To:

The Faculty of the College of Engineering

From:

The Faculty of the School of Industrial Engineering

Subject:

Curriculum Change for the B.S. Degree in Industrial Engineering

The Faculty of the School of Industrial Engineering has approved the following changes in the minimum degree requirements for the B.S. degree in Industrial Engineering. These changes are based on the changes in the First-Year Engineering Program effective for students entering Purdue in the Fall Semester 2006.

This action is now submitted to the Engineering Faculty with a recommendation for approval.

The implementation of the first-year program into the B.S.I.E. curriculum is summarized below:

- 1. The minimum number of credit hours required for graduation is changed from 125 cr. hrs. to 123 cr. hrs. There are no changes to the number of credits in the sophomore through senior years.
- 2. The plan of study assigns a total of 29 credit hours to the first year (from 31 cr. hrs.)
- 3. CHM 116 (4cr. hrs.) is no longer required.
- 4. CS 158 (2 cr. hrs.) is replaced by CS 159 (3 cr. hrs.).
- 5. ENGR 106 (2 cr. hrs) is replaced by ENGR 126 (3 cr. hrs.).
- 6. PHYS 152 is replaced by PHYS 172.

The suggested plan of study is unchanged for the sophomore, junior, and senior years. The total requirements from sophomore through senior years remain at 94 credit hours.

N. Prabhu Professor and Head School of Industrial Engineering

APPROVED FOR THE FACULTY
OF THE SCHOOLS OF ENGINEERING
BY THE ENGINEERING
CURRICULUM COMMITTEE

ECC Minutes # 10

Date

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CURRENT (from the 2004-2006 Engineering Catalog) **PROPOSED 1** Inimum Degree Requirements for Industrial Engineering Minimum Degree Requirements for Industrial Engineering Credit Hours Required for Graduation: 125 Credit Hours Required for Graduation: 123 Cr. Hrs. Courses Courses Cr. Hrs. Freshman Engineering Program 31 Freshman Engineering Program 29 13 **Mathematics and Physical Sciences Mathematics and Physical Sciences** 13 MA 261, 265, 266; PHYS 241 MA 261, 265, 266; PHYS 241 18 **General Education Electives General Education Electives** 18 **Required Engineering Courses** 48 **Required Engineering Courses** 48 CE 273; ECE 201; IE 230, 330, 332, 335, 336, 343, 370, 383, CE 273; ECE 201; IE 230, 330, 332, 335, 336, 343, 370, 431, 474, 486; ME 200, 270. 383, 431, 474, 486; ME 200, 270. **Technical Electives** 15 **Technical Electives** 15

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lan of Study for Industrial Engineering			Plar	Plan of Study for Industrial Engineering				
Credit Hours Required for Graduation: 125			Credit Hours Required for Graduation: 123					
First Year, see First-Year Engineering Program			Firs	First Year, see First-Year Engineering Program				
Sophomore Year			Sop	Sophomore Year				
Thir	d Semester		_	d Semester				
0	IE 200	Industrial Engineering Seminar	0	IE 200	Industrial Engineering Seminar			
3	IE 230	Probability and Statistics I	3	IE 230	Probability and Statistics I			
3	IE 343	Engineering Economics	3	IE 343	Engineering Economics			
4	MA 261	Multivariate Calculus	• 4	MA 261	Multivariate Calculus			
3	ME 270	Basic Mechanics I	3	ME 270	Basic Mechanics I			
3	General Education	Elective	3_	3 General Education Elective				
16			16					
Four	th Semester		Four	th Semester				
3	IE 330	Probability and Statistics II	3	IE 330	Probability and Statistics II			
3	MA 265	Linear Algebra	3	MA 265	Linear Algebra			
3	NUCL 273	Mechanics of Materials	3	NUCL 273	Mechanics of Materials			
3	PHYS 241	Electricity and Optics	3	PHYS 241	Electricity and Optics			
3	General Education	Elective	3	General Education	Elective			
15			15	_				
Jun	ior Year		Jun	ior Year				
	Semester			Semester				
3	ECE 201	Linear Circuit Analysis I	3	ECE 201	Linear Circuit Analysis I			
3	IE 332	Computing in IE	3	IE 332	Computing in IE			
•	IE 335	Oper Res - Optimization	3	IE 335	Oper Res - Optimization			
	IE 370	Manufacturing Processes I	3	IE 370	Manufacturing Processes I			
3	MA 266	Ordinary Differential Equations	3	MA 266	Ordinary Differential Equations			
3	General Education		3	General Education	· · · · · · · · · · · · · · · · · · ·			
18			18		Licotive			
Civel	ı Semester							
3	IE 336	Oper Res - Stochastic Models		h Semester	Ones Des Casales d'a Madale			
3	IE 383	•	3	IE 336	Oper Res - Stochastic Models			
3	IE 386	Integrated Production Systems I Work Analysis and Design I	3	IE 383	Integrated Production Systems I			
3	ME 200	Thermodynamics I	3	IE 386 ME 200	Work Analysis and Design I Thermodynamics I			
3	General Education		3					
15	_General Estacation	Elective	15	General Education	i Elective			
	ior Year			nior Year				
	enth Semester			enth Semester				
3	IE 474	Industrial Control Systems	3	IE 474	Industrial Control Systems			
3	IE 486	Work Analysis and Design II	3	IE 486	Work Analysis and Design II			
6	Technical Electives		6	Technical Elective				
3 General Education Elective			3	_General Education	ı Elective			
15			15					
Eigh	t Semester		Eigl	nt Semester				
3	IE 431	Industrial Engineering Design	3	IE 431	Industrial Engineering Design			
9	Technical Electives	*	9	9 Technical Electives*				
3 General Education Elective			_ 3	3 General Education Elective				
15			15					
5	Total Credits Req	nired	124	5 Total Credits Re	omired			
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PROPOSED

CURRENT (from the 2004-2006 Engineering Catalog)

^{*} The 15 credit hours of technical elective are chosen from a list of courses approved by the industrial engineering faculty and must include either IE 470 (Manufacturing Processes II) or IE 484 (Integrated Production Systems II), both courses, or one additional 3-credit hour approved technical elective in industrial engineering.

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