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EP.22.036
November 15, 2021

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN SENATE
COMMITTEE ON EDUCATIONAL POLICY
(Final; Information)

EP.22.036 Report of Administrative Approvals through October 25, 2021

Senate committees are authorized to act for and in the name of the Senate on minor matters. Below is a listing of the administrative approvals the Senate Committee on Educational Policy approved at its meeting on October 25, 2021. Additional information for each approval is attached.

A. Graduate Programs

1) **MS in Computer Science** – incorporate internship opportunities for students in the program, allowing students to select CS 591, Advanced Seminar (0-4 hours) or comparable work experience in CS; ENG 572, Professional Practicum (1-8 hours); or elective course (subject to Other Requirements and Conditions) for 0-4 hours. There is no change to the total hours required for the degree.
2) **Piano Pedagogy concentration in the MMUS in Music** – reflect the updated rubric and course number of the required Advanced Piano course, which was revised from MUS 480 to MUSC 401 (4 hours). Clarify that MUS 557, Piano Literature, a 4-hour course, is to be repeated twice for a total of 8 hours. There is no change to the total hours required for the degree.

B. Undergraduate Programs

1) **Leadership Studies Minor** – as part of the required courses for the minor, allow students to choose between one of two capstone-style courses, LEAD 460, Critical Approaches to Leading (3 hours) or LEAD 480, Collaborative Learning (3 hours). In the list of electives from which students are to select 2 courses, add LEAD 480 as an option with the note that it cannot be used as an elective if it is also taken as the choice within the requirements. Remove from the list of electives AGCM 430, Comm in Env Social Movements (3 hours); ENG 315, Learning in Community (3 hours); and ENG 598, Special Topics – Applied Project Management (1 to 4 hours). Add a restriction that students within the Organizational Community Leadership concentration of the BS in Agricultural Leadership and Environmental Communications major cannot also be awarded this minor because of the amount of overlap between the two programs. There is no change to the total hours required for the minor.
2) **BS in Metropolitan Food & Environmental Systems** – revise the listed Quantitative Reasoning II requirement for the major from ACE 261, Applied Statistical Methods (4 hours) or CPSC 241, Intro to Applied Statistics (3 hours), to ACE 262, Applied Statistical Methods and Data Analytics I (3 hours) or CPSC 241. Move ACES 101, Contemporary Issues in ACES (2 hours) from the "Required Introductory Courses" section to a new section titled "ACES Prescribed." In the core Curriculum Technology I list from which students are to choose one course, replace CPSC 226, Introduction to Weed Science (3 hours) with CPSC 212, Introduction to Plant Protection (4 hours). There is no change to the total hours required for the degree.
3) **Minor in Mathematics** – in the lists of courses from which students are to choose a total of five courses (15 hours), add MATH 257, Linear Algebra with Computational Applications (3 hours), to the Algebra list;

create a list titled “Fundamentals” under which MATH 347, Fundamental Mathematics (3 hours), is the sole course, and in the Probability and Statistics list, clarify that in the “or” option where students choose STAT 410, Statistics and Probability II (3 hours), or STAT 420, Methods of Applied Statistics (3 hours) that students may use one of these courses but not both toward the minor, by listing this in parentheses in the table rather than with a footnote. There is no change to the total hours required for the minor.

10KS0112MS: COMPUTER SCIENCE, MS

In Workflow

1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1434 Head (namato@illinois.edu; vmahesh@illinois.edu; egunter@illinois.edu)
3. KP Committee Chair (bsnewell@illinois.edu; kcp@illinois.edu; jmakela@illinois.edu; amccul2@illinois.edu; bodony@illinois.edu)
4. KP Dean (candyd@illinois.edu)
5. University Librarian (jpwilkin@illinois.edu)
6. Grad_College (agrindly@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. HLC (kmartens@illinois.edu)
14. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

Approval Path

1. Mon, 27 Sep 2021 19:54:53 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review
2. Tue, 28 Sep 2021 21:19:11 GMT
   Elsa Gunter (egunter): Approved for 1434 Head
3. Tue, 12 Oct 2021 18:01:08 GMT
   Keri Pipkins (kcp): Approved for KP Committee Chair
4. Tue, 12 Oct 2021 18:01:44 GMT
   Candy Deaville (candyd): Approved for KP Dean
5. Tue, 12 Oct 2021 18:50:37 GMT
   John Wilkin (jpwilkin): Approved for University Librarian
6. Wed, 13 Oct 2021 21:11:08 GMT
   Allison McKinney (agrindly): Approved for Grad_College
7. Thu, 14 Oct 2021 13:54:48 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:Fri, 24 Sep 2021 00:12:13 GMT

Viewing:10KS0112MS : Computer Science, MS

Changes proposed by: Viveka Kudaligama

Proposal Type:

Major (ex. Special Education)

This proposal is for a:

Revision

Administration Details

Official Program Name

Computer Science, MS

Sponsor College

Grainger College of Engineering

Sponsor Department

Computer Science

Sponsor Name

Robin Kravets

Sponsor Email

rhk@illinois.edu

College Contact

Keri Carter Pipkins

College Contact Email

kcp@illinois.edu

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.*

Rollback to Viveka Kudaligama (initiator); Other stakeholders: Mahesh Viswanathan (Assoc. Head for Academics), Elsa Gunter (Director of Undergraduate Programs)

Does this program have inter-departmental administration?

No

Proposal Title

Effective Catalog Term

Spring 2022

Provide a brief, concise description (not justification) of your proposal.

Administrative approval: These revisions are to incorporate internship opportunities for CS MS students.

Program Justification

Why are these changes necessary?

The majority of CS MS students hold an external internship during their academic program, which provides them valuable (industry) workplace experience to complement the knowledge and skills gained in the classroom. Such internship experiences are integral to preparing the Master's level students for competitive careers upon graduation. The proposed revisions recognize the value of the internship experiences in the overall educational experience through inclusion of a credit-bearing practicum course, comparable work experience, or other elective course as a required degree 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?

No

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).

[No changes are being requested]

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

CS MS Curriculum Revisions_FA21 (5).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.

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.

[No changes are being requested to the current Overview tab on the Catalog Page.]

Statement for Programs of Study Catalog

The Master of Science (M.S.) in Computer Science is a research-oriented degree that can be counted toward the Computer Science Ph.D. For additional details and requirements refer to the department's Graduate Degree Requirements (http://cs.illinois.edu/academics/graduate/ms-program/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Requirements

Code	Title	Hours
CS 599	Thesis Research (minimum applied toward degree)	4
Breadth Requirement - One course from each of three different core areas (http://cs.illinois.edu/current-students/graduate-students/ms-thesis/)		9-12
Advanced courses – One 500-level course from one of the three areas selected in the Breadth Requirement; Remaining hours from any 500-level CS course (500-590 or 598) exceptCS 591orCS 597. An approved 500-level non-CS course may satisfy 4 credit hours of this requirement;CS 599(thesis) may satisfy 4 credit hours of this requirement.		12
Select one of the following -CS 591Prof. Development (or comparable work experience in CS); orENG 572Professional Practicum (CS); or Elective course (subject to Other Requirements and Conditions)		0-4
Elective courses (subject to Other Requirements and Conditions below)		0-7
Total Hours		32

Other Requirements

Requirement
Other Requirements and Conditions may overlap
A minimum of 16 CS credit hours must be taken from the University of Illinois at Urbana-Champaign campus.
A minimum of 12 500-level credit hours overall.
A maximum of 4 hours ofCS 591andCS 491may be applied toward the degree.
A grade of B- or higher is required for Breadth Requirement course work.
At most, 12 semester credit hours of previous graduate course work may be transferred and applied to the M.S. degree requirements and 12 credit hours of non-degree graduate courses completed in the Department of Computer Science at the University of Illinois at Urbana-Champaign may be transferred and applied to the M.S. degree requirements.
It is each student's responsibility to secure a M.S. thesis advisor and start thesis research no later than the beginning of the third semester in the program.
All degree requirements must be completed within five consecutive semesters (only fall and spring semesters are counted).
The minimum program GPA is 3.0.

Corresponding Degree

MS Master of Science

Program Features

Academic Level

Graduate

Does this major have transcripted concentrations?

No

What is the typical time to completion of this program?

2.5

What are the minimum Total Credit Hours required for this program?

32

What is the required GPA?

3.0

CIP Code

110701 - Computer Science.

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.

Enrollment

Describe how this revision will impact enrollment and degrees awarded.

No impact anticipated.

Estimated Annual Number of Degrees Awarded

What is the matriculation term for this program?

Fall

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

Financial Resources

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?

No

Is this program requesting self-supporting status?

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

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.

No impact is expected due to these revisions. Newly listed courses will become part of regular teaching schedules.

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.

No impact is expected due to these revisions.

EP Documentation

EP Control Number

EP.22.036

This proposal requires HLC inquiry

No

DMI Documentation

Banner/Codebook Name

MS:Computer Science -UIUC

Program Code:

10KS0112MS

Major Code

0112

Program Reviewer Comments

Deb Forgacs (dforgacs) (Mon, 27 Sep 2021 16:23:52 GMT): Re-entered the proposal type, the corresponding program and the CIP code due to system bug 09/27/2021
Allison McKinney (agrindly) (Wed, 13 Oct 2021 21:11:04 GMT): Administratively approved by the Graduate College.
Kathy Martensen (kmartens) (Thu, 14 Oct 2021 13:49:07 GMT): Administrative approval: Does not change total hours required, doesn't restrict student options.

Key: 184

Revisions to Master of Science in Computer Science (CS MS) program, Fall 2021

Key
GREEN HIGHLIGHT = Updates to couresework specification or hours

Current Requirement	Current Hours		Revised Requirements	Revised Hours
CS 599 Thesis Research (minimum applied toward degree)	4		CS 599 Thesis Research (minimum applied toward degree)	4
Breadth Requirement - One course from each of three different (out of eight) core areas	9-12		Breadth Requirement - One course from each of three different core areas	9-12
Advanced courses – One 500-level course from one of the three areas selected in the Breadth Requirement; Remaining hours from any 500-level CS course (500-590 or 598) except CS 591 or CS 597. An approved 500-level non-CS course may satisfy 4 credit hours of this requirement; CS 599 (thesis) may satisfy 4 credit hours of this requirement.	12		Advanced courses – One 500-level course from one of the three areas selected in the Breadth Requirement; Remaining hours from any 500-level CS course (500-590 or 598) except CS 591 or CS 597. An approved 500-level non-CS course may satisfy 4 credit hours of this requirement; CS 599 (thesis) may satisfy 4 credit hours of this requirement.	12
			Select one of the following - CS 591 Prof. Development (or comparable work experience in CS); or ENG 572 Professional Practicum (CS); or Elective course (subject to Other Requirements and Conditions)	0-4
Elective courses (subject to Other Requirements and Conditions below)	0-7		Elective courses (subject to Other Requirements and Conditions below)	0-7
Total Hours	**32**		**Total Hours**	**32**

Courses newly listed in revisions

CS 591 Prof. Development - 1 hour

ENG 572 Professional Practicum (CS) - 1 hour

5114: MUSIC: PIANO PEDAGOGY, MMUS

Completed Workflow

1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)

Approval Path

1. Fri, 11 Oct 2019 17:00:07 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review

History

1. Oct 11, 2019 by Mary Lowry (lowry)

Date Submitted:Wed, 29 Sep 2021 13:40:07 GMT

Viewing:5114 : Music: Piano Pedagogy, MMUS

Changes proposed by: Mary Lowry

Proposal Type:

Concentration (ex. Dietetics)

This proposal is for a:

Revision

Administration Details

Official Program Name

Music: Piano Pedagogy, MMUS

Sponsor College

Fine & Applied Arts

Sponsor Department

Music

Sponsor Name

Reynold Tharp

Sponsor Email

reynold@illinois.edu

College Contact

Nicole Turner

College Contact Email

nicturn@illinois.edu

College Budget Officer

Greg Anderson

College Budget Officer Email

gnanders@illinois.edu

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.*

proposal edits can be sent to Jenny Phillips, jhorn@illinois.edu

Does this program have inter-departmental administration?

