> University of Illinois at Urbana-Champaign
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>> *****
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Manssour H. Moeinzadeh

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Dear Professor Krassa --

In anticipation of this request, we had asked for letter of concurrence from Physics (copied below) and now will request the same from Math. Will forward Math dept's response as soon as received. Please let me know if is sufficient and if you need any additional information.

Regards,
-Manssour

Manssour H. Moeinzadeh
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From: "Gladding, Gary E" <geg@illinois.edu>

Date: Thu, 4 Mar 2010 17:27:14 -0600

To: "Moeinzadeh, Manssour H" <manssour@illinois.edu>

Cc: Michael Pleck <mhpleck@illinois.edu>, Hall- Brent <w-hall@uiuc.edu>

Conversation: Letter of concurrence-Phys 213 (GE & IE Revised Curriculums)

Subject: RE: Letter of concurrence-Phys 213 (GE & IE Revised Curriculums)

Hi Manssour,

Recently, the enrollments in 213 have been essentially equal to those in 214 in the fall semesters and about 100 to 150 smaller than 214 in the spring semesters. Therefore, if you are shifting perhaps 100 students to 213 from 214, we will be able to accommodate that change.

Gary Gladding, Prof & Assoc Head, Physics

From: Manssour [<mailto:manssour@illinois.edu>]

Sent: Friday, February 26, 2010 2:08 PM

To: Gladding, Gary E

Cc: Michael Pleck; Hall- Brent

Subject: Letter of concurrence-Phys 213 (GE & IE Revised Curriculums)

Dear Gary --

As you may know, in the new and revised GE & IE curriculums recently approved by the COE Executive Committee and currently under review by the Senate EdPol Committee, following changes have been made to the physics requirements:

- 1)- In the GE curriculum: Physics 214 has been replaced by Physics 213, and
- 2)- In the IE curriculum: Physics 214 has been dropped.

I presume these changes should have minimal impact on the overall Physic 213 & 214 enrollment. Assuming final approval by late summer, we are planning for 'soft' implementation of both curriculums this fall. However, proposed changes should impact you in SP 2012.

I appreciate receiving a letter (e-mail) of your concurrence with these changes and impact assessment. Attached please find copies of both GE and IE proposals.

Thank you,
-Manssour