Date Submitted: 12/23/21 6:06 pm

Viewing: 10KP0127BS : Industrial

Industrial Engineering, BS

Engineering, **BS**

Last approved: 10/08/21 12:49 pm

Last edit: 02/15/22 10:35 am

Changes proposed by: Heidi Craddock

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1422 Head
- 3. KP Committee Chair
- 4. KP Dean
- 5. University Librarian
- 6. Provost
- 7. Senate EPC
- 8. Senate
- 9. U Senate Conf
- 10. Board of Trustees
- 11. IBHE
- 12. HLC
- 13. DMI

Approval Path

- 01/05/22 2:39 pm Deb Forgacs (dforgacs): Approved for U Program Review
- 2. 01/05/22 3:18 pm Jeff Shamma (jshamma): Approved for 1422 Head
- 3. 02/03/22 11:39 am Brooke Newell (bsnewell): Approved for KP Committee Chair 4. 02/03/22 11:47
 - am Candy Deaville (candyd): Approved for KP Dean
- 5. 02/03/22 11:55 am

- John Wilkin (jpwilkin): Approved for University Librarian 6. 02/03/22 4:15 pm Kathy Martensen
- Kathy Martensen (kmartens): Approved for Provost

History

- 1. Dec 13, 2018 by Deb Forgacs (dforgacs)
- 2. Apr 23, 2019 by Deb Forgacs (dforgacs)
- 3. Aug 9, 2019 by Deb Forgacs (dforgacs)
- 4. Aug 12, 2019 by Deb Forgacs (dforgacs)
- 5. Apr 2, 2020 by Brooke Newell (bsnewell)
- Apr 14, 2020 by Deb Forgacs (dforgacs)
- 7. Jan 8, 2021 by Deb Forgacs (dforgacs)
- 8. Oct 8, 2021 by Brooke Newell (bsnewell)

Major (ex. Special Education)

This proposal is for a: Revision

Administration Details

Official Program Industrial Engineering, BS Name

Sponsor College	Grainger College of Engineering			
Sponsor Department	Industrial and Enterprise Systems Engineering			
Sponsor Name	Carolyn Beck			
Sponsor Email	beck3@illinois.edu			
College Contact	<u>Jonathan Makela</u> Brooke Newell	College Contact Email		
jmakela@illinois.edu				
College Budget Officer	<u>Tessa Hile</u>			
College Budget Officer Email	<u>tmhile@illinois.edu</u>			

List the role for rollbacks (which role will edit the proposal on questions from EPC, e.g., Dept Head or Initiator) and/or any additional stakeholders. *Purpose: List here who will do the editing work if proposal needs rolled back. And any other stakeholders.*

Brooke Newell, bsnewell@illinois.edu, GCOE; Heidi Craddock, hcraddoc@illinois.edu, ISE Department

Does this program have inter-departmental administration?

No

Proposal Title

Effective Catalog Fall 2022 Term Provide a brief, concise description (not justification) of your proposal.

Removed Liberal Education Electives, updated number of free elective hours, and moved footnotes (when possible) into the Program of Study Table (to improve accessibility).

MATH 415 was replaced with MATH 257.

Allowed for students to take CS 124 in place of CS 101 for students that will be pursuing the CS Minor.

IE 413 was replaced with IE 371.

Revised the Track Option (TO) Listings:

- a. Added clarifying text to be consistent throughout all tracks.
- b. Added a Computational Methods in IE track which includes a number of CS courses.
- c. Revised the TO hours to reflect only undergraduate hours.
- d. Added clarifying text to the Economics and Finance TO.
- e. Revised the Human Factors TO to reflect the rubric change from TSM to ETMA.
- f. Revised the Supply Chain, Manufacturing, and Logistics TO to include ME 270.

Added clarifying text for Technical Electives and in the Track Options.

List here any related proposals/revisions and their keys. *Example: This BS proposal (key 567) is related to the Concentration A proposal (key 145) and the Concentration B proposal (key 203).*

Program Justification

Why are these changes necessary?

After careful analysis of programs of studies, various requirements, and course selection for students in The Grainger College of Engineering, we have decided to provide additional flexibility to all engineering undergraduate students by increasing the number of free elective hours in all engineering programs. While the actual number of credit hours for free electives varies by program, within the college - 8 programs currently provide only 6 credit hours for free electives while an additional 2 have less than 10 - only 4 programs have more than 10 free elective credits. This lack of free elective credit hours limits students' abilities to efficiently pursue minors, certificates, and other educational opportunities and potentially limits those opportunities only to students coming in with significant AP credit or similar.

The additional free elective credit hours added to the program of study are obtained through the removal of The Grainger College of Engineering's Liberal Education requirement, which required engineering students to take an additional 6 credit hours above-and-beyond the campus' General Education requirement from the Humanities & the Arts, Social & Behavioral Sciences, or a college-curated list of courses. Over time, the Liberal Education requirement has been revised within the college, successively relaxing restrictions and providing additional choice to students (i.e., removal of a sequencing requirement in 1999; addition of the college-curated course list in 2010). Simultaneously, the college-curated list of courses continued to expand to include courses from approximately 120 rubrics across campus (including within The Grainger College of Engineering), gradually removing constraints to allow greater flexibility of choice for students to take advantage of the many opportunities the campus has to offer. Still, in its current form, this additional college-level requirement constrains student choice and interferes with their ability to efficiently pursue minors, certificates, and other educational opportunities across campus unless those opportunities intersect with coursework in the Liberal Education requirement.

Simultaneously, the required engineering orientation course, ENG 100, will be granted 1-credit hour. Previously, this course was a 0-credit course. The allocation of 1-credit appropriately recognizes the time and commitment expected of all students who take this course. In the 1-credit version of ENG 100, content will be added to improve teamwork and interpersonal skills, including topics related to diversity, equity, and inclusion (DEI). The engineering accrediting agency, ABET, will soon be adding DEI requirements for accredited programs. This component of ENG 100 is therefore beneficial to all Grainger Engineering programs and students by providing a common framework on which additional DEI topics can build throughout a student's program of study.

MATH 415 was replaced with MATH 257 due to the Math Department no longer offering MATH 415 as of Fall 2022.

Allowed for students to take CS 124 in place of CS 101 for students that will be pursuing the CS Minor. As the CS Department changed their curricular requirements and prerequisites, it was necessary for ISE to reflect those changes in our own curriculum to allow for students that wish to pursue CS minors.

IE 413 was replaced with IE 371 which teaches simulation at a level which is more

appropriate for undergraduate students.