No

Proposal Title

Effective Catalog Term

Fall 2021

Provide a brief, concise description (not justification) of your proposal.

Administrative approval: Revision to the Master of Music, Concentration in Piano Pedagogy, School of Music, College of Fine & Applied Arts.

Program Justification

Why are these changes necessary?

This is an administrative action to replace old applied lesson and ensemble courses that were formally with the MUS rubric. These courses have new numbers under the MUSC rubric.

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

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).

These revisions will not impact the learning outcomes and assessment of these outcomes.

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

Curriculum_Table_MMUS-Piano_Pedagogy_FA21.docx

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

Statement for Programs of Study Catalog

Code	Title	Hours
MUS 480	Course MUS 480 Not Found	4
MUSC 401	Advanced Piano	4
MUS 528	Res & Bibliography in Music (sections A1-A3)	2
MUS 557	Piano Literature (repeated twice)	8
MUS 570	Prac Pno Tchg Child and Teens	4
MUS 571	Practicum in Piano Tchg Adults	4
Electives selected in consultation with the student's advisor.		10
Master's Comprehensive Examination		
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		

Program Relationships

Corresponding Program(s):

Corresponding Program(s)
Music, MMUS

Program Features

Academic Level

Graduate

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.

Enrollment

Describe how this revision will impact enrollment and degrees awarded.

No impact.

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

Additional Budget Information

N/A

Financial Resources

How does the unit intend to financially support this proposal?

No impact.

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

No

Is this program requesting self-supporting status?

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

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.

No impact.

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.

No impact.

EP Documentation

EP Control Number

EP.22.036

This proposal requires HLC inquiry

No

DMI Documentation

Banner/Codebook Name

Piano Pedagogy

Program Code:

5114

Conc Code

5114

Degree Code

MMUS

Major Code

0265

Program Reviewer Comments

Allison McKinney (agrindly) (Wed, 13 Oct 2021 21:11:25 GMT): Administratively approved by the Graduate College.

Key: 821

MMUS in Piano Pedagogy

Current Curriculum (red text = deletion/edit)

Course #	Course Title	Hours
~~MUS 480~~	~~Piano~~	~~4~~
MUS 528	Res & Bibliography in Music (sections A1-A3)	2
MUS 557	Piano Literature	8
MUS 570	Practicum in Piano Teaching Child and Teens	4
MUS 571	Practicum in Piano Teaching Adults	4
Electives selected in consultation with the student's advisor.		10
Master's Comprehensive Examination		
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		
Concentration requirements as listed in table above.		
Total Hours		**32**

Other Requirements

Other requirements may overlap	
Concentration required	Yes
Minimum 500-level hours required overall:	12
Minimum GPA:	3.0

Revised Curriculum (red text = addition or change in course content and/or credit hours)

Course #	Course Title	Hours
MUSC 401	Advanced Piano	4
MUS 528	Res & Bibliography in Music (sections A1-A3)	2
MUS 557	Piano Literature (repeated twice)	8
MUS 570	Practicum in Piano Teaching Child and Teens	4
MUS 571	Practicum in Piano Teaching Adults	4
Electives selected in consultation with the student's advisor.		10
Master's Comprehensive Examination		
Language Requirements:		
Courses taken to meet language requirements do not count toward the degree. See the departmental handbook for details.		
Concentration requirements as listed in table above.		
Total Hours		**32**

Other Requirements

Concentration required	Yes
Minimum 500-level hours required overall:	12
Minimum GPA:	3.0

5317: LEADERSHIP STUDIES MINOR, UG

Completed Workflow

1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1306 Head (aball@illinois.edu)
3. 1342 Head (dmrosch@illinois.edu)
4. KL Committee Chair (bjgray2@illinois.edu; adilger2@illinois.edu)
5. KL Dean (aball@illinois.edu)
6. University Librarian (jpwilkin@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. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

Approval Path

1. Mon, 09 Nov 2020 16:33:22 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review
2. Mon, 09 Nov 2020 16:36:36 GMT
   Anna Ball (aball): Approved for 1306 Head
3. Fri, 22 Jan 2021 21:18:41 GMT
   David Rosch (dmrosch): Approved for 1342 Head
4. Wed, 27 Jan 2021 16:02:02 GMT
   Brianna Gregg (bjgray2): Approved for KL Committee Chair
5. Wed, 27 Jan 2021 16:18:40 GMT
   Anna Ball (aball): Approved for KL Dean
6. Wed, 27 Jan 2021 18:17:17 GMT
   John Wilkin (jpwilkin): Approved for University Librarian
7. Fri, 29 Jan 2021 19:28:16 GMT
   Kathy Martensen (kmartens): Approved for Provost
8. Tue, 09 Feb 2021 16:11:00 GMT
   Barbara Lehman (bjlehman): Approved for Senate EPC
9. Tue, 09 Feb 2021 16:12:42 GMT
   Jennifer Roether (jtempel): Approved for Senate
10. Wed, 10 Feb 2021 21:55:12 GMT
    Kathy Martensen (kmartens): Approved for U Senate Conf
11. Fri, 12 Feb 2021 20:10:23 GMT
    Emily Stuby (eastuby): Approved for DMI

History

1. Feb 28, 2019 by Kathy Martensen (kmartens)
2. Mar 1, 2019 by Kathy Martensen (kmartens)
3. May 9, 2019 by Deb Forgacs (dforgacs)
4. May 10, 2019 by Brianna Gregg (bjgray2)
5. Feb 26, 2020 by Brianna Gregg (bjgray2)
6. Apr 28, 2020 by Andrea Ray (aray)
7. Feb 12, 2021 by Andrea Ray (aray)

Date Submitted:Fri, 08 Oct 2021 19:25:14 GMT

Viewing:5317 : Leadership Studies Minor, UG

Changes proposed by: Andrea Ray

Proposal Type:

Minor (ex. European Union Studies)

This proposal is for a:

Revision

Administration Details

Official Program Name

Leadership Studies Minor, UG

Sponsor College

Agr, Consumer, & Env Sciences

Sponsor Department

Agricultural Leadership Education & Communication Program

Sponsor Name

Jenn Smist

Sponsor Email

jsmist@illinois.edu

College Contact

Brianna Gregg

College Contact Email

bjgray2@illinois.edu

College Budget Officer

Tosha Waller-Mumm

College Budget Officer Email

wallermu@illinois.edu

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.*

Dept Head

Does this program have inter-departmental administration?

No

Proposal Title

Effective Catalog Term

Spring 2022

Provide a brief, concise description (not justification) of your proposal.

Administrative approval: We propose to create more flexibility in the Minor by providing students a choice of one of two capstone-style courses - LEAD 460 Critical Approaches to Leading or LEAD 480 Collaborative Leadership. Related, we propose to add LEAD 480 to the list of electives, thus allowing students to use both courses to fulfill either requirement. Lastly, we proposal eliminating three electives that are no longer offered. Lastly, we note the ability for students in ALEC - within the AGED and AGCM concentrations - to earn this Minor, but not OCL concentration students, given the significant curricular overlap.

Program Justification

Why are these changes necessary?

LEAD 460 is taught as an advanced theoretical and critical course appropriate for seniors and graduate students in leadership studies. Adding it as a "Pick one from [two courses]" situated as capstones to the Minor is conceptually appropriate. The need to eliminate three courses (AGCM 430, ENG 315, and ENG 598) as electives is due to their no longer being offered.

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

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).

This process to assess student learning within the Minor is not changing in any way. In fact, adding LEAD 460 as a core requirement stems, in part, from what students have reported from our assessment practices as being valuable to their learning.

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.

An undergraduate minor should consist of at least 16 - and no more than 21 hours - of course work, with at least 6 hours of 300- or 400- level courses. Except clearly remedial offerings, prerequisite courses within the sponsoring unit count towards the total; prerequisite courses outside the sponoring unit do not count toward this total. The unit sponsoring the minor and that unit's college may set educationally necessary prerequisites for eligibility for the minor within these constraints. Does this proposal meet these criteria?

Yes

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

Minor in Leadership Revised Program Fall 2021.xlsx

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.

The minor in Leadership Studies provides instruction in leadership theories and their applications and is open to all undergraduate students who have a minimum 2.0 GPA. The minor requires a total of seventeen or eighteen semester hours: nine hours of required foundation courses, five to six hours of elective context courses, and three hours in a capstone course. Students within the Organizational Community Leadership concentration of the ALEC major are unable to add this minor.

Statement for Programs of Study Catalog

Code	Title	Hours
Requirements		
LEAD 260	Foundations of Leadership	3
LEAD 380	Leadership in Groups and Teams	3
PSYC 245	Industrial Org Psych	3
LEAD 460	Critical Approaches to Leadership Practice	3
or LEAD 480	Collaborative Leadership	
Two(2) electives from:		**5-6**
ACE 231	Food and Agribusiness Mgt	
ACE 291	Ag Policy & Leadership	
ACES 298	International Experience (Leadership Experience to Rome)	
AFAS 331	Leading People and Effective Communication I	
AFAS 332	Leading People and Effective Communication II	
AGCM 430	Comm in Env Social Movements	

LEAD 230	Leadership Communications
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges
LEAD 460	Critical Approaches to Leadership Practice (If not used for capstone requirement)
LEAD 480	Collaborative Leadership (If not used for capstone requirement)
AHS 365	Civic Engagement in Wellness
ANSC 471	ANSC Leaders & Entrepreneurs
BADM 310	Mgmt and Organizational Beh
BADM 311	Leading Individuals and Teams
BADM 314	Leading Negotiations
CMN 321	Strategies of Persuasion
ENG 315	Learning in Community
ENG 598	Special Topics (Applied Project Management)
IHLT 230	Leadership in Health
JOUR 250	Journalism Ethics & Diversity
KIN 369	Coaching Strategies
MILS 341	Leadership and Management
MILS 342	Officership
NS 303	Leadership and Management
NS 308	Leadership and Ethics
PHIL 436	Phil of Law and of the State
PS 304	The US Presidency
PSYC 455	Organizational Psych
RST 200	Leadership in Recreation, Sport and Tourism
SE 361	Emotional Intelligence Skills
SOCW 321	Social Entre & Social Change
Total Hours	17-18

Program Features

Academic Level

Undergraduate

Is this minor?

