# 10KS0127MS & 10KS0127MSU: INDUSTRIAL ENGINEERING, MS (ON CAMPUS & ONLINE)

#### In Workflow

- 1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
- 2. 1422 Head (thurston@illinois.edu; hcraddoc@illinois.edu; lredman@illinois.edu)
- 3. KP Committee Chair (mch@illinois.edu; bsnewell@illinois.edu; danko@illinois.edu; kcp@illinois.edu)
- 4. KP Dean (candyd@illinois.edu)
- 5. University Librarian (jpwilkin@illinois.edu)
- 6. Grad\_College (agrindly@illinois.edu; jch@illinois.edu; lowry@illinois.edu)
- 7. Provost (kmartens@illinois.edu)
- 8. Senate EPC (bjlehman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
- 9. Senate (jtempel@illinois.edu)
- 10. U Senate Conf (none)
- 11. Board of Trustees (none)
- 12. IBHE (none)
- 13. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

#### **Approval Path**

- Mon, 12 Oct 2020 16:05:49 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review
- 2. Thu, 15 Oct 2020 19:07:12 GMT Deborah Thurston (thurston): Approved for 1422 Head
- 3. Tue, 17 Nov 2020 19:28:49 GMT Keri Pipkins (kcp): Approved for KP Committee Chair
- 4. Tue, 17 Nov 2020 20:59:20 GMT Candy Deaville (candyd): Approved for KP Dean
- 5. Tue, 17 Nov 2020 22:14:50 GMT John Wilkin (jpwilkin): Approved for University Librarian
- 6. Thu, 10 Dec 2020 20:05:23 GMT Allison McKinney (agrindly): Approved for Grad\_College
- 7. Thu, 10 Dec 2020 20:38:00 GMT Kathy Martensen (kmartens): Approved for Provost

## **History**

- 1. Jul 1, 2019 by Mary Lowry (lowry)
- 2. Jul 1, 2019 by Mary Lowry (lowry)

Date Submitted:Mon, 12 Oct 2020 16:04:30 GMT

Viewing:10KS0127MS & 10KS0127MSU: Industrial Engineering, MS (on campus & online)

Changes proposed by: Lauren Redman

#### **Proposal Type**

#### Proposal Type:

Major (ex. Special Education)

#### This proposal is for a:

Revision

Proposal Title:
If this proposal is one piece of a multi-element change please include the other impacted programs here.example: A BS revision with multiple concentration revisions
MS revision with multiple minor revisions.
The other programs that are tied to this revision include: IE, PHD – key 336 SE, MS – key 338 SE, PHD – key 335
EP Control Number
EP.21.050
Official Program Name
Industrial Engineering, MS (on campus & online)
Effective Catalog Term
Fall 2021
Sponsor College
Grainger College of Engineering
Sponsor Department
Industrial and Enterprise Systems Engineering
Sponsor Name
Lauren Redman
Sponsor Email
lredman@illinois.edu
College Contact
Harry Dankowicz
College Contact Email
danko@illinois.edu

# **Program Description and Justification**

Justification	for	proposa	al change:

The Department of Industrial and Enterprise Systems Engineering would like to align both the Industrial Engineering and Systems & Entrepreneurial Engineering curriculum requirements to create consistency among both programs. This has no implication for students from a financial aspect and should make the requirements much more clear to avoid confusion that we currently experience.

In particular, we are structuring the electives that students are taking to ensure they know the types of courses we want them to take – 500-level IE courses, a STEM course, and open electives. We are also defining the STEM courses that will count toward the degree.

Corresponding Degree
MS Master of Science
la this anamana intendissialinand
Is this program interdisciplinary?
No
Academic Level
Graduate
Will you admit to the concentration directly?
No
Is a concentration required for graduation?
No
CIP Code
143501 - Industrial Engineering.
Is This a Teacher Certification Program?
No
Will specialized accreditation be sought for this program?
No
Admission Requirements

Is this revision a change to the admission status of the program?

No

# **Enrollment**

Describe now this revision will impact enrollment and degrees awarded.
No impact in enrollment or degrees awarded is expected
Estimated Annual Number of Degrees Awarded
What is the matriculation term for this program?
Fall
What is the typical time to completion of this program?
2 years
What are the minimum Total Credit Hours required for this program?
32
Delivery Method
Is this program available on campus and online?
Yes
This program is available:
On Campus and Online
Describe the use of this delivery method:
This program is available on campus & online.
Budget
Are there budgetary implications for this revision?
No
Will the program or revision require staffing (faculty, advisors, etc.) beyond what is currently available?  No

Resource Implications
Facilities
Will the program require new or additional facilities or significant improvements to already existing facilities?  No
Technology
Will the program need additional technology beyond what is currently available for the unit?
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.
Faculty Resources
Library Resources
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?
No

# **Financial Resources**

How does the unit intend to financially support this proposal?
No financial impact is expected
Will the unit need to seek campus or other external resources?
No
Answers cooking a change in the twiting rate or differential for this program?
Are you seeking a change in the tuition rate or differential for this program?
Yes
Is this program requesting self-supporting status?
No
Program Regulation and Assessment
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 hou
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
MSIE ProposedChanges 101220.pdf
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.
nom to tamin requirements, a usung of these courses, including the course fabric, number, title, and number of credit nours.
Catalog Page Text

Catalog Page Text: Description of program for the catalog page. This is not official content, it is used to help build the catalog pages for the program.

same catalog text as what previously exists

Can be edited in the catalog by the college or department.