Revised the Track Option (TO) Listings:

a. Added clarifying text to be consistent throughout all tracks.

b. Added the Computational Methods in IE track which includes a number of CS courses. This will provide an opportunity for student interested in a deeper understanding of computational methods and computer science.

c. Revised the TO hours to reflect only undergraduate hours rather than undergraduate or graduate hours.

d. Added clarifying text to the Economics and Finance TO because most of the courses should be taken at the junior or senior level.

e. Revised the Human Factors TO reflect the acronym change in TSM 421, TSM 422, and TSM 425. These were changed to ETMA 421, ETMA 422, and ETMA 425.

f. Revised the Supply Chain, Manufacturing, and Logistics TO to include ME 270. The ME 270 course is a prerequisite course for ME 451 and ME 452 and since students cannot take these courses without this prerequisite, we received permission from the Mechanical Science and Engineering Department to include the course within the TO.

Added clarifying text for Technical Electives and in the Track Options so students understand that courses which may appear on multiple lists can only be used for one requirement.

Instructional Resources

Will there be any reduction in other course offerings, programs or concentrations by your department as a result of this new program/proposed change?

No

Does the program include other courses/subjects impacted by the creation/revision of this program?

Yes

Required courses

<u>CS 173</u> - <u>Discrete Structures</u> <u>CS 225</u> - <u>Data Structures</u> <u>MATH 257</u> - <u>Linear Algebra w Computat Appl</u> ME 270 - Design for Manufacturability

Explain how the inclusion or removal of the courses/subjects listed above impacts the offering departments.

The current Liberal Education requirement is satisfied by a student completing 6 credit hours beyond those required by campus' General Education requirement from Humanities & the Arts, Social & Behavioral Sciences, or a college-curated list of courses (containing courses from over 120 rubrics across campus). An analysis of student course selection in the Liberal Education category indicates 25% of courses are taken in the College of Liberal Arts & Sciences, 20% from the College of Applied Health Sciences, 18% from Gies College of Business, 11% from the College of Agricultural, Consumer and Environmental Sciences, 11% from the College of Fine and Applied Arts, and 9% from The Grainger College of Engineering. Less than 2% of credits are taken in each of the remaining colleges and units across campus.

Although it might stand to reason that removal of the Liberal Education requirement would reduce the amount of credits Grainger Engineering students take outside of their home college, the data do not support that assertion. Specifically, despite the current Liberal Education requirement being set at 6 credit hours, the average number of credit hours completed from the Liberal Education course list upon graduation is 11.9. Through discussions with departmental and college advisors as well as students, students are making course selections not because the course satisfies the Liberal Education requirement, but because they are interested in the coursework offered outside of their home college, are pursing minors and other educational opportunities, and are looking to balance course loads between technical and non-technical courses. Taken together, the data and evidence from advisors and students suggest that students will continue to take the types of courses represented on the Liberal Education course list, even if not specifically required to do so.

A subset of IE students will pursue the CS coursework and a CS minor in addition to their degree program. This will not be all students. The ISE Department has the approval from the CS Department for this.

All IE students will be required to complete MATH 257.

A subset of IE students will pursue the Supply Chain, Manufacturing, and Logistics Track Option. This will not be all students. The ISE Department has the approval from the MechSE Department for this.

Attach letters of	<u>CS courses taken by ISE students, Beck signed tp.pdf</u>
support or	ISE_letter_Math_257.pdf
acknowledgement	Support Letter ISE.pdf
from other	Letters of Acknowledgement - Liberal Education Electives.pdf
departments.	

Program Regulation and Assessment

Briefly describe the plan to assess and improve student learning, including the program's learning objectives; when, how, and where these learning objectives will be assessed; what metrics will be used to signify student's achievement of the stated learning objectives; and the process to ensure assessment results are used to improve student learning. (Describe how the program is aligned with or meets licensure, certification, and/or entitlement requirements, if applicable).

Graduates should have:

<u>1.</u> an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

<u>2.</u> an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

3. an ability to communicate effectively with a range of audiences.

<u>4.</u> an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

<u>6.</u> an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies. NA

Is the career/profession for graduates of this program regulated by the State of Illinois?

No

Program of Study

"Baccalaureate degree requires at least 120 semester credit hours or 180 quarter credit hours and at least 40 semester credit hours (60 quarter credit hours) in upper division courses" (source: https://www.ibhe.org/assets/files/PrivateAdminRules2017.pdf). For proposals for new bachelor's degrees, if this minimum is not explicitly met by specifically-required 300- and/or 400-level courses, please provide information on how the upper-division hours requirement will be satisfied.

All proposals must attach the new or revised version of the Academic Catalog program of study entry. Contact your college office if you have questions.

Revised programs Industrial Engineering, BS Side by

<u>Side.xlsx</u>

Attach a side-by-side comparison with the existing program AND, if the revision references or adds "chose-from" lists of courses students can select from to fulfill requirements, a listing of these courses, including the course rubric, number, title, and number of credit hours. Catalog Page Text - Overview Tab

Text for Overview tab on the Catalog Page. This is not official content, it is used to help build the new catalog page for the program. Can be edited in the catalog by the college or department.

Statement for Programs of Study Catalog

Graduation Requirements

Minimum Technical GPA: 2.0

<u>TGPA is required for required Engineering and Technical Elective courses, as well as MATH 257. MATH 415.</u> <u>See</u> <u>Technical GPA</u> to clarify requirements.

Minimum Overall GPA: 2.0

Minimum hours required for graduation: 128 hours

General education: Students must complete the Campus General Education requirements including the campus general education language requirement. One of the SBS courses must be an introductory economics course (ECON 102 (ECON 102 or ECON 103). ECON 103). SE 494 and SE 495 will satisfy a core course requirement and the Campus General Education Advanced Composition requirement.