An interdisciplinary study focusing on a single theme

Is This a Teacher Certification Program?

No

Will specialized accreditation be sought for this program?

No

Other than certification via the students' degree audits, is there any additional planned mechanism to award/honor successful completion of the minor?

No

Delivery Method

This program is available:

On Campus - Students are required to be on campus, they may take some online courses.

Enrollment

Will the department limit enrollment to the minor?

No

Describe how the department will monitor the admission to/enrollment in the minor.

The Minor Coordinator will review and approve requests. This process has not changed.

Are there any prerequisites for the proposed minor?

No

Describe how this revision will impact enrollment and degrees awarded.

There will not be a negative impact on the program. We expect the increased flexibility in coursework to potentially positively impact enrollment.

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

Financial Resources

How does the unit intend to financially support this proposal?

There will be no changes to financial support as a result of this proposal.

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

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.

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.

Current library collections and services are adequate for the proposed program.

EP Documentation

EP Control Number

EP.22.036

This proposal requires HLC inquiry

No

DMI Documentation

Banner/Codebook Name

Leadership Studies

Program Code:

5317

Minor Code

5317

Program Reviewer Comments

David Rosch (dmrosch) (Tue, 21 Sep 2021 13:24:40 GMT): Rollback: Deb, the Statement for Programs of Study Catalogue table seems to still say that LEAD 480 is required, when it should say (LEAD 480 or LEAD 460) - and then LEAD 480 should be listed as an elective below. Am I reading this incorrectly, or should that change be made? Thanks!
Deb Forgacs (dforgacs) (Tue, 21 Sep 2021 18:46:01 GMT): Rollback: Update LEAD 480 credit hours.
Deb Forgacs (dforgacs) (Mon, 27 Sep 2021 16:10:21 GMT): Re-entered the proposal type, minor type and Describe how the department will monitor the admission to/enrollment in the minor. system bug 09/27/2021
Brianna Gregg (bjgray2) (Fri, 08 Oct 2021 18:51:19 GMT): Rollback: additional language about who and who cannot add this minor, otherwise approved with revisions once language added.
Kathy Martensen (kmartens) (Tue, 12 Oct 2021 13:48:24 GMT): Rollback: The two capstone courses, LEAD 460 and 480, appear in both the required and elective lists. Please add a clarifying footnote or other means of explaining that the courses cannot count toward both. Thanks! --Kathy
Kathy Martensen (kmartens) (Wed, 13 Oct 2021 00:42:57 GMT): Rollback: Kathy Martensen (kmartens) (10/12/21 8:48 am): Rollback: The two capstone courses, LEAD 460 and 480, appear in both the required and elective lists. Please add a clarifying footnote or other means of explaining that the courses cannot count toward both. Thanks! --Kathy
Anna Ball (aball) (Wed, 13 Oct 2021 13:38:30 GMT): Rollback: Rollback per Provost
Kathy Martensen (kmartens) (Wed, 13 Oct 2021 16:27:35 GMT): Administrative approval: Does not impact overall hours required; doesn't restrict student choice.

Key: 91

	CURRENT Program	PROPOSED Program
Required Courses	LEAD 260	LEAD 260
	LEAD 380	LEAD 380
	PSYC 245	PSYC 245
	LEAD 480	LEAD 460 or 480
Electives	ACE 231	ACE 231
	ACE 291	ACE 291
	ACES 298 - Experience in Rome	ACES 298 - Experience in Rome
	AFAS 331	AFAS 331
	AFAS 332	AFAS 332
	AGCM 430	
	LEAD 230	LEAD 230
	LEAD 340	LEAD 340
	LEAD 460	LEAD 460
		LEAD 480
	AHS 365	AHS 365
	ANSC 471	ANSC 471
	BADM 310	BADM 310
	BADM 311	BADM 311
	BADM 314	BADM 314
	CMN 321	CMN 321
	ENG 315	
	ENG 598 - Applied Proj Mgmt	
	IHLT 230	IHLT 230
	JOUR 250	JOUR 250
	KIN 369	KIN 369
	MILS 341	MILS 341
	MILS 342	MILS 342
	NS 303	NS 303
	NS 308	NS 308
	PHIL 436	PHIL 436
	PS 304	PS 304
	PSYC 455	PSYC 455
	RST 200	RST 200
	SE 361	SE 361
	SOCW 321	SOCW 321

10KL5895BS: METROPOLITAN FOOD & ENVIRONMENTAL SYSTEMS, BS

Completed Workflow

1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1306 Head (aball@illinois.edu)
3. 1733 Head (rpendall@illinois.edu)
4. KR Dean (nicturn@illinois.edu; mmedward@illinois.edu)
5. KL Committee Chair (bjgray2@illinois.edu; adilger2@illinois.edu)
6. KL Dean (aball@illinois.edu)
7. University Librarian (jpwilkin@illinois.edu)
8. Provost (kmartens@illinois.edu)
9. Senate EPC (bjlehman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
10. Senate (jtempel@illinois.edu)
11. U Senate Conf (none)
12. Board of Trustees (none)
13. IBHE (none)
14. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

Approval Path

1. Tue, 01 Oct 2019 13:17:22 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review
2. Tue, 01 Oct 2019 13:50:20 GMT
   Anna Ball (aball): Approved for 1306 Head
3. Wed, 02 Oct 2019 17:22:28 GMT
   Rolf Pendall (rpendall): Approved for 1733 Head
4. Wed, 02 Oct 2019 17:44:37 GMT
   Nicole Turner (nicturn): Approved for KR Dean
5. Wed, 02 Oct 2019 20:42:34 GMT
   Anthony Yannarell (acyann): Approved for KL Committee Chair
6. Wed, 02 Oct 2019 20:44:25 GMT
   Anna Ball (aball): Approved for KL Dean
7. Wed, 02 Oct 2019 20:50:17 GMT
   John Wilkin (jpwilkin): Approved for University Librarian
8. Wed, 02 Oct 2019 20:55:02 GMT
   Kathy Martensen (kmartens): Approved for Provost
9. Tue, 08 Oct 2019 19:26:49 GMT
   Barbara Lehman (bjlehman): Approved for Senate EPC
10. Tue, 15 Oct 2019 19:12:05 GMT
    Jennifer Roether (jtempel): Approved for Senate
11. Fri, 01 Nov 2019 22:01:31 GMT
    Kathy Martensen (kmartens): Approved for U Senate Conf
12. Thu, 14 Nov 2019 15:49:25 GMT
    Kathy Martensen (kmartens): Approved for Board of Trustees
13. Sat, 02 May 2020 21:14:15 GMT
    Kathy Martensen (kmartens): Approved for IBHE
14. Mon, 18 May 2020 17:39:18 GMT
    Emily Stuby (eastuby): Approved for DMI

History

1. May 18, 2020 by Megan Dailey (mdailey5)

Date Submitted:Mon, 14 Dec 2020 18:45:03 GMT

Viewing:10KL5895BS : Metropolitan Food & Environmental Systems, BS

Changes proposed by: Megan Dailey

Proposal Type:

Major (ex. Special Education)

This proposal is for a:

Revision

Administration Details

Official Program Name

Metropolitan Food & Environmental Systems, BS

Sponsor College

Agr, Consumer, & Env Sciences

Sponsor Department

Agricultural, Consumer and Environmental Sciences

Sponsor Name

Megan Dailey

Sponsor Email

mdailey5@illinois.edu

College Contact

Anthony (Tony) Yannarell

College Contact Email

acyann@illinois.edu

Does this program have inter-departmental administration?

Yes

Interdisciplinary Colleges and Departments (list other colleges/departments which are involved other than the sponsor chose above)

College

Fine & Applied Arts

Department

Urban & Regional Planning

Is there an additional department involved in governance?

No

Proposal Title

Effective Catalog Term

Spring 2021

Provide a brief, concise description (not justification) of your proposal.

Admin approval: Update CPSC 226 with CPSC 212 and ACE 261 with ACE 262.

Program Justification

Why are these changes necessary?

The Department of CPSC has eliminated CPSC 226 and replaced it with a new course CPSC 212. Because CPSC 226 was offered as a part of the MFST curriculum (see Technology I choices in the curriculum), this change needs to be reflected in the program.

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

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

In addition to the College of ACES departmental courses required to fulfill the core curriculum, students will also be required to take two courses offered by the Department of Urban & Regional Planning - one lower and one upper level course that the student chooses from the list provided in the curriculum (see courses listed under "Urban Planning I and Urban Planning II" in the attached MFST Curriculum).
Most courses required for this major are already being taught across the departments in the College of ACES or across campus (see attached "MFST Curriculum"). With the addition of ~25 students per year and a number of class choices within the curriculum design, we do not project that this will burden any one class or another program. We are employing 5 teaching assistants to be allocated to the classes most affected by the increase in enrollment and to alleviate any additional teaching load to an individual faculty member. We will re-evaluate the admission and advising process if the demand exceeds capacity or if there is undue burden on faculty. If necessary, expansion of the classes will be done through the revenue generated from tuition.
This interdisciplinary curriculum design using mostly existing departmental courses requires an interdisciplinary governing council. Upon counsel with the heads of MFST-associated departments, the Dean of Academic Programs will appoint a mixture of faculty members from the representative units involved in the program to form an interdisciplinary MFST Coordinating Committee for decision-making purposes. An external advisory committee composed of stakeholders in the metropolitan food system will also be selected by the College of ACES Dean and will provide input to the Coordinating Committee of MFST. These stakeholders include individuals in industry (eg. food producers, processors, distributors, and

waste management) government (eg. local, state, national, or international officials involved in food policy, infrastructure, and management), non-governmental organizations (eg. non-profits involved research/educational advancements in the food system or in food justice and improving food access), and educational institutions (eg. administrators from high schools and/or other universities). The Course and Curriculum Committee that established this proposal and will continue to decide future curriculum decisions consists of the Director of MFST, the Associate Dean and Director of Extension, the Head of the Department of Natural Resources and Environmental Sciences, and the Interim Associate Dean of ACES Academic Programs.
There is also a designated reporting process for the this program. Each semester, the Director of MFST will compile a list of faculty who taught courses related to the program (and the IUs associated with MFST registered students), faculty who accepted MFST students to work in their laboratories, and any university member that accepted MFST students for experiential learning opportunities. The Director of MFST will circulate this to the department heads and additional college administrators. These data will be made available to department executive officers to be included in the individual university member's promotion and tenure documents.