# This degree program can be completed with or without a thesis; either on campus or online, the requirements are listed below:

**Thesis Option** 

Code	Title	Hours
IE 599	Thesis Research (Thesis Research) A maximum of 8 credit hours of IE 599 (or other approved thesis) may be counted toward the degree	8
IE 590	Seminar (registration for 0 hours every term while in residence)	0
Elective courses – chosen i	n consultation with advisor (subject to Other Requirements and Conditions below)	24
500-level IE Courses		12
other approved department). Exclu		4
Electives in consultation wi the elective coursework requireme	th advisor <sup>A</sup> maximum of 4 hours of IE 597 (or other approved independent study/project design) may be applied toward nt.	8
Total Hours		32

Other Conditions and Requirements (may overlap)

Requirement	Description

Other Requirements and conditions may overlap

A minimum of 12 500-level credit hours applied toward the degree, 8 of which must be IE.

A maximum of 4 hours of IE 597 (or other approved independent study) may

be applied toward the elective course work requirement.

Other Requirements and Conditions may overlap

Minimum 500-level credit hours applied toward the degree: 12
Minimum GPA: 3.0

### **Non-Thesis Option**

Code	Title	Hours
IE 597	Independent Study	4
Elective courses – chose	en in consultation with advisor (subject to Other Requirements and Conditions below)	32
IE 590	Seminar (registration for 0 hours every term while in residence)	0
500-level IE Courses		12
other approved department). E	de of major <sup>STEM</sup> course must be approved and be from a College of Engineering department, including ABE and CHBE (or excludes TEC and ENG courses.	4
Electives in consultation counted toward the elective co	with advisor <sup>A</sup> maximum of 4 additional credit hours of IE 597 (or other approved independent study/project design) may be oursework requirement.	16
Total Hours		36

#### Other Requirements and Conditions (may overlap)

other requirements and containing (may overlap)	
Requirement	Description
Other Requirements and conditions may overlap	

A minimum of 12 500-level credit hours applied toward the degree, 8 of which must be IE.

Departmental approval is required to pursue the non-thesis option, for students terminating their studies with the M.S. degree.

For students in the non-thesis option, 4 hours ofIE 597are required (4 hours maximum allowed towards the M.S. degree), because each student must show evidence of the ability to do independent research.

Other Requirements and Conditions may overlap

Minimum 500-level credit hours applied toward the degree:	12
Minimum GPA:	3.0

# **EP Documentation**

# **DMI Documentation**

#### Banner/Codebook Name

MS:Industrial Engineerng -UIUC & MS:Industrial Engr Online-UIUC

#### **Program Code:**

10KS0127MS & 10KS0127MSU

**Degree Code** 

MS

**Major Code** 

0127

#### **Program Reviewer Comments**

Deb Forgacs (dforgacs) (Mon, 12 Oct 2020 15:36:12 GMT):Rollback: requested.

Key: 337

# 10KS0127MS & 10KS0127MSU Program Codes Effective Fall 2021

#### **MSIE Thesis Current**

# **MSIE Thesis Proposed**

Thesis credit (IE 599)	8	Thesis credit (IE 599)	8
Seminar registration each semester (IE 590)	0	Seminar registration each semester (IE 590)	0
Electives in consultation with advisor	24	500-level IE Courses	12
		STEM course from outside of major	4
		Electives in consultation with advisor	8
Total	32	Total	32
		STEM course must be approved and be from a College of Engineering department, including ABE and CHBE (or other approved department). Excludes TEC and ENG courses.	
A maximum of 4 hours of IE 597 (or other		A maximum of 4 hours of IE 597 (or other approved	
approved independent study) may be applied		independent study/project design) may be applied toward	
toward the elective course work requirement.		the elective coursework requirement.	
Minimum GPA: 3.0		Minimum GPA: 3.0	

A minimum of 12 500-level credit hours applied toward the degree, 8 of which must be

### **MSIE Non-Thesis Current**

# **MSIE Non-Thesis Proposed**

Independent Study (IE 597)	4	Independent Study (IE 597)	4
Seminar registration each semester (IE 590)	0	Seminar registration each semester (IE 590)	0
Electives in consultation with advisor	32	500-level IE Courses	12
		STEM course from outside of major	4
		Electives in consultation with advisor	16
Total	36	Total	36
		STEM course must be approved and be from a College of Engineering department, including ABE and CHBE (or other approved department). Excludes TEC and ENG courses.	
For students in the non-thesis option, 4 hours		A maximum of 4 additional credit hours of IE 597 (or other	
of IE 597 are required (4 hours maximum		approved independent study/project design) may be	
allowed towards the M.S. degree), because		counted toward the elective coursework requirement.	
each student must show evidence of the ability			
to do independent research.			
Minimum GPA: 3.0		Minimum GPA: 3.0	

A minimum of 12 500-level credit hours applied toward the degree, 8 of which must be