Specific Advanced Composition courses required for this degree are listedbelow.Orientation and Professional Development

Course List

Code Title Hou	irs	
ENG 100 Grainger Engineering Orientation Seminar (External transfer students take ENG 300.)1		
<u>SE 100</u> Introduction to ISE 1		
<u>SE 290</u> ISE Undergraduate Seminar 0		
Total Hours 2		
Foundational Mathematics and Science		
Course List		
Code Title	Hours	
CHEM 102 General Chemistry I	3	
<u>CHEM 103</u> General Chemistry Lab I		
MATH 221Calculus I (MATH 220 may be substituted. MATH 220 is appropriate for students with no		
background in calculus. 4 of 5 credit hours count towards degree.)		
MATH 231 Calculus II	3	
MATH 241 Calculus III	4	
MATH 257 Linear Algebra with Computational Applications	<u>3</u>	

Code litle	Hours		
MATH 285 Intro Differential Equations			
MATH 415 Applied Linear Algebra			
PHYS 211 University Physics: Mechanics			
PHYS 212 University Physics: Elec & Mag			
PHYS 213 Univ Physics: Thermal Physics			
Total Hours	31		
Industrial Engineering Technical Core			
Course List			
Code Title Hours			
CS 101 Intro Computing: Engra & Sci (CS 124 may be substituted.) 3			
ECE 110 Introduction to Electronics 3			
IE 300 Analysis of Data 3			
IF 310 Deterministic Models in Optimization 3			
IE 360 Eacilities Planning and Design 3			
IF 361 Production Planning & Control 3			
IF 370 Stochastic Processes and Applications 3			
IE 371 Simulation Modeling with Applications for Industrial Engineering3			
IE 400 Design & Anlys of Experiments 3			
IE 413 Simulation 3			
ME 330 Engineering Materials 4			
SE 101 Engineering Graphics & Design			
SE 261 Business Side of Engineering 2			
SE 494 Senior Engineering Project I			
SE 495 Senior Engineering Project I			
TAM 211Station 2			
TAM 212Introductory Dynamics			
TAM 251 Introductory Dynamics 5			
Tetal Hours 5			
Track Option Electives			
Course List			
Code Title	Hours		
Track option electives. Courses selected from departmentally approved lists of Track Option Electives	- 12		
or by petition to the department. The current Track options include:			
Track options include courses selected from departmentally approved lists. Courses on these elective	<u>12</u>		
lists may only be used to fulfill one curricular requirement.			
Computational Methods in IE			
Track Core requirement - complete 2 courses:			
<u>CS 173</u> <u>Discrete Structures</u>	<u>3</u>		
<u>CS 225</u> <u>Data Structures</u>	<u>4</u>		
Track Electives - select remaining courses from this list:			
All 200-, 300-, and 400-level CS courses excluding <u>CS 210</u> , <u>CS 211</u> , <u>CS 397</u> , <u>CS 398</u> , and CS			
seminar and senior project courses.			
Economics and Finance (E&F)			
Track Core - complete 2 courses from this list:			
ACE 427 Commodity Price Analysis	3		
IE 420 Financial Engineering	3		
SE 450 Decision Analysis I	3		

Code	Title	Hours			
Track Electives - select remaining courses from this list of courses. Of these courses, only 1					
selected may be at the 10	0 or 200 level				
<u>ACE 410</u>	Energy Economics	3			
ACE 427	Commodity Price Analysis	3			
ACE 428	Commodity Futures and Options	3			
<u>ACCY 200</u>	Fundamentals of Accounting	3			
ECON 302	Inter Microeconomic Theory	3			
ECON 303	Inter Macroeconomic Theory	3			
ECON 420	International Economics	2 to			
		4			
ECON 471	Intro to Applied Econometrics	2 to			
		4			
FIN 221	Corporate Finance	3			
FIN 300	Financial Markets	3			
FIN 411	Investment & Portfolio Mnat	3			
FIN 412	Ontions and Futures Markets	3			
FIN 415	Fixed Income Portfolios	3			
FIN 461	Banking and Financial Regulation	3			
Human Factors		12			
Track Core complete the	following courses	12			
	Human Factors	4			
<u>IE 340</u> Track Electives complete	nullial factors	4			
Dhysical Erganamics Facus	at least 5 of the following courses.				
Physical Ergonomics Focus		4			
		4			
OF <u>IAM 461</u>	Cellular Biomechanics	2			
	Industrial and Agricultural Safety-Injury Prevention	<u>3</u>			
<u>ETMA 422</u>	Industrial and Agricultural Occupational Illness Prevention	<u>3</u>			
<u>ETMA 425</u>	Managing Industrial and Agricultural Safety Risks	<u>3</u>			
<u>KIN 355</u>	Biomechanics of Human Movement	3			
<u>KIN 401</u>	Measure & Eval in Kinesiology	3 or			
		4			
<u>ME 481</u>	Whole-Body Musculoskel Biomech	3 or			
		4			
<u>ME 482</u>	Musculoskel Tissue Mechanics	3 or			
		4			
TSM 421	Course TSM 421 Not Found				
TSM-422	Course TSM 422 Not Found				
TSM 425	Course TSM 425 Not Found				
Cognitive Ergonomics Focu	S				
<u>SE 450</u>	Decision Analysis I	3 or			
		4			
<u>IE 445</u>	Human Performance and Cognition in Context	3 or			
		4			
Organizational Ergonomics Focus					
<u>ANTH 411</u>	Research Methods in Socio-Cultural Anthropology	3 or			
		4			
ARCH 423	Soc/Beh Factors for Design	3			

Code	Title	Hours		
BADM 310	Mgmt and Organizational Beh	3		
BADM 312	Designing and Managing Orgs	3		
BADM 357	Digital Making Seminar	3		
<u>PSYC 245</u>	Industrial Org Psych	3		
Optional Health Focus				
<u>CHLH 470</u>	Technology, Health, and Aging	3 or 4		
Industrial Engineering Fundan	nentals (IEF)			
Track Core - complete the	following 4 courses:			
<u>IE 330</u>	Industrial Quality Control	3		
<u>IE 411</u>	Optimization of Large Systems	3		
<u>IE 412</u>	OR Models for Mfg Systems	3		
<u>IE 340</u>	Human Factors	4		
Operations Research (OR)				
Track Core - complete the	following 2 courses:			
<u>IE 410</u>	Advanced Topics in Stochastic Processes & Applications	3		
<u>IE 411</u>	Optimization of Large Systems	3		
Track Electives - complete	2 courses from this list:			
<u>ECE 490</u>	Introduction to Optimization	3		
<u>IE 420</u>	Financial Engineering	3		
<u>MATH 444</u>	Elementary Real Analysis	3-4		
or <u>MATH 447</u>	Real Variables			
<u>MATH 484</u>	Nonlinear Programming	3 or		
		4		
<u>SE 411</u>	Reliability Engineering	3		
<u>STAT 410</u>	Statistics and Probability II	3		
or <u>MATH 464</u>	Statistics and Probability II			
<u>STAT 420/ASRM 450</u>	Methods of Applied Statistics	3		
<u>STAT 424</u>	Analysis of Variance	3		
<u>STAT 425</u>	Statistical Modeling I	3		
Quality Engineering (QE)				
Track Core - complete the	following course:			
<u>IE 330</u>	Industrial Quality Control	3		
Track Core Elective - comp	lete at least 1 of the following courses:			
<u>IE 431</u>	Design for Six Sigma	3		
<u>SE 411</u>	Reliability Engineering	3		
Track Elective- complete re	maining courses from this list:			
<u>STAT 410/MATH 464</u>	Statistics and Probability II	3		
<u>STAT 420/ASRM 450</u>	Methods of Applied Statistics	3		
<u>STAT 424</u>	Analysis of Variance	3		
<u>STAT 426</u>	Statistical Modeling II	3		
Supply Chain, Manufacturing	and Logistics (SC&L)			
Track Core - complete the	following course:			
<u>IE 412</u>	OR Models for Mfg Systems	3		
Track Electives - complete	Track Electives - complete 3 of the following courses:			
<u>ECE 470</u>	Introduction to Robotics	4		
<u>IE 330</u>	Industrial Quality Control	3		