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).

N/A

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.

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.

Megan Dailey, Ph.D., Director
215 Mumford Hall
1301 W. Gregory Dr., Urbana
PH: (217) 244-5567
mdailey5@illinois.edu

The Metropolitan Food and Environmental Systems (MFST) program uses an interdisciplinary approach to understanding and implementing solutions in the area of urban food and environmental systems to ensure the sustainability of readily available nutritious foods for metropolitan populations. The

students in this major will learn to understand the science and practice of food production and security across urban environmental, economic, social, and health contexts, while maintaining environmental sustainability. Students in this program will be prepared for jobs in impact areas related to food systems, such as government, non-governmental organizations, institutional food buyers, investment firms, financial and insurance companies, industry, retail, and food service. Alternatively, students may choose to pursue post-baccalaureate education, including law school and graduate school in food systems or in specific areas of the food system. Because the MFST curricula includes required training in STEM education, critical thinking, scientific literacy, communication and leadership, students will obtain the skills necessary to traverse an ever-changing job market and have the freedom to choose from many career-life options.

A minimum of 127 credit hours are required for graduation, including General Education Requirements and the MFST Core Curriculum. Because the core curriculum includes many College of Agricultural, Consumer and Environmental Sciences (ACES) departmental course requirements, the students in MFST have the unique opportunity to minor in many of the ACES departments or to delve deeper into a food system area of interest in addition to the core courses, including (but not limited to) advanced nutrition, plant or animal production, food processing, food safety, environmental sustainability, climate change, or landscape architecture.

Statement for Programs of Study Catalog

Prescribed Courses including Campus General Education

Code	Title	Hours
Composition I		4
RHET 105	Writing and Research	
Advanced Composition		3
LEAD 230	Leadership Communications	
Cultural Studies		9
LEAD 340	Leadership Ethics & Society: Addressing Contemporary Challenges (US Minority)	
ACE 251	The World Food Economy (Non-Western)	
or CPSC 116	The Global Food Production Web	
Western - select one course from campus approved list		
Humanities & the Arts		6
TSM 311	Course TSM 311 Not Found	
Select one course from campus approved list		
Natural Science and Technology		8
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
Quantitative Reasoning I		3-5
Select one course from campus approved list		
Quantitative Reasoning II		3-4
ACE 261	Applied Statistical Methods	
or CPSC 241	Intro to Applied Statistics	
ACE 262	Applied Statistical Methods and Data Analytics I	
or CPSC 241	Intro to Applied Statistics	
Social & Behavioral Sciences		7
ACE 100	Introduction to Applied Microeconomics	4
ACE 255	Economics of Food and Environmental Justice	3
ACES Prescribed		
ACES 101	Contemporary Issues in ACES[for freshman only]	2

Core Curriculum

Code	Title	Hours
Required Introductory Courses		**6**
ACES 101	Contemporary Issues in ACES	0 or 2
or ACES 200	ACES Transfer Orientation	

ACES 102	Intro Sustainable Food Systems	3
MFST 101	Experiencing Food Systems	3
Understanding Abiotic-Biotic Interactions Necessary for Food		**14-15**
ANSC 100	Intro to Animal Sciences	4
CPSC 112	Introduction to Crop Sciences	3 or 4
or HORT 100	Introduction to Horticulture	
NRES 102	Introduction to NRES	3
NRES 201	Introductory Soils	4
Human Nutrition		
FSHN 120	Contemporary Nutrition	3
or FSHN 220	Principles of Nutrition	
Economics I and II		**7**
ACE 100	Introduction to Applied Microeconomics (fulfills SBS requirement)	4
ACE 255	Economics of Food and Environmental Justice (fulfills SBS requirement)	3
Food Production I and II - Choose two from the following list:		**5-8**
ANSC 301	Food Animal Production, Management, and Evaluation	
ANSC 309	Meat Production and Marketing (If you takeANSC 309, you must take a 4-hour upper-level course here or from another list)	
ANSC 400	Dairy Herd Management	
ANSC 401	Beef Production	
ANSC 402	Sheep and Goat Production	
ANSC 403	Pork Production	
ANSC 404	Poultry Science	
CPSC 418	Crop Growth and Management	
CPSC 437	Principles of Agroecology	
HORT 341	Greenhouse Mgmt and Production	
HORT 360	Vegetable Crop Production	
HORT 421	Horticultural Physiology	
HORT 435	Urban Food Production	
NRES 488	Soil Fertility and Fertilizers	
Urban Planning I - Choose one from the following list:		**3**
UP 101	Introduction to City Planning	
UP 116	Urban Informatics I	
UP 136	Urban Sustainability	
UP 203	Cities: Planning & Urban Life	
UP 204	Chicago: Planning & Urban Life	
UP 205	Ecology & Environmental Sustainability	
UP 260	Social Inequality and Planning	
Urban Planning II - Choose one from the following list:		**3-4**
UP 330	The Modern American City	
UP 340	Planning for Healthy Cities	
UP 345	Economic Development Planning	
UP 405	Watershed Ecology and Planning	
UP 406	Urban Ecology	
UP 473	Housing & Urban Policy	
UP 475	Real Estate Development Fundamentals	
Policy I - Choose one from the following list:		**3**
ACE 199	Undergraduate Open Seminar (Food Ag & Pol)	
ACE 291	Ag Policy & Leadership	
ACE 292	Farm, Food & Environmental Policy	
UP 211	Local Planning, Gov't and Law	
Policy II - Choose one from the following list:		**3-4**

ACE 306	Food Law	
ACE 403	Agricultural Law	
ACE 406	Environmental Law	
ACE 410	Energy Economics	
ACE 411	Environment and Development	
ACE 456	Agr and Food Policies	
NRES 424	US Environ, Justic & Policy	
UP 407	State and Local Public Finance	
Technology I - Choose one from the following list:		**2-4**
ABE 141	ABE Principles: Biological	
ABE 223	ABE Principles: Machine Syst	
ABE 224	ABE Principles: Soil & Water	
ABE 225	ABE Principles: Bioenvironment	
ABE 226	ABE Principles: Bioprocessing	
ANSC 110	Life With Animals and Biotech	
CPSC 226	Course CPSC 226 Not Found	
CPSC 212	Introduction to Plant Protection	
CPSC 261	Biotechnology in Agriculture	
CPSC 265	Genetic Engineering Lab	
CPSC 266	Data in Biology and Agriculture	
TSM 232	Course TSM 232 Not Found	
TSM 234	Course TSM 234 Not Found	
Technology II - Choose one from the following list:		**2-3**
ANSC 409	Meat Science	
CPSC 408	Integrated Pest Management	
CPSC 426	Weed Mgt in Agronomic Crops	
CPSC 428	Weed Science Practicum (If you takeCPSC 428, you must take a 4-hour upper-level course from another list)	
CPSC 491	Ugrad Bioinformatics Seminar (Intro to R Programming - if you takeCPSC 491, you must take a 4-hour upper-level course from another list)	
FSHN 460	Food Processing Engineering	
FSHN 465	Principles of Food Technology	
FSHN 469	Package Engineering	
TSM 352	Course TSM 352 Not Found	
TSM 371	Course TSM 371 Not Found	
TSM 372	Course TSM 372 Not Found	
TSM 430	Course TSM 430 Not Found	
TSM 435	Course TSM 435 Not Found	
TSM 438	Course TSM 438 Not Found	
TSM 465	Course TSM 465 Not Found	
TSM 467	Course TSM 467 Not Found	
TSM 486	Course TSM 486 Not Found	
Advanced Scientific Literacy - Choose one from the following list:		**3-4**
ACE 431	Agri-food Strategic Management	
ANSC 444	Applied Animal Genetics	
ANSC 448	Math Modeling in Life Sciences	
CPSC 440	Applied Statistical Methods I	
FSHN 428	Community Nutrition	
HDFS 420	Inequality, Public Policy, and U.S. Families	
HDFS 461	Family Life Education	
NRES 421	Quantitative Methods in NRES	
NRES 427	Modeling Natural Resources	

NRES 340	Environ Social Sci Res Meth	
UP 316	Urban Informatics II	
UP 418	GIS for Planners	
UP 443	Scenarios, Plans & Future Cities	
UP 457	Small Town/Rural Planning Workshop	
UP 478	Community Development Workshop	
Social Ecology - Choose one from the following list:		**3**
ACE 335	Food Marketing and Behavior	
HDFS 420	Inequality, Public Policy, and U.S. Families	
NRES 428	Valuing Nature	
Social Impact in Practice - Choose one from the following list:		**3-9**
LEAD 480	Collaborative Leadership	
HDFS 494	Applied Research Methods	
MFST 450	Social Impact Learning Experience (MFST 450&MFST 397can only equal a total of 12 hours)	
Experiential Learning Series		**7-16**
MFST 301	Experiential Learning Preparedness & Planning	1
MFST 397	Experiential Learning	3 to 9
MFST 401	Experiential Learning Review and Reflection	3
Capstone		**3**
MFST 498	Metropolitan Food & Environmental Systems Capstone	3
Total hours		**127**

Corresponding Degree

BS Bachelor of Science

Program Features

Academic Level

Undergraduate

Does this major have transcripted concentrations?

No

What is the typical time to completion of this program?

4 years

What are the minimum Total Credit Hours required for this program?

127

CIP Code

010000 - Agriculture, General.

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

Fall 2020

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.

For incoming freshman, admission into the program requires 1) strong math and science coursework & performance, 2) an interest in improving society through food and environmental systems, 3) leadership experience and commitment to activities. There are no minimum required test scores.

Transfer student admission requires a minimum GPA of 2.5.
Sophomore-level transfer admission requires the completion of equivalent transfer coursework to the following UIUC courses and graduation requirements:
Composition: RHET 105 Writing and Research
Quantitative Reasoning I: STAT 100 Statistics and MATH 112 Algebra or higher
Natural Sciences & Technology: CHEM 102 and 103 General Chemistry I and
General Chemistry Lab I
Humanities: 1 course following General Education Requirement
Social & Behavioral Sciences: a course in Political Science, Government, Policy,
Psychology, or Sociology
Language other than English

Junior-level transfer admission requires the completion of all equivalent transfer coursework listed above for Sophomore-level transfer admission and the following UIUC courses and graduation requirements:
Quantitative Reasoning II: MATH 220, 221, or 234 Calculus, Calculus I, or
Calculus for Business I
Natural Sciences & Technology: CHEM 104 and 105, General Chemistry II and
General Chemistry Lab II
Social & Behavioral Sciences: ECON 102 or ACE 100 Microeconomics or Ag,
Consumer & Resource Econ AND a course in Political Science, Government,
Policy, Psychology, or Sociology
Cultural Studies: 1 course that satisfies the Western/Comparative Cultures
General Education Requirement
Completion of transferable coursework in the following areas is highly recommended: Environmental Sciences, Human Nutrition, Plant Biology, Horticulture, Technology.

