

APPROVED BY SENATE
02/08/2021

10KS3846MS: SYSTEMS AND ENTREPRENEURIAL ENGINEERING, MS

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

1. Mon, 12 Oct 2020 16:05:55 GMT
Deb Forgacs (dforgacs): Approved for U Program Review
2. Thu, 15 Oct 2020 19:07:40 GMT
Deborah Thurston (thurston): Approved for 1422 Head
3. Tue, 17 Nov 2020 19:29:09 GMT
Keri Pipkins (kcp): Approved for KP Committee Chair
4. Tue, 17 Nov 2020 20:59:28 GMT
Candy Deaville (candyd): Approved for KP Dean
5. Tue, 17 Nov 2020 22:15:30 GMT
John Wilkin (jpwilkin): Approved for University Librarian
6. Thu, 10 Dec 2020 20:05:29 GMT
Allison McKinney (agrindly): Approved for Grad_College
7. Thu, 10 Dec 2020 20:38:50 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 16:04:47 GMT

Viewing: 10KS3846MS : Systems and Entrepreneurial Engineering, MS

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, MS -- key 337

IE, PHD -- key 336

SE, PHD -- key 335

EP Control Number

EP:21.052

Official Program Name

Systems and Entrepreneurial Engineering, MS

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 proposal change:

The Department of Industrial and Enterprise Systems Engineering would like to align both the Industrial Engineering and Systems & Entrepreneurial Engineering curriculum requirements. 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 proposing the following:

Thesis MS:

- *Increasing the number of thesis hours required
- *Reducing the number of electives (due to increase of thesis) and structuring the electives -- a STEM course and open electives
- *Defining the STEM courses that will count toward the degree
- *Lowering the GPA requirement to 3.0 to match MSIE

Non-Thesis MS:

- *Decreasing the number of project design hours required
- *Increasing the number of electives (due to decrease of project design) and structuring the electives -- a STEM course and open electives
- *Defining the STEM courses that will count toward the degree
- *Lowering the GPA requirement to 3.0 to match MSIE

Corresponding Degree

MS Master of Science

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

142701 - Systems 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 how 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?

No

This program is available:

On Campus

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?

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.

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

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 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

MSSEE ProposedChanges 101220.pdf

Attach a side-by-side comparison with the existing program AND, if the revision references or adds "chosed-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

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

Existing catalog information can be used.

Statement for Programs of Study Catalog

Thesis Option

Code	Title	Hours
SE 599	Thesis Research ^A A maximum of 8 credit hours of SE 599 (or other approved thesis) may be counted toward the degree	8
SE 590	Seminar (registration for 0 hours every term while in residence)	0
500-level SE Courses		12
Technical side of engineering (8 hours)		
Business side of engineering (4 hours)		
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		16
STEM course from outside of major ^S 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.		4
Electives in consultation with advisor ^A A maximum of 4 hours of SE 594 (or other approved independent study/project design) may be applied toward the elective coursework requirement.		8
Total Hours		32

Other Requirements and Conditions (may overlap)

Requirement	Description
For the thesis option, a maximum of 4 hours of SE 597 (or other approved independent study) may be applied toward the elective course work requirement.	
4 hours of the elective courses must be from a College of Engineering department, including ABE and CHBE.	
A maximum of 4 CR-graded credit hours in non-SE courses may be applied toward the degree.	
Minimum 500-level credit hours applied toward the degree:	12
Minimum program GPA:	3.0

Non-Thesis Option

Code	Title	Hours
SE 594	Project Design	4
SE 590	Seminar (registration for 0 hours every term while in residence)	0
500-level SE Courses		12
Technical side of engineering (8 hours)		
Business side of engineering (4 hours)		
Elective courses – chosen in consultation with advisor (subject to Other Requirements and Conditions below)		16
STEM course from outside of major ^S 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.		4
Electives in consultation with advisor ^A A maximum of 4 additional credit hours of SE 594 (or other approved project design/independent study) may be counted toward the elective coursework requirement.		16
Total Hours		36

Other Requirements and Conditions (may overlap)

Requirement	Description
4 hours of the elective courses must be from a College of Engineering department, including ABE and CHBE.	
A maximum of 4 CR-graded credit hours in non-SE courses may be applied toward the degree.	
Minimum 500-level credit hours applied toward the degree:	12
Minimum program GPA:	3.0

EP Documentation

DMI Documentation

Banner/Codebook Name

MS:Sys & Entreprnural Eng-UIUC

Program Code:

10KS3846MS

Degree Code

MS

Major Code

3846

Program Reviewer Comments

Deb Forgacs (dforgacs) (Mon, 12 Oct 2020 15:36:31 GMT):Rollback: requested.

Key: 338

10KS3846MS Program Code

Effective Fall 2021

MSSEE Thesis Current

Thesis credit (SE 599)	4	Thesis credit (SE 599)	8
Seminar registration each semester (SE 590)	0	Seminar registration each semester (SE 590)	0
SE Courses at 500-level	12	500-level SE Courses	12
Technical side of Engineering (8)			
Business side of Engineering (4)			
Electives in consultation with advisor	16	STEM course from outside of major*	4
		Electives in consultation with advisor	8
Total	32	Total	32

4 hours of the elective courses must be from a College of Engineering department, including ABE and CHBE.

A maximum of 4 hours of IE 597 (or other approved independent study) may be applied toward the elective coursework requirement.

Minimum GPA: 3.25

A maximum of 4 CR-graded credit hours in non-SE courses may be applied toward the degree.

MSSEE Thesis Proposed

Thesis credit (SE 599)	8
Seminar registration each semester (SE 590)	0
500-level SE Courses	12
STEM course from outside of major*	4
Electives in consultation with advisor	8
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 SE 594 (or other approved independent study/project design) may be applied toward the elective coursework requirement.

Minimum GPA: 3.0

MSSEE Non-Thesis Current

Project Design (SE 594)	8	Project Design (SE 594)	4
Seminar registration each semester (SE 590)	0	Seminar registration each semester (SE 590)	0
SE Courses at 500-level	12	500-level SE Courses	12
Technical side of Engineering (8)			
Business side of Engineering (4)			
Electives in consultation with advisor	16	STEM course from outside of major*	4
		Electives in consultation with advisor	16
Total	36	Total	36

4 hours of the elective courses must be from a College of Engineering department, including ABE and CHBE.

A maximum of 4 additional credit hours of SE 594 (or other approved project design/independent study) may be counted toward the elective coursework requirement.

Minimum GPA: 3.25

A maximum of 4 CR-graded credit hours in non-SE courses may be applied toward the degree.

MSSEE Non-Thesis Proposed

Project Design (SE 594)	4
Seminar registration each semester (SE 590)	0
500-level SE Courses	12
STEM course from outside of major*	4
Electives in consultation with advisor	16
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.

A maximum of 4 additional credit hours of SE 594 (or other approved project design/independent study) may be counted toward the elective coursework requirement.

Minimum GPA: 3.0