Code	Title	Hours		
<u>ME 270</u>	Design for Manufacturability	<u>3</u>		
<u>ME 451</u>	Computer-Aided Mfg Systems	3		
<u>ME 452</u>	Num Control of Mfg Processes 3			
Technica	lElectives			
	Course List			
Code	Title	Hours		
Courses on the	ese elective lists may only be used to fulfill one curricular requirement.			
Computer scie	nce elective selected from the departmentally approved list of Computer Science	3		
Electives below	V:			
<u>CS 225</u>	Data Structures	4		
<u>CS 357</u>	Numerical Methods I	3		
<u>CS 411</u>	Database Systems	3		
<u>CS 450</u>	Numerical Analysis	3		
<u>IE 405</u>	Computing for ISE	3		
IE technical ele	ectives selected from the departmentally approved list of IE Technical Electives below:	3		
<u>IE 330</u>	Industrial Quality Control	3		
<u>IE 340</u>	Human Factors	4		
<u>IE 411</u>	Optimization of Large Systems	3		
<u>IE 412</u>	OR Models for Mfg Systems	3		
<u>IE 420</u>	Financial Engineering	3		
<u>IE 431</u>	Design for Six Sigma	3		
<u>IE 445</u>	Human Performance and Cognition in Context	3		
<u>SE 310</u>	310 Design of Structures and Mechanisms			
<u>SE 320</u>	<u>320</u> Control Systems			
SE 424 State Space Design for Control				
Free Elec	tives			
	Course List			
Code	Title	Hours		
Additional cour	rse work, subject to the Grainger College of Engineering restrictions to Free Electives,	<u>11</u>		
<u>so that there a</u>	re at least 128 credit hours earned toward the degree.			
<u>Total Hours of</u>	Curriculm to Graduate	<u>128</u>		
	Course List			
Code	Title	Hours		
The Grainger C	College of Engineering Liberal Education course list, or additional courses from the	6		
campus Gener	al Education lists for Social and Behavioral Sciences or Humanities and the Arts 4			
Free electives.	Additional unrestricted course work, subject to certain exceptions as noted by the	7		
College, so that	at there are at least 128 credit hours earned toward the degree. 5			
Total Hours of Curriculum to Graduate				
12				
MATH 220%7C may be substituted, with four of the five credit hours applying toward the degree. MATH				
220%7C is appropriate for students with no background in calculus.				
3 Advanced Composition satisfied by completing the combination of SE 494%7C and SE 495%7C. 4				
The Grainger College of Engineering approved liberal education course list can be found here. Note that				
these credit hours could carry the required cultural studies designation required for campus general				
education requ	lirements.			
Sine Grainger College of Engineering restrictions to free electives can be found here.				

Program Features

Academic LevelUndergraduateDoes this majorNohave transcriptedNoconcentrations?YearsWhat is the typical time to completion of this program?4 yearsWhat are the minimum Total Credit Hours required for this program?128CIP Code143501 - Industrial Engineering.Is This a Teacher Certification Program?

No

Will specialized accreditation be sought for this program?

No

Delivery Method

This program is available: On Campus - Students are required to be on campus, they may take some online courses.

Admission Requirements

Desired Effective Admissions Term

Provide a brief narrative description of the admission requirements for this program. Where relevant, include information about licensure requirements, student background checks, GRE and TOEFL scores, and admission requirements for transfer students.

Describe how critical academic functions such as admissions and student advising are managed.

Enrollment

Describe how this revision will impact enrollment and degrees awarded.

These changes will not impact enrollment.

Estimated Annual Number of Degrees Awarded

What is the
matriculation
term for this
program?
Fall

Budget

Are there	No
budgetary	
implications for	
this revision?	
Will the program or r beyond what is curre	revision require staffing (faculty, advisors, etc.) ently available? No
Additional Budget	
Information	
Attach File(s)	

Financial Resources

How does the unit intend to financially support this proposal?

Will the unit need to seek campus or other external resources?

No

Attach letters of support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

Are you seeking a change in the tuition rate or differential for this program?

No

Resource Implications

Facilities

Will the program require new or additional facilities or significant improvements to already existing facilities?

Technology

Will the program need additional technology beyond what is currently available for the unit?

No

Non-Technical Resources

Will the program require additional supplies, services or equipment (non-technical)?

No

Resources

For each of these items, be sure to include in the response if the proposed new program or change will result in replacement of another program(s). If so, which program(s), what is the anticipated impact on faculty, students, and instructional resources? Please attach any letters of support/acknowledgement from faculty, students, and/or other impacted units as appropriate.

Attach File(s)

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.

These changes will not impact our faculty resources.

Library Resources

Describe your proposal's impact on the University Library's resources, collections, and services. If necessary please consult with the appropriate disciplinary specialist within the University Library.

There is no impact to use the Library collections, resources, and services.

EP Documentation

EP Control Number	EP.22.091
Attach Rollback/Approval Notices	ep22091 response from sponsor 20220214.pdf
This proposal requires HLC inquiry	No

DMI Documentation

Attach Final Approval Notices

Banner/Codebook BS:Industrial Engineerng -UIUC

Name

Program Code:	10KP0127BS			
Minor Code 0127	Conc Code	Degree Code	BS	Major Code
Senate Approval Date				
Senate Conference Approval Date				
BOT Approval Date				
IBHE Approval Date				
HLC Approval Date				
Effective Date:				
Attached Document Justification for this request				
Program Reviewer				
Comments				Key: 119