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

The Director, who is a 100%-time specialized faculty in MFST, with the assistance of future specialized faculty within the MFST program, will manage student advising and any on-campus recruitment responsibilities. Admissions will be handled by Cory Ohms, an Assistant Dean in the College of ACES Academic Programs Office.

Enrollment

Describe how this revision will impact enrollment and degrees awarded.

N/A

Estimated Annual Number of Degrees Awarded

Year One Estimate

0

5th Year Estimate (or when fully implemented)

50

What is the matriculation term for this program?

Fall

Budget

Are there budgetary implications for this revision?

No

Will the program or revision require staffing (faculty, advisors, etc.) beyond what is currently available?

Yes

Please explain/describe:

Because the program will be administered within the College of ACES Academic Programs Office, the existing facilities and staff will be made available. Beyond these existing resources, a Director (100% FTE, non-TT), specialized faculty (50% FTE, non-TT), and graduate assistants (50% FTE) will be used for critical academic functions related to the program. The Director and specialized faculty will mange student advising, any on-campus recruitment responsibilities, teaching MFST courses, and any other responsibilities not handled by ACES Office of Academic Programs staff.

Additional Budget Information

The College of ACES received funding from UIUC's Investment for Growth Program to develop the MFST degree program and hire the Director, specialized faculty, and graduate teaching assistants. By 2022, the program is projected to be funded solely by tuition and instructional unit revenue.

Attach File(s)

Organizational Chart.pdf

Financial Resources

How does the unit intend to financially support this proposal?

The College of ACES received funding from UIUC's Investment for Growth Program to develop and initiate the MFST degree program (see attached Budget). By 2022, the program is projected to be funded solely by tuition and instructional unit revenue. Several proposed courses currently exist, and will continue to be housed outside of the MFST rubric, which will provide helpful revenue to these participating units (see attached Letter of Support). Since ACES expects ~25 students enrolled per class year for several years, we do not expect MFST students to be an enrollment burden for these units.

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

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

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.

Most courses are already being taught across the departments in the College of ACES or across campus. With the addition of ~25 students per year and a number of class choices within the curriculum design, we do not project that this will burden any one class or another program (see Letters of Support from department and program heads). We are employing 5 teaching assistants to be allocated to the classes most affected by the increase in enrollment and to alleviate any additional teaching load to an individual faculty member. We will re-evaluate the admission and advising process if the demand exceeds capacity or if there is undue burden on faculty. If necessary, expansion of the classes will be done through the revenue generated from tuition.
The Director, who is a 100%-time specialized faculty in MFST, with the assistance of future specialized faculty within the MFST program, will manage student advising and any on-campus recruitment responsibilities. Admissions will be handled by Cory Ohms, an Assistant Dean in the College of ACES Academic Programs Office. We expect most students will work with our existing network of agency connections through the College of ACES faculty and Extension to complete their experiential learning activities. These networks have an established footprint in all nodes of the food system in major metropolitan areas, including production, processing, distribution, consumerism, and waste. We expect that the networks can be used by MFST administration to place students into jobs within these organizations and for the students to directly build relationships with potential future employers through the student experiential learning projects.

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 should be no additional resources needed for the library. A letter from the University Librarian is added in the attached "Letters of Support".

EP Documentation

EP Control Number

EP.22.036

This proposal requires HLC inquiry

No

DMI Documentation

Banner/Codebook Name

BS:Met Food & Enviro Sys -UIUC

Program Code:

10KL5895BS

Degree Code

BS

Major Code

5895

Program Reviewer Comments

Deb Forgacs (dforgacs) (Wed, 09 Dec 2020 22:03:14 GMT): Rollback: requested
Kathy Martensen (kmartens) (Tue, 19 Oct 2021 16:02:12 GMT): Administrative approval: No change to total hours required; doesn't restrict student choice.

Key: 777

STATEMENT FOR PROGRAMS OF STUDY CATALOG:

Megan Dailey, Ph.D., Director
215 Mumford Hall
1301 W. Gregory Dr., Urbana
PH: (217) 244-5567
mdailey5@illinois.edu

The Metropolitan Food and Environmental Systems (MFST) program uses an interdisciplinary approach to understanding and implementing solutions in the area of urban food and environmental systems to ensure the sustainability of readily available nutritious foods for metropolitan populations. The students in this major will learn to understand the science and practice of food production and security across urban environmental, economic, social, and health contexts, while maintaining environmental sustainability. Students in this program will be prepared for jobs in impact areas related to food systems, such as government, non-governmental organizations, institutional food buyers, investment firms, financial and insurance companies, industry, retail, and food service. Alternatively, students may choose to pursue postbaccalaureate education, including law school and graduate school in food systems or in specific areas of the food system. Because the MFST curricula includes required training in STEM education, critical thinking, scientific literacy, communication and leadership, students will obtain the skills necessary to traverse an ever-changing job market and have the freedom to choose from many career-life options.

A minimum of 127 credit hours are required for graduation, including General Education Requirements and the MFST Core Curriculum. Because the core curriculum includes many College of Agricultural, Consumer and Environmental Sciences (ACES) departmental course requirements, the students in MFST have the unique opportunity to minor in many of the ACES departments or to delve deeper into a food system area of interest in addition to the core courses, including (but not limited to) advanced nutrition, plant or animal production, food processing, food safety, environmental sustainability, climate change, or landscape architecture.

GENERAL EDUCATION REQUIREMENTS

Composition I			**4hrs**
RHET 105	Writing and Research	4hrs	
Advanced Composition			**3hrs**
AGED 230	Leadership Communication	3hrs	
Cultural Studies			**9hrs**
AGED 340 (US Minority) ACE 251 or CPSC 116 (Non-Western) Western	Leadership Ethics & Pluralism (US Minority) World Food Economy or The Global Food Web Select from campus approved list	3hrs 3hrs 3hrs	
Humanities & the Arts			**6hrs**
TSM 311 Select from campus approved list	Humanity in the Food Web Select from campus approved list	3hrs 3hrs	
Natural Science and Technology			**8hrs**
CHEM 102 & 103 CHEM 104 & 105	General Chemistry I General Chemistry II	4hrs 4hrs	
Quantitative Reasoning I			**3-5hrs**
Select from campus approved mathematics courses			
Quantitative Reasoning II			**3-4hrs**
Select from one of the following: ACE 261 CPSC 241	 Applied Statistical Methods Intro to Applied Statistics		
Social & Behavioral Sciences			**7hrs**
ACE 100 ACE 255	Agriculture, Consumer & Resource Economics Economics of Food and Environmental Justice	4hrs 3hrs	

The general education courses listed above are required by the major. The college and program understands that there may be no direct articulation for these courses for transfer students. As is the case with all students, the college and program will work with students on an individual basis in such cases to ensure the learning outcomes are not compromised while evaluating specific courses for substitutions.

CORE CURRICULUM

Required Introductory Courses			**6-8hrs**
ACES 101 or ACES 200 ACES 102 MFST 101	Contemporary Issues in ACES/ACES Tr Orient Introduction to Food Systems Experiencing Food Systems	0-2hrs 3hrs 3hrs	
Understanding Abiotic-Biotic Interactions Necessary for Food			**14-15hrs**
NRES 102 CPSC 112 or HORT 100 ANSC 100 NRES 201	Introduction to NRES Intro to Crop Sciences or Intro to Horticulture Introduction to Animal Sciences Introduction to Soils	3hrs 3-4hrs 4hrs 4hrs	
Human Nutrition (choose one from the following list)			**3-4hrs**
FSHN 120 FSHN 220	Contemporary Nutrition Principles of Nutrition	3hrs 4hrs	
Economic I and II			**7hrs**
ACE 100 *(fulfills SBS requirement)* ACE 255 *(fulfills SBS requirement)*	Agriculture, Consumer & Resource Economics Economics of Food and Environmental Justice	4hrs 3hrs	***(fulfills SBS requirement)***

Food Production I and II (choose two from the following list)			**5-8hrs**
HORT 341	Greenhouse Mgmt and Production	4hrs	
HORT 360	Vegetable Crop Production	3hrs	
HORT 421	Horticulture Physiology	4hrs	
HORT 435	Urban Food Production	3hrs	
HORT 466	Growth & Dev of Hort Crops	4hrs	
CPSC 418	Crop Growth and Mgmt	3hrs	
CPSC 437	Agroecology	3hrs	
NRES 488	Soil Fertility and Fertilizers	3hrs	
ANSC 301	Food Animal Production, Mgmt & Eval	3hrs	
ANSC 309	Meat Production and Marketing *(if you take ANSC 309, you must take a 4hr upper level course here or from another list)*	2hrs	
ANSC 400	Dairy Herd Mgmt	3hrs	
ANSC 401	Beef Production	3hrs	
ANSC 402	Sheep Production	3hrs	
ANSC 403	Pork Production	3hrs	
ANSC 404	Poultry Science	3hrs	
Urban Planning I (choose one from the following list)			**3hrs**
UP 101	Intro to City Planning	3hrs	
UP 116	Urban Informatics I	3hrs	
UP 136	Urban Sustainability	3hrs	
UP 203	Cities: Planning & Urban Life	3hrs	
UP 204	Chicago: Planning & Urban Life	3hrs	
UP 205	Ecology & Environmental Sustainability	3hrs	
UP 260	Social Inequality and Planning	3hrs	
Urban Planning II (choose one from the following list)			**3-4hrs**
UP 330	The Modern American City	3hrs	
UP 340	Planning for Healthy Cities	3hrs	
UP 345	Economic Development Planning	3hrs	
UP 405	Watershed Ecology and Planning	4hrs	
UP 406	Urban Ecology	4hrs	
UP 473	Housing & Urban Planning	3hrs	
UP 475	Real Estate Development Fundamentals	3hrs	
Policy I (choose one from the following list)			**3hrs**
ACE 199	Food Ag & Pol	3hrs	
ACE 291	Ag Policy & Leadership	3hrs	
ACE 292	Farm, Food & Env Policy	3hrs	
UP 211	Local Planning, Gov't and Law	3hrs	
Policy II (choose one from the following list)			**3-4hrs**
ACE 306	Food Law	3hrs	

ACE 403	Agricultural Law	3hrs	
ACE 406	Environmental Law	3hrs	
ACE 410	Energy Economics	3hrs	
ACE 411	Environment and Development	3hrs	
ACE 456	Agriculture and Food Policies	3hrs	
NRES 424	US Environ, Justice & Policy	4hrs	
UP 407	State and Local Public Finance	3hrs	
Technology I (choose one from the following list)			**2-4hrs**
ABE 141	ABE Principles: Biological	2hrs	
ABE 223	ABE Principles: Machine System	2hrs	
ABE 224	ABE Principles: Soil & Water	2hrs	
ABE 225	ABE Principles: Bioenvironment	2hrs	
ABE 226	ABE Principles: Bioprocessing	2hrs	
TSM 232	Materials and Construction Sys	3hrs	
TSM 234	Wiring, Motors and Control Sys	3hrs	
ANSC 110	Life with Animals and Biotech	3hrs	
CPSC 226	Intro to Weed Science	3hrs	
CPSC 261	Biotechnology in Agriculture	3hrs	
CPSC 265	Genetic Engineering Lab	3hrs	
CPSC 266	Data in Biology and Agriculture	4hrs	
Technology II (choose one from the following list)			**2-3hrs**
TSM 352	Land and Water Mgt Systems	3hrs	
TSM 371	Residential Housing Design	3hrs	
TSM 372	Environ Control & HVAC Systems	3hrs	
TSM 430	Project Management	2hrs	
TSM 435	Elec Computer Ctrl Sys	3hrs	
TSM 438	Renewable Energy Applications	3hrs	
TSM 465	Chemical Application Systems	3hrs	
TSM 467	Precision Agric Technology	3hrs	
TSM 486	Grain Bioprocessing Coproducts	3hrs	
ANSC 409	Meat Science	3hrs	
CPSC 408	Integrated Pest Mgt	3hrs	
CPSC 426	Weed Science Practicum	3hrs	
CPSC 428	Weed Mgt in Agronomic Crops *(if you take CPSC 428, you must take a 4hr upper level course from another list)*	2hrs	
CPSC 491	Intro to R Programming *(if you take CPSC 491, you must take a 4hr upper level course from another list)*	2hrs	
FSHN 460	Food Processing Engineering	3hrs	
FSHN 465	Principles of Food Technology	3hrs	
FSHN 469	Package Engineering	3hrs	
Advanced Scientific Literacy (choose one from the following list)			**3-4hrs**
NRES 340	Environmental Social Science Research	3hrs	
NRES 421	Methods	3hrs	
NRES 427	Quantitative Methods in NRES	4hrs	

CPSC 440 ANSC 444 ANSC 448 ACE 431 FSHN 428 HDFS 420 HDFS 461 UP 316 UP 418 UP 443 UP 457 UP 478	Modeling Natural Resources Applied Statistical Methods Applied Animal Genetics Mathematical Modeling in Life Sciences Agri-food Strategic Management Community Nutrition Inequality, Public Policy and US Families Family Life Education Urban Informatics II GIS for Planners Scenarios, Plans & Future Cities Small Town/Rural Planning Workshop Community Development Workshop	4hrs 3hrs 3hrs 3hrs 3hrs 3hrs 3hrs 3hrs 4hrs 3hrs 4hrs 4hrs	
Social Ecology (choose one from the following list)			**3hrs**
ACE 335 HDFS 420 NRES 428	Food Marketing and Behavior Inequality, Public Policy, and US Families Valuing Nature	3hrs 3hrs 3hrs	
Social Impact in Practice (choose one from the following list)			**3-9hrs**
MFST 450 HDFS 494 AGED 480	Social Impact Learning Experience *(MFST 450 & MFST 397 can only equal a total of 12hrs)* Applied Research Methods Collaborative Leadership	3-9hrs 3hrs 3hrs	
Experiential Learning Series			**7-16hrs**
MFST 301 MFST 397 MFST 401	Experiential Learning Preparedness and Planning Experiential Learning *(MFST 397 and MFST 450 can only equal a total of 12hrs)* Experiential Learning Review and Reflection	1hr 3-9hrs 3hrs	
Capstone			**3hrs**
MFST 498	Capstone	3hrs	

UPPER-LEVEL (300 or 400) COURSES REQUIRED BY MAJOR

AGED 340	Leadership Ethics & Pluralism (US Minority)		3hrs
TSM 311	Humanity in the Food Web		3hrs
Food Production I and II	Choose from the list	*	5-8hrs
Urban Planning II	Choose from the list		3-4hrs
Policy II	Choose from the list		3-4hrs
Technology II	Choose from the list	*	2-3hrs
Advanced Scientific Literacy	Choose from the list		3-4hrs
Social Ecology	Choose from the list		3hrs
Social Impact in Practice	Choose from the list	+	3-9hrs
Experiential Learning Series (MFST 301, 397, 401)		+	7-16hrs
MFST 498	Capstone		3hrs
Total upper-level hrs			**40-51hrs**

*if a 2hr course is taken in this discipline, then a 4hr upper-level course must be taken in the same or another discipline

+there is a limit of 12hrs that can be taken between MFST 397 and MFST 450

College of ACES - Metropolitan Food & Environmental Sciences (MetroFESt) Major

Assumptions:

Cohort of 25 new undergraduate students will begin in Fall 2020
Additional increase of 25 students per year until full capacity of 100 students by Fall 2023
Expenditure inflation rate used - 2%
One Specialized Faculty member is required to administer the major
Teaching Assistants - 1 for Years 1-2 and 5 for Years 3-10
.5 FTE Specialized Faculty - Instruction for Years 3-10
Year 1 Expenditures - program development costs/stakeholder input/travel
Year 2 Expenditures - fundraising and program startup
Year 3-10 Expenditures - URM student scholarships $25,000 per class
Year 3 Other Operating Costs - student support funds
Each academic department within the College of ACES will participate

Investments:

	Central (Pool) Funds Nonrecurring	College Funds	Other Units
Year 1	$ 105,000	$ -	$ -
Year 2	$ 167,500	$ -	$ -
Year 3	$ 248,282	$ -	$ -
Year 4		$ -	$ -
Year 5		$ -	$ -
Year 6		$ -	$ -
Year 7		$ -	$ -
Year 8		$ -	$ -
Year 9		$ -	$ -
Year 10			$ -

Revenues

Undergraduate Revenue:

		Tuition Paid	
Base Rate Year 1	$ 12,036		
Program Differential Rate Year 1	$ -	Illinois Residents	12,036
Non-resident + Base Rate Year 1	$ 28,156	US: Out of state	28,156
International Rate Year 1	$ 29,016	International	29,016

Number of Students	Illinois Residents	US: Out of state	International	Rate Increase	Cumulative Increase
Year 1	-	-	-		
Year 2	-	-	-	1%	1.0%
Year 3	20	3	2	1%	2.0%
Year 4	40	6	4	1%	3.0%
Year 5	60	9	6	1%	4.1%
Year 6	80	12	8	1%	5.1%
Year 7	80	12	8	1%	6.2%
Year 8	80	12	8	1%	7.2%
Year 9	80	12	8	1%	8.3%
Year 10	80	12	8	1%	9.4%

Graduate, Professional, Certificate Revenue

		Tuition Paid	
Base Rate Year 1	$ 12,266		
Program Differential Rate Year 1	$ 5,568	Illinois Residents	17,834
Non-resident + Base Rate Year 1	$ 26,502	US: Out of state	32,070
International Rate Year 1	$ 26,502	International	32,070

Number of Students	Illinois Residents	US: Out of state	International	Rate Increase	Cumulative Increase
Year 1	-	-	-		
Year 2	-	-	-	1%	1.0%
Year 3	-	-	-	0%	1.0%
Year 4	-	-	-	0%	1.0%
Year 5	-	-	-	0%	1.0%
Year 6	-	-	-	0%	1.0%
Year 7	-	-	-	0%	1.0%
Year 8	-	-	-	0%	1.0%
Year 9	-	-	-	0%	1.0%
Year 10	-	-	-	0%	1.0%

Other Revenue:

	Description 1: ICR, fees, etc.	Description 2: ICR, fees, etc.	Description 3: ICR, fees, etc.
Year 1	-	-	-
Year 2	-	-	-
Year 3	-	-	-
Year 4	-	-	-

Year 5	-	-	-
Year 6	-	-	-
Year 7	-	-	-
Year 8	-	-	-
Year 9	-	-	-
Year 10	-	-	-

Expenditures

Inflation: 2%

	Tenure System Faculty				
	# of new Faculty	Average Salary Cost/ new faculty	Startup Costs / new faculty		Startup Transition Costs %
Year 1	-	200,000	1,000,000	Year 1 of hire	30%
Year 2	-	204,000	1,020,000	Year 2 of hire	25%
Year 3	-	208,080	1,040,400	Year 3 of hire	20%
Year 4	-	212,242	1,061,208	Year 4 of hire	10%
Year 5	-	216,486	1,082,432	Year 5 of hire	10%
Year 6	-	220,816	1,104,081	Year 6 of hire	5%
Year 7	-	225,232	1,126,162	Should total 100%	100%
Year 8	-	229,737	1,148,686		
Year 9	-	234,332	1,171,659		
Year 10	-	239,019	1,195,093		

Include only the change in the number from year to year

	Specialized Faculty/Advisors/Lecturers, etc.		IT/Programming/Operations/Support Staff		Teaching & Graduate Research Assistants	
	#	Average Cost per	#	Average Cost per	#	Average Cost per
Year 1	1	$ 70,000.00	-	$ 75,000.00	1	$ 20,000.00
Year 2	0.5	$ 71,400.00	-	$ 76,500.00	-	$ 20,400.00
Year 3	-	$ 72,828.00	-	$ 78,030.00	4	$ 20,808.00
Year 4	-	$ 74,284.56	-	$ 79,590.60	-	$ 21,224.16
Year 5	-	$ 75,770.25	-	$ 81,182.41	-	$ 21,648.64
Year 6	-	$ 77,285.66	-	$ 82,806.06	-	$ 22,081.62
Year 7	-	$ 78,831.37	-	$ 84,462.18	-	$ 22,523.25
Year 8	-	$ 80,408.00	-	$ 86,151.43	-	$ 22,973.71
Year 9	-	$ 82,016.16	-	$ 87,874.45	-	$ 23,433.19
Year 10	-	$ 83,656.48	-	$ 89,631.94	-	$ 23,901.85

	Capital Expenditures	Infrastructure/ Maintenance Costs	Platform/Online Costs	Faculty Overload Costs	Other Operating Costs	Estimated Residual Value of Capital Expenditures
Year 1	$ -	$ -	$ 15,000	$ -	$ -	$ -
Year 2	$ -	$ -	$ 40,000	$ -	$ -	$ -
Year 3	$ -	$ -	$ -	$ -	$ 35,000	$ -
Year 4	$ -	$ -	$ -	$ -	$ 50,000	$ -
Year 5	$ -	$ -	$ -	$ -	$ 75,000	$ -
Year 6	$ -	$ -	$ -	$ -	$ 100,000	$ -
Year 7	$ -	$ -	$ -	$ -	$ 100,000	$ -
Year 8	$ -	$ -	$ -	$ -	$ 100,000	$ -
Year 9	$ -	$ -	$ -	$ -	$ 100,000	$ -
Year 10	$ -	$ -	$ -	$ -	$ 100,000	$ -
	$ -					