Key			
GREEN HIGHLIGHT = Course addition or requirement replacement RED HIGHLIGHT = Course to be removed from listed requirements			
Yellow Highlight - Revision to requirement			
Current Program of Study		New Program of Study	
Graduation Requirements		Graduation Requirements	
Minimum Technical GPA: 2.0 TGPA is required for required Engineering and Technical Elective courses, as well as MATH 415. See Technical		Minimum Technical GPA: 2.0 TGPA is required for required Engineering and Technical Elective courses, as well as MATH 257. See Technical	
GPA to clarify requirements. Minimum Overall GPA: 2.0		GPA to clarify requirements. Minimum Overall GPA: 2.0	
Minimum hours required for graduation: 128 hours General education: Students must complete the Campus General Education requirements including the		Minimum hours required for graduation: 128 hours General education: Students must complete the Campus General Education requirements including the	
campus general education language requirement. One of the SBS courses must be an introductory economics course (ECON 102 or ECON 103). Specific Advanced Composition courses required for this degree are listed		campus general education language requirement. One of the SBS courses must be an introductory economics course (ECON 102 or ECON 103). SE 494 and SE 495 will satisfy a core course requirement and the Campus	
below.		General Education Advanced Composition requirement.	
Current Requirement	Current Hours	Revised Requirement	Revised Hours
ENG 100: Engineering Orientation ¹	0	ENG 100: Engineering Orientation (External transfer students take ENG 300 instead)	
SE 100: Introduction to ISE SE 290: ISE Undergraduate Seminar	<u> </u>	SE 100: Introduction to ISE SE 290: ISE Undergraduate Seminar	
Foundational Mathematics and Science	31	Foundational Mathematics and Science	31
CHEM 102: General Chemistry I	3	CHEM 102: General Chemistry I ab I	
MATH 221: Calculus I ²	4	MATH 221: Calculus I (Math 220 may be substituted. MATH 220 is appropriate for students with no backgrou	- 4
MATH 231: Calculus II MATH 241: Calculus III	<u> </u>	MATH 231: Calculus II MATH 241: Calculus III	2
MATH 285: Intro Differential Equations	3	MATH 257: Linear Algebra with Computational Applications MATH 285: Intro Differential Equations	
MATH 415: Applied Linear Algebra PHYS 211: University Physics: Mechanics	3 4	PHYS 211: University Physics: Mechanics	
PHYS 212: University Physics: Elec & Mag PHYS 213: Univ Physics: Thermal Physics	4	PHYS 212: University Physics: Elec & Mag PHYS 213: Univ Physics: Thermal Physics	2
Industrial Engineering Technical Core	50	Industrial Engineering Technical Core	50
CS 101: Intro Computing: Engrg & Sci ECE 110: Introduction to Electronics	3	CS 101: Intro Computing: Engrg & Sci (CS 124 may be substituted.) ECE 110: Introduction to Electronics	
IE 300: Analysis of Data	3	IE 300: Analysis of Data IE 310: Deterministic Models in Optimization	
IE 360: Facilities Planning and Design	3	IE 360: Facilities Planning and Design	
IE 370: Stochastic Processes and Applications	3	IE 370: Stochastic Processes and Applications	
IE 400: Design & Anlys of Experiments	3	IE 400: Design & Anlys of Experiments	
IE 413: Simulation ME 330: Engineering Materials	3 4	ME 330: Engineering Materials	
SE 101: Engineering Graphics & Design SE 261: Business Side of Engineering	3	SE 101: Engineering Graphics & Design SE 261: Business Side of Engineering	
SE 494: Senior Engineering Project I ³ SE 495: Senior Engineering Project II ³	3	SE 494: Senior Engineering Project I SE 495: Senior Engineering Project II	3
TAM 212: Introductory Dynamics	3	TAM 212: Introduction Dynamics	
TAM 251: Introductory Solid Mechanics	3	TAM 251: Introductory Solid Mechanics	
Track Option Electives		Track Option Electives	
Track option electives. Courses selected from departmentally approved lists of Track Option Electives or by petition to the department. The current Track options include:	12	Track options include courses selected from departmentally approved lists. Courses on these elective lists may only be used to fulfill one curricular requirement.	12
		Computational Methods in IE Track Core requirement - complete 2 courses:	
		CS 173: Discrete Structures CS 225: Data Structures	3
		Track Electives - select remaining courses from this list: All 200-, 300-, and 400-level CS courses excluding CS 210, CS 211, CS 397, CS 398, and CS seminar and senior	
Fconomics & Finance (F&F)		project courses. Economics & Finance (F&F)	
Track Core - Compete at least 2 of the following courses: ACE 427: Commodity Price Analysis	3	Track Core - complete 2 courses from this list: ACE 427 Commodity Price Analysis	
IE 420: Financial Engineering SE 450: Decision Analysis I	3 or 4	IE 420 Financial Engineering SE 450 Decision Analysis L	
Track Elective - Complete 2 of the following courses:	5 01 4	Track Electives - select remaining courses from this list of courses. Of these courses, only 1 selected may be at	·
ACCY 200: Fundamentals of Accounting	3	ACCY 200 Fundamentals of Accounting	
ACE 410: Energy Economics ACE 427: Commodity Price Analysis	3 or 4 3	ACE 410 Energy Economics ACE 427 Commodity Price Analysis	
ACE 428: Commodity Futures and Options ECON 302: Inter Microeconomic Theory	3	ACE 428 Commodity Futures and Options ECON 302 Inter Microeconomic Theory	
ECON 303: Inter Macroeconomic Theory ECON 420: International Economics	3	ECON 303 Inter Macroeconomic Theory ECON 420 International Economics	
ECON 471: Intro to Applied Econometrics	3	ECON 471 Intro to Applied Econometrics	
FIN 221: Corporate Finance FIN 300: Financial Markets	3	FIN 300 Financial Markets	
FIN 411: Investment & Portfolio Mngt	3	FIN 411 Investment & Portfolio Mngt	
FIN 415: Fixed Income Portfolios	3	FIN 412 Options and Futures Markets	
FIN 461: Banking and Financial Regulation Human Factors	3	FIN 461: Banking and Financial Regulation Human Factors	
Track Core - Complete the following course: IF 340: Human Factors	4	Track Core - complete the following course: IF 340: Human Factors	
Track Electives - Comlete at least 3 of the following courses:		Track Electives - complete at least 3 of the following courses: Physical Ergonomics Eocus	
BIOE 461/TAM 461: Cellular Biomechanics	4	BIOE 461/TAM 461: Cellular Biomechanics ETMA 421: Industrial and Agricultural Safety-Injury Prevention	
		ETMA 422: Industrial and Agricultural Occupational Illness Prevention	
KIN 355: Biomechanics of Human Movement	3	KIN 355: Biomechanics of Human Movement	
MIN 401. Ivieasure and Evaluation of Kinesiology ME 481: Whole-Body Musculoskeletal Biomechanics	3	ME 481: Whole-Body Musculoskeletal Biomechanics	
TSM 421: Ag Safety – Injury Prevention	3	INE 482: Musculoskeletal Lissue Mechanics	
TSM 422: Ag Health – Illness Prevention TSM 425: Managing Ag Safety Risk	3 3		
Cognitive Ergonomics Focus SE 450: Decision Analysis	3	Cognitive Ergonomics Focus SE 450: Decision Analysis	
IE 445: Human Performance and Cognition in Context Organizational Ergonomics Focus	3	IE 445: Human Performance and Cognition in Context Organizational Ergonomics Focus	
ANTH 411: Research Methods in Socio-Cultural Anthropology ARCH 423: Social/Behavioral Factors for Design	3	ANTH 411: Research Methods in Socio-Cultural Anthropology ARCH 423: Social/Behavioral Factors for Design	
BADM 310: Management and Organizational Behavior BADM 312: Designing and Managing Organizations	3	BADM 310: Management and Organizational Behavior BADM 312: Designing and Managing Organizations	
BADM 357: Digital Making Seminar	3	BADM 357: Digital Making Seminar PSYC 245: Industrial/Organizational Psychology	
Optional Health Focus	3	Optional Health Focus CHI H 470: Technology Health and Aging	
Industrial Engineering Fundamentals (IEF)	3	Industrial Engineering Fundamentals (IEF)	
IFrack Core - Complete the following 4 courses: IE 330: Industrial Quality Control	3	IF 444 O visit in the following 4 courses:	:
IE 411: Optimization of Large Systems IE 412: OR Models for Mfg Systems	3	IE 411: Optimization of Large Systems IE 412: OR Models for Mfg Systems	
IE 340 Human Factors Operations Research (OR)	3	IE 340 Human Factors Operations Research (OR)	
Track Core - Complete the following 2 courses: IE 410: Advanced Topics in Stochastic Processes & Applications	3 or 4	Track Core - complete the following 2 courses: IE 410: Advanced Topics in Stochastic Processes & Applications	3
IE 411: Optimization of Large Systems Track Electives - Complete 2 of the following courses:	3 or 4	IE 411: Optimization of Large Systems Track Electives - complete 2 courses from this list:	3
ECE 490: Introduction to Optimization IE 420: Financial Engineering	3 or 4	ECE 490: Introduction to Optimization IE 420: Financial Engineering	3
MATH 444: Elementary Real Analysis			
or MATH 447: Real Variables	3-4	MATH 444: Elementary Real Analysis or MATH 447: Real Variables	3-4
or MATH 447: Real Variables MATH 484: Nonlinear Programming SE 411: Reliability Engineering	3-4 3 or 4 3 or 4	MATH 444: Elementary Real Analysis or MATH 447: Real Variables MATH 484: Nonlinear Programming SE 411: Reliability Engineering	3-4 3 or 4