Increased campus costs

	Financial Aid	Teaching support Other Colleges	Increased Research Support	Increased Tech Support	Increased Admin Support
Year 1	$ -	$ -	$ -	$ -	$ -
Year 2	$ -	$ -	$ -	$ -	$ -
Year 3	$ 49,111.69	$ -	$ -	$ -	$ -
Year 4	$ 99,205.62	$ -	$ -	$ -	$ -
Year 5	$ 150,296.52	$ -	$ -	$ -	$ -
Year 6	$ 202,399.31	$ -	$ -	$ -	$ -
Year 7	$ 204,423.30	$ -	$ -	$ -	$ -
Year 8	$ 206,467.54	$ -	$ -	$ -	$ -
Year 9	$ 208,532.21	$ -	$ -	$ -	$ -
Year 10	$ 210,617.54	$ -	$ -	$ -	$ -

College of ACES - Metropolitan Food & Environmental Sciences (MetroFESt) Major

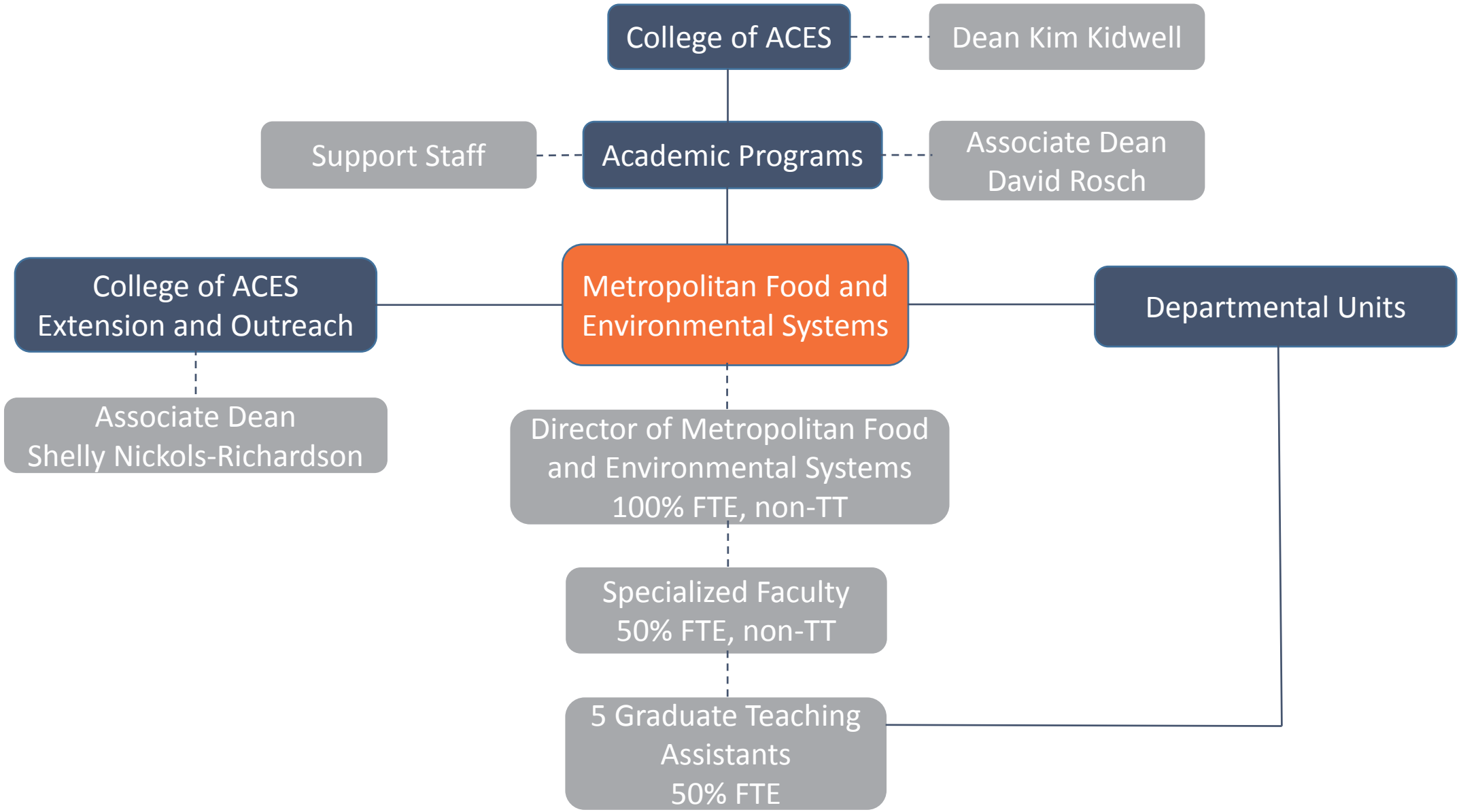
Revenue		**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
	Undergraduate										
	Illinois residents	$ -	$ -	$ 245,558	$ 496,028	$ 751,483	$ 1,011,997	$ 1,022,117	$ 1,032,338	$ 1,042,661	$ 1,053,088
	Nonresident	-	-	86,166	174,055	263,693	355,107	358,658	362,245	365,867	369,526
	International	-	-	59,198	119,581	181,165	243,969	246,409	248,873	251,361	253,875
	Subtotal: UG	$ -	$ -	$ 390,923	$ 789,664	$ 1,196,341	$ 1,611,072	$ 1,627,183	$ 1,643,455	$ 1,659,889	$ 1,676,488
	Graduate										
	Illinois residents	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Nonresident	-	-	-	-	-	-	-	-	-	-
	International	-	-	-	-	-	-	-	-	-	-
	Subtotal: Graduate	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Less: Financial Aid	$ -	$ -	$ (49,112)	$ (99,206)	$ (150,297)	$ (202,399)	$ (204,423)	$ (206,468)	$ (208,532)	$ (210,618)
	Other										
	Description 1: ICR, fees, etc.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Description 2: ICR, fees, etc.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Description 3: ICR, fees, etc.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenue		$ -	$ -	$ 341,811	$ 690,458	$ 1,046,044	$ 1,408,673	$ 1,422,760	$ 1,436,987	$ 1,451,357	$ 1,465,871

Expenditures		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Recurring											
	Faculty	-	-	-	-	-	-	-	-	-	-
	Spec Faculty/Adv./Lect.,.	70,000	107,100	109,242	111,427	113,655	115,928	118,247	120,612	123,024	125,485
	IT/Prog/Operation/Support Staff	-	-	-	-	-	-	-	-	-	-
	TA/GRA	20,000	20,400	104,040	106,121	108,243	110,408	112,616	114,869	117,166	119,509
	Total Recurring	90,000	127,500	213,282	217,548	221,899	226,337	230,863	235,481	240,190	244,994
Nonrecurring											
	Faculty Startups	-	-	-	-	-	-	-	-	-	-
	Infrastructure/ Maintenance Costs	-	-	-	-	-	-	-	-	-	-
	Platform/Online Costs	15,000	40,000	-	-	-	-	-	-	-	-
	Faculty Overload Costs	-	-	-	-	-	-	-	-	-	-
	Other Operating Costs	-	-	35,000	50,000	75,000	100,000	100,000	100,000	100,000	100,000
Other campus costs											
	Teaching support Other Colleges	-	-	-	-	-	-	-	-	-	-
	Increased Research Support	-	-	-	-	-	-	-	-	-	-
	Increased Tech Support	-	-	-	-	-	-	-	-	-	-
	Increased Admin Support	-	-	-	-	-	-	-	-	-	-
Total Expenses		105,000	167,500	248,282	267,548	296,899	326,337	330,863	335,481	340,190	344,994
Net Revenue		$ (105,000)	$ (167,500)	$ 93,529	$ 422,911	$ 749,146	$ 1,082,336	$ 1,091,896	$ 1,101,507	$ 1,111,167	$ 1,120,877

Cash Flow	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Carryover Cash		-	-	341,811	764,722	1,513,867	2,596,204	3,688,100	4,789,607	5,900,774
Investment from unit	-	-	-	-	-	-	-	-	-	-
Investments from other units	-	-	-	-	-	-	-	-	-	-
Investment from central pool	105,000	167,500	248,282							
Total Revenue	$ -	$ -	$ 341,811	$ 690,458	$ 1,046,044	$ 1,408,673	$ 1,422,760	$ 1,436,987	$ 1,451,357	$ 1,465,871
Total Expenses	105,000	167,500	248,282	267,548	296,899	326,337	330,863	335,481	340,190	344,994
Capital Expenditures	-	-	-	-	-	-	-	-	-	-
Surplus/Deficit	-	-	341,811	764,722	1,513,867	2,596,204	3,688,100	4,789,607	5,900,774	7,021,651

Return on Investment	
3 year	-156.47%
5 Year	16.94%
10 year	30.79%

Metropolitan Food and Environmental Systems Organizational Chart



0439: MATHEMATICS MINOR

In Workflow

1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1257 Head (verahur@illinois.edu)
3. KV Dean (las-catalog@illinois.edu)
4. University Librarian (jpwilkin@illinois.edu)
5. Provost (kmartens@illinois.edu)
6. Senate EPC (bjlehman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
7. Senate (jtempel@illinois.edu)
8. U Senate Conf (none)
9. Board of Trustees (none)
10. IBHE (none)
11. HLC (kmartens@illinois.edu)
12. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

Approval Path

1. Thu, 14 Oct 2021 18:48:01 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review
2. Fri, 15 Oct 2021 21:06:28 GMT
   Randy McCarthy (rmccrthy): Approved for 1257 Head
3. Tue, 19 Oct 2021 21:40:43 GMT
   Stephen Downie (sdownie): Approved for KV Dean
4. Tue, 19 Oct 2021 22:42:46 GMT
   John Wilkin (jpwilkin): Approved for University Librarian
5. Wed, 20 Oct 2021 13:44:39 GMT
   Kathy Martensen (kmartens): Approved for Provost

Date Submitted:Thu, 14 Oct 2021 18:29:13 GMT

Viewing:0439 : Mathematics Minor

Changes proposed by: Beth McKown

Proposal Type:

Minor (ex. European Union Studies)

This proposal is for a:

Revision

Administration Details

Official Program Name

Mathematics Minor

Sponsor College

Liberal Arts & Sciences

Sponsor Department

Mathematics

Sponsor Name

Randy McCarthy, Professor and Director of Undergraduate Studies

Sponsor Email

rmccrthy@illinois.edu

College Contact

Stephen R. Downie

College Contact Email

sdownie@illinois.edu

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.*

Alison Champion, abc@illinois.edu

Does this program have inter-departmental administration?

No

Proposal Title

Effective Catalog Term

Fall 2022

Provide a brief, concise description (not justification) of your proposal.

Administrative approval: Revision to the undergraduate Minor in Mathematics, Department of Mathematics, College of Liberal Arts & Sciences. MATH 257 will be added as an option for the Math minor. MATH 347 is added into its own category instead of being a separate option.