STAT 420/ASRM 450: Methods of Applied Statistics	3 or 4	STAT 420/ASRM 450: Methods of Applied Statistics	3
STAT 424: Analysis of Variance	3 or 4	STAT 424: Analysis of Variance	3
STAT 425: Statistical Modeling I	3 or 4	STAT 425: Statistical Modeling I	3

Quality Engineering (QE)	
Track Core - Complete the following course:	
IE 330: Industrial Quality Control	3
Track Core - Complete 1 of the following courses:	
IE 431: Design for Six Sigma	3
SE 411: Reliability Engineering	3 or 4
Track Elective - Complete 1 of the following courses:	
STAT 410: Statistics and Probability II	2.4
MATH 464: Statistics and Probability II	5-4
STAT 420/ASRM 450: Methods of Applied Statistics	3 or 4
STAT 424: Analysis of Variance	3 or 4
STAT 426: Statistical Modeling II	3 or 4
Supply Chain, Manufacturing and Logistics (SC&L)	
Track Core - Complete the following course:	
IE 412: OR Models for Mfg Systems	3 or 4
Track Electives - Complete 3 of the following courses:	
ECE 470: Introduction to Robotics	4
IE 330: Industrial Quality Control	3
ME 451: Computer-Aided Mfg Systems	3 or 4
ME 452: Num Control of Mfg Processes	3 or 4
Technical Electives	
Computer science elective selected from the departmentally approved list of Computer Science Electives	2
below:	5
CS 225: Data Structures	3
CS 357: Numerical Methods I	4
CS 411: Database Systems	3 or 4
CS 450: Numerical Analysis	3 or 4
IE 405: Computing for ISE	3 or 4
IE technical electives selected from the departmentall approed list of IE Technical Electives below:	3
IE 330: Industrial Quality Control	3
IE 340: Human Factors	4
IE 411: Optimization of Large Systems	3 or 4
IE 412: OR Models for Mfg Systems	3 or 4
IE 420: Financial Engineering	3 or 4
IE 431: Design for Six Sigma	3
IE 445: Human Performance and Cognition in Context	3 or 4
SE 310: Design of Structures and Mechanisms	3
SE 320: Control Systems	4
SE 424: State Space Design for Control	3
Electives	
The Grainger College of Engineering Liberal Education course list, or additional courses from the campus	6
General Education lists for Social and Behavioral Sciences or Humanities and the Arts 4	
Free electives. Additional uprestricted course work, subject to cortain exceptions as noted by the College, so	
thet there are at least 128 gradit hours earned toward the degree 5	6
that there are at least 128 credit nours earned toward the degree. 5	
Total Hours of Curriculum to Graduate	128
	120

² MATH 220 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 Advanced Composition satisfied by completing the combination of SE 494 and SE 495.

⁴ The Grainger College of Engineering approved liberal education course list can be found here. Note that these credit hours could carry the required cultural studies designation required for campus general education requirements.

The Grainger College of Engineering restrictions to free electives can be found here.

Quality Engineering (QE)	
Track Core - complete the following course:	
E 330: Industrial Quality Control	3
Track Core Elective - complete at least 1 of the following courses:	
IE 431: Design for Six Sigma	3
SE 411: Reliability Engineering	3
Track Elective - complete remaining courses from this list:	
STAT 410/MATH 464: Statistics and Probability II	3
STAT 420/ASRM 450: Methods of Applied Statistics	3
STAT 424: Analysis of Variance	3
STAT 426: Statistical Modeling II	3
Supply Chain, Manufacturing and Logistics (SC&L)	
Track Core - complete the following course:	
E 412: OR Models for Mfg Systems	3
Track Electives - complete 3 of the following courses:	
ECE 470: Introduction to Robotics	4
E 330: Industrial Quality Control	3
ME 270: Design for Manufacturability	3
ME 451: Computer-Aided Mfg Systems	3
ME 452: Num Control of Mfg Processes	3
Technical Electives	
Courses on these elective lists may only be used to fulfill one curricular requirement.	
Computer science elective selected from the departmentally approved list of Computer Science Electives	3
below:	
CS 225: Data Structures	3
CS 357: Numerical Methods I	4
CS 411: Database Systems	3
LS 450: Numerical Analysis	3
E 405: Computing for ISE	3
technical electives selected from the departmentally approved list of it lechnical Electives below. These (3
E 330: Industrial Quality Control	3
E 340. Ruinan Factors	4
E 411. Optimization of Large Systems	3
IF 120. Financial Engineering	
IF 431' Design for Six Sigma	2
IF 445: Human Performance and Cognition in Context	3
SF 310: Design of Structures and Mechanisms	2
SE 320: Control Systems	4
SE 424: State Space Design for Control	3
Free Electives	
Additional course work subject to the Grainger College of Engineering restrictions to Free	
Electives so that there are at least 128 credit hours earned toward the degree.	11
(https://go.grainger.illinois.edu/FreeElectives)	
(inclosify Dordination Contraction Contrac	130
Total Hours of Curriculum to Graduate	120
Total Hours of Curriculum to Graduate	
Total Hours of Curriculum to Graduate	
Total Hours of Curriculum to Graduate	
Total Hours of Curriculum to Graduate	
Total Hours of Curriculum to Graduate	
Total Hours of Curriculum to Graduate	
Total Hours of Curriculum to Graduate	
Total Hours of Curriculum to Graduate	
Total Hours of Curriculum to Graduate	



THE GRAINGER COLLEGE OF ENGINEERING

Department of Mechanical Science & Engineering 144 Sidney Lu Mechanical Engineering Building, MC-244 1206 W. Green St. Urbana, IL 61801

15 November, 2021

Carolyn Beck Associate Head of Undergraduate Studies Industrial and Systems Engineering

Dear Prof. Beck,

The Department of Mechanical Science and Engineering will support your request to allow B.S. degree students in the ISE program to take ME 270, ME 360, ME 451, ME 452, ME 460, ME 461, ME 471 and TAM 470 courses as part of their subject area concentrations. The proposed curriculum will not place an unacceptable burden on our department. However, MechSE will continue to provide priority registration in these courses to its own degree program students, consistent with current policies.

Best regards,

Savin Suite

Sanjiv Sinha Associate Head for Undergraduate Programs Mechanical Science and Engineering

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Department of Mathematics

273 Altgeld Hall, MC-382 1409 West Green Street Urbana, IL 61801



Re: Use of Math 257 in Industrial and Systems Engineering

The Mathematics Department, working with the Grainger College of Engineering, has recently created the course MATH 257, *Linear Algebra with Computational Applications*. Quoting from the justification of the approved proposal, "In the future, MATH 257 will replace the MATH 415 requirement in many science and engineering curricula." With this in mind, the department would be pleased to have Industrial and Systems Engineering add MATH 257 as an option to MATH 415 in their curricula. As the Mathematics department is reallocating instructional resources from Math 415 to Math 257 as the need shifts, this will not cause any undue difficulties for Mathematics resources.

Sincerely

Randy M'Carthy

Randy McCarthy Professor of Mathematics Dir of Undergraduate Studies in Math rmccrthy@illinois.edu

telephone 217-333-3350 • fax 217-333-9576 email office@math.uiuc.edu • url http://www.math.uiuc.edu/



DEPARTMENT OF COMPUTER SCIENCE

Thomas M. Siebel Center for Computer Science 201 N. Goodwin Ave. Urbana, IL 61801-2302 USA NANCY M. AMATO

Abel Bliss Professor and Head 2248 Siebel Center namato@illinois.edu

November 15, 2021

Dear Prof. Carolyn Beck,

Computer Science is fully supportive of the Department of Industrial and Enterprise Systems Engineering using CS 173, CS 225, and other 200, 300, and 400 level CS courses in subject area concentrations in both their 10KP0127BS: Industrial Engineering, BS and 10KP5532BS: Systems Engineering & Design, BS undergraduate degree programs.

Many ant

Nancy M. Amato Abel Bliss Professor and Head Department of Computer Science



COLLEGE OF AGRICULTURAL, CONSUMER & ENVIRONMENTAL SCIENCES

Office of the Dean 227 Mumford Hall, MC-710 1301 W. Gregory Drive Urbana, IL 61801

January 13, 2022

Dear Dean Bashir,

Thank you for informing us of the proposed removal of the Liberal Education requirements in all undergraduate programs in The Grainger College of Engineering. I understand that this requirement included an extensive list of courses Grainger Engineering students could choose from, including some from our college. Grainger Engineering students will continue to be welcome to enroll in the courses formerly on your Liberal Education list as Free Electives after the removal of this requirement.

Germán Bollero, Interim Dean



COLLEGE OF APPLIED HEALTH SCIENCES

Office of the Dean 110 Huff Hall, MC-586 1206 S. Fourth St. Champaign, IL 61820

January 25, 2022

Dear Dean Bashir,

Thank you for informing us of the proposed removal of the Liberal Education requirements in all undergraduate programs in The Grainger College of Engineering. I understand that this requirement included an extensive list of courses Grainger Engineering students could choose from, including some from our college. Grainger Engineering students will continue to be welcome to enroll in the courses formerly on your Liberal Education list as Free Electives after the removal of this requirement.

While I support the move the give your students more freedom in course selection, it is important to express my concern that discontinuing your Liberal Education requirement may negatively impact my college's finances by reducing the IUs generated from lower enrollments in AHS courses. As you know, the current budget model rewards colleges financially based on the number of registrants in courses. I am hopeful that your students and advisors will continue to view AHS courses as relevant and valuable when they are selecting electives.

Sincerely,

Chery Hanley - Maxwell

Dean



College of Education

Undergraduate Student Academic Affairs Office 110 Education Building, MC-708 1310 S. Sixth St. Champaign, IL 61820

Dear Dean Bashir,

Thank you for informing us of the proposed removal of the Liberal Education requirements in all undergraduate programs in The Grainger College of Engineering. I understand that this requirement included an extensive list of courses Grainger Engineering students could choose from, including some from our college. Grainger Engineering students will continue to be welcome to enroll in the courses formerly on your Liberal Education list as Free Electives after the removal of this requirement.

Assistant Dean for Academic Affairs College of Education | University of Illinois at Urbana-Champaign



College of Fine & Applied Arts

Office of the Dean 100 Architecture Building, MC-622 608 E. Lorado Taft Dr. Champaign, IL 61820

21 December 2021

Rashid Bashir, Dean 306 Engineering Hall 1308 W. Green St. M/C 266 Urbana, IL 61801

Dear Dean Bashir,

Thank you for informing us of the proposed removal of the Liberal Education requirements in all undergraduate programs in The Grainger College of Engineering. I understand that this requirement included an extensive list of courses Grainger Engineering students could choose from, including some from the College of Fine & Applied Arts. Grainger Engineering students will continue to be welcome to enroll in the courses formerly on your Liberal Education list as Free Electives after the removal of this requirement.

Kevin Hamiltan

Kevin Hamilton Dean and Professor



2090 Lincoln Hall, MC-448 702 S. Wright St. Urbana, IL 61801

December 20, 2021

Dear Dean Bashir,

Thank you for informing the College of LAS of the proposed removal of the Liberal Education requirement in all undergraduate programs in the Grainger College of Engineering. I understand that this requirement includes an extensive list of courses from which your students could choose some, many of which are from our college. Grainger Engineering students will continue to be welcome to take our courses formerly on your Liberal Education list as free electives after the removal of this requirement from their programs of study.

metrie Rollin

Venetria K. Patton Harry E. Preble Dean



College of Media

Office of the Dean 119 Gregory Hall, MC-462 810 S. Wright St. Urbana, IL 61801

January 13, 2022

Rashid Bashir, Dean The Grainger College of Engineering 306 Engineering Hall 1308 W. Green Street Urbana, IL 61801

Dear Dean Bashir,

Thank you for informing us of the proposed removal of the Liberal Education requirements in all undergraduate programs in The Grainger College of Engineering. I understand that this requirement included an extensive list of courses Grainger Engineering students could choose from, including some from our college. Grainger Engineering students will continue to be welcome to enroll in the courses formerly on your Liberal Education list as Free Electives after the removal of this requirement.

Shary huk

Tracy Sulkin Dean, College of Media



December 13th, 2021

Dean Bashir,

Thank you for informing us of the proposed removal of the Liberal Education requirements in all undergraduate programs in The Grainger College of Engineering. I understand that this requirement included an extensive list of courses Grainger Engineering students could choose from, including some from Gies College of Business. Students from Grainger will continue to be welcome to enroll in the courses formerly on your Liberal Education list as Free Electives after the removal of this requirement.

Jeffrey R. Brown Dean, Gies College of Business



501 E. Daniel St., MC-493 Champaign, IL 61820-6211

February 3, 2022

Dean Rashid Bashir 306 Engineering Hall 1308 West Green Street Urbana, IL 61801

Dear Rashid,

Thank you for informing us of the proposed removal of the Liberal Education requirements in all undergraduate programs in the Grainger College of Engineering. I understand that this requirement included an extensive list of courses that Grainger Engineering students could choose from, including some from the iSchool. This letter acknowledges that Grainger Engineering students will continue to be able to enroll in courses as articulated and constrained in Course Explorer and formerly on your Liberal Education list as Free Electives, after the removal of this requirement.

Eunice Santos

Eunice Santos Professor and Dean

From: Hanley-Maxwell, Cheryl D <<u>cherylhm@illinois.edu</u>>
Sent: Monday, February 14, 2022 3:57 PM
To: Miller, Nolan H <<u>nmiller@illinois.edu</u>>
Subject: RE: Senate Ed Pol - Re: change to Grainger Liberal Education requirement

That's fine. Thanks for asking

CHERYL D HANLEY-MAXWELL

Dean

University of Illinois at Urbana-Champaign College of Applied Health Sciences 108 Huff Hall 1206 S Fourth | M/C 586 Champaign, IL 61820 217.333.2131 | <u>cherylhm@illinois.edu</u> www.ahs.illinois.edu (217) 333-0404 (FAX)

Human kindness has never weakened the stamina or softened the fiber of a free people. A nation does not have to be cruel to be tough. -- President Franklin D. Roosevelt



Under the Illinois Freedom of Information Act any written communication to or from university employees regarding university business is a public record and may be subject to public disclosure.

From: Miller, Nolan H <<u>nmiller@illinois.edu</u>>
Sent: Monday, February 14, 2022 1:49 PM
To: Hanley-Maxwell, Cheryl D <<u>cherylhm@illinois.edu</u>>
Subject: RE: Senate Ed Pol - Re: change to Grainger Liberal Education requirement

Dear Cheryl,

Thanks again for talking with me about the changes to the Grainger BS programs. I read the statement you sent to the committee today. The Chair would like to include it in the record that is forwarded to the Senate. Is it ok to include the email you sent below?

Thanks,

Nolan



NOLAN H MILLER

Daniel and Cynthia Mah Helle Professor in Finance | Department of Finance Director, Center for Business and Public Policy Gies College of Business | University of Illinois at Urbana-Champaign 217.244.2847 | nmiller@illinois.edu | http://www.business.illinois.edu/nmiller

Under the Illinois Freedom of Information Act any written communication to or from university employees regarding university business is a public record and may be subject to public disclosure.

From: Hanley-Maxwell, Cheryl D <<u>cherylhm@illinois.edu</u>>
Sent: Thursday, February 10, 2022 1:49 PM
To: Miller, Nolan H <<u>nmiller@illinois.edu</u>>
Subject: RE: Senate Ed Pol - Re: change to Grainger Liberal Education requirement

Hi Nolan –

I appreciate what Ed Pol does in juggling the interests and concerns of the various programs across the campus, while keeping the students in mind. I served on a committee like this at my previous institution and know that it all boils down to what is best for the students' learning. Thanks for reminding me of that.

Here is a statement: While the Grainger proposal has the potential to financially affect AHS, we want to affirm another college's right to control their program requirements and student experiences, ensuring the best possible outcomes for their students. As a result, AHS supports this proposal and hopes that Grainger advisors will recognize the valuable contribution AHS classes make to the education of their students and continue to encourage them to consider relevant and/or high interest classes in AHS.

Hope this works!

Cheryl

CHERYL D HANLEY-MAXWELL, PHD Dean

University of Illinois at Urbana-Champaign College of Applied Health Sciences 108 Huff Hall 1206 S Fourth | M/C 586 Champaign, IL 61820 217.333.2131 | <u>cherylhm@illinois.edu</u> www.ahs.illinois.edu (217) 333-0404 (FAX)

Human kindness has never weakened the stamina or softened the fiber of a free people. A nation does not have to be cruel to be tough. -- President Franklin D. Roosevelt



Under the Illinois Freedom of Information Act any written communication to or from university employees regarding university business is a public record and may be subject to public disclosure.