Program Justification

Why are these changes necessary?

Most undergraduate programs currently requiring MATH 415 will shift to requiring the new MATH 257 class. Adding this class to the minor allows us to keep the minor equally attractive to students in those majors. The MATH 347 change simplifies the structure of the minor without significant change.

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

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).

N/A; this minor is not aligned with licensure or certification requirements.

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.

An undergraduate minor should consist of at least 16 - and no more than 21 hours - of course work, with at least 6 hours of 300- or 400- level courses. Except clearly remedial offerings, prerequisite courses within the sponsoring unit count towards the total; prerequisite courses outside the sponoring unit do not count toward this total. The unit sponsoring the minor and that unit's college may set educationally necessary prerequisites for eligibility for the minor within these constraints. Does this proposal meet these criteria?

Yes

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

Comparative Table Revision to the Undergraduate Minor in Mathematics.docx
Math Minor Senate Curriculum Revision Form.doc

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.

department website: https://www.math.illinois.edu/
department faculty: Mathematics Faculty

overview of college admissions & requirements: Liberal Arts & Sciences
college website: https://las.illinois.edu/

email: mathadvising@illinois.edu

Students must complete MATH 241, and at least one 400-level MATH course with a grade of C+ or higher for admission into the minor. The Mathematics minor is designed to prepare students majoring in some other discipline with a background in mathematics that is both broad and deep. Students interested in pursuing the minor should have completed the calculus sequence through MATH 241, and one additional Math course at the 400-level demonstrating a strong record of success in college-level mathematics courses. Given the cumulative character of mathematics preparation, students earning grades of C or below in previous mathematics courses are advised not to pursue the minor.

Statement for Programs of Study Catalog

Code	Title	Hours
MATH 241	Calculus III	4
Five courses chosen from the following lists:		15
Algebra		
ASRM 406	Linear Algebra with Financial Applications (formerly MATH 410)	
MATH 257	Linear Algebra with Computational Applications	
MATH 415	Applied Linear Algebra	
MATH 416	Abstract Linear Algebra	
MATH 417	Intro to Abstract Algebra	
MATH 418	Intro to Abstract Algebra II	
MATH 427	Honors Abstract Algebra	
MATH 453	Number Theory	
Discrete Mathematics		
MATH 412	Graph Theory	
MATH 413	Intro to Combinatorics	
MATH 414	Mathematical Logic	
MATH 482	Linear Programming	
Analysis		
MATH 284	Intro Differential Systems	
MATH 285	Intro Differential Equations	
MATH 286	Intro to Differential Eq Plus	
MATH 424	Honors Real Analysis	
MATH 425	Honors Advanced Analysis	
MATH 441	Differential Equations	
MATH 442	Intro Partial Diff Equations	
MATH 444	Elementary Real Analysis	
MATH 446	Applied Complex Variables	
MATH 447	Real Variables	
MATH 448	Complex Variables	
CS 450	Numerical Analysis	
MATH 484	Nonlinear Programming	
MATH 487	Advanced Engineering Math	

MATH 489	Dynamics & Differential Eqns
Fundamentals	
MATH 347	Fundamental Mathematics
OR	
five courses chosen from at least two of the following lists of courses.	
Geometry	
MATH 402	Non Euclidean Geometry
MATH 403	Euclidean Geometry
MATH 423	Differential Geometry
MATH 428	Honors Topics in Mathematics
MATH 432	Set Theory and Topology
MATH 481	Vector and Tensor Analysis
Probability and Statistics	
MATH 461	Probability Theory
STAT 400	Statistics and Probability I
STAT 410	Statistics and Probability II (Students may useSTAT 410orSTAT 420, but not both toward the minor)
or STAT 420	Methods of Applied Statistics
Total Hours	19

Program Features

Academic Level

Undergraduate

Is this minor?

A Comprehensive study in a single discipline

Is This a Teacher Certification Program?

No

Will specialized accreditation be sought for this program?

No

Other than certification via the students' degree audits, is there any additional planned mechanism to award/honor successful completion of the minor?

No

Delivery Method

This program is available:

On Campus - Students are required to be on campus, they may take some online courses.

Enrollment

Will the department limit enrollment to the minor?

No

Describe how the department will monitor the admission to/enrollment in the minor.

Students are admitted after completing Math 241 and earning a C+ or higher grade in a Math-controlled 400-level minor course.

Are there any prerequisites for the proposed minor?

No

Describe how this revision will impact enrollment and degrees awarded.

This revision will allow us to maintain current enrollment.

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

Additional Budget Information

This revision is necessary to avoid increasing the staffing required to offer the minor.

Financial Resources

How does the unit intend to financially support this proposal?

No change to current model.

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

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.

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.

Current collections and services are adequate for the proposed program.

EP Documentation

EP Control Number

EP.22.036

This proposal requires HLC inquiry

No

DMI Documentation

Banner/Codebook Name

Mathematics

Program Code:

0439

Minor Code

0439

Program Reviewer Comments

Kathy Martensen (kmartens) (Wed, 20 Oct 2021 13:44:36 GMT): Administrative approval: No change to total hours required, doesn't restrict student options.

Key: 231

Proposal for revised curricula (degree, major, concentration, minor)

Submit completed proposals via email to Interim Associate Dean Stephen R. Downie (sdownie@illinois.edu). Please obtain Executive Officer and School Director (if applicable) approval via email and forward with the proposal to LAS.

Proposal Title:

Revision to the undergraduate Minor in Mathematics, Department of Mathematics, College of Liberal Arts & Sciences.

Proposed effective date: *(Proposals may not be implemented until they go through all necessary levels of approval. Proposed changes may not be publicized as final on any web sites, printed documents, etc. until written confirmation of final approval is issued. For LAS units, a fall semester effective term for all curricula will be requested, please indicate the proposed year).*

Fall 2022

Sponsor(s): *(Please include name, title, and email address of a faculty member knowledgeable about the proposal who will serve as the primary contact for the proposal. This person must be authorized to make changes in the proposal on behalf of the department. In case of multiple units, give information for each unit.)*

Randy McCarthy, Professor and Director of Undergraduate Studies, Department of Mathematics, rmccrthy@illinois.edu

College contact: Stephen Downie, Associate Dean for Curricula and Academic Policy, College of Liberal Arts and Sciences, sdownie@illinois.edu

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For Minors ONLY-

1) Is this minor:

- **A comprehensive study in a single discipline**

PROGRAM DESCRIPTION and JUSTIFICATION

1) **Provide a brief description but concise description of your proposal.** For example, if proposing revisions to a curriculum, state specifically what is changing. Where applicable, note whether stated program changes include additional requirements in the form of prerequisite courses. Requests for curriculum revisions must be accompanied by a table which clearly outlines the current requirements

and the proposed revisions. This information may be submitted as an appendix. See Appendix A for an example. Please provide pertinent information only.

MATH 257 will be added as an option for the Math minor. MATH 347 is added into its own category instead of being a separate option.

2) **Provide a justification of the program**, including how your unit decided to create this program, highlights of the program objectives, and the careers, occupations, or further educational opportunities for which the program will prepare graduates, when appropriate.

Most undergraduate programs currently requiring MATH 415 will shift to requiring the new MATH 257 class. Adding this class to the minor allows us to keep the minor equally attractive to students in those majors. The MATH 347 change simplifies the structure of the minor without significant change.

Is this program interdisciplinary? No

Will specialized accreditation be sought for this program? No

ADMISSION REQUIREMENTS

1) Desired admissions term: *For LAS units, a fall semester effective term for all curricula will be requested, please indicate the proposed year*

Fall, 2022

Is this revision a change to the admission status of the program? No

2) 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. (degrees, majors, concentrations ONLY)

Students are admitted to this minor after completing Math 241 and earning a C+ or higher grade in a Math-controlled 400-level minor course.

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

Students will be advised through the Math Undergradaute Office.

ENROLLMENT

1) Describe how this revision will impact enrollment and degrees awarded.

This revision will allow us to maintain current enrollment.

2) Estimated Annual Number of Degrees Awarded **(degrees, majors, concentrations ONLY)**

Year 1:

Year 5 (or when fully implemented):

N/A

3) What is the matriculation term for this program? N/A

4) What is the typical time to completion of this program?

Note: grad certificates require at least 10 weeks. Other examples: BALAS= 4years, MA=2.5 years

N/A

5) What are the minimum Total Credit Hours required for this program?

19

6) Delivery Method, what is the program's primary delivery method?

Face to Face

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5) MINORS ONLY:

Will the department limit enrollment in the minor?

No

Describe how the department will monitor admission to/enrollment in the minor.

Students are admitted after completing Math 241 and earning a C+ or higher grade in a Math-controlled 400-level minor course.

Are there any prerequisites for the proposed minor? If yes, please list the courses and whether or not these course count in the total hours for the minor.

No

Other than certification via the students' degree audits, is there any additional planned mechanism to award/honor successful completion of the minor? If yes, please describe.

No

BUDGET

1) Please describe any budgetary implications for this revision- addressing applicable personnel, facilities, technology and supply costs.

None

2) Will the revision require staffing (faculty, advisors, etc.) beyond what is currently available? If yes, please describe.

No

3) Please provide any additional budget information needed to effectively evaluate the proposal.

This revision is necessary to avoid increasing the staffing required to offer the minor.

RESOURCE IMPLICATIONS

1) Facilities- Will the program require new or additional facilities or significant improvements to already existing facilities? If yes, please outline the specific need and Year 1 and Year 5 cost.

No

2) Technology- Will the program need additional technology beyond what is currently available for the unit? If yes, please outline the specific need and Year 1 and Year 5 cost.

No

3) Non-Technical Resources- Will the program require additional supplies, services or equipment (non-technical)? If yes, please outline the specific need and Year 1 and Year 5 cost.

No

RESOURCES

1) 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.

N/A

2) 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.

Current collections and services are adequate for the proposed program.

3) 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? If yes, please describe.

Enrollment will shift from MATH 415 to the new MATH 257 course, and there will be a shift in instructional resources. However this will be due primarily to STEM majors shifting requirements from MATH 415 to MATH 257, not to the change in the minor.

4) Does this new program/proposed change result in the replacement of another program? If yes, please specify the program.

No

5) Does the program include any required or recommended subjects that are offered by other departments? If yes, please list the courses. Explain how these additional courses will be used by the program and provide letters of support from the departments.

CS 450 is one of many options in this minor already. STAT 400 and one of STAT 410 of STAT 420 may also fill minor requirements already.

FINANCIAL RESOURCES

1) How does the unit intend to financially support this proposal?

No change to current model.

2) Will the unit need to seek campus or other external resources? If yes, please provide a summary of the sources and an indication of the approved support.

No

3) Are you seeking a change in the tuition rate or differential for this program? (degrees, majors, concentrations ONLY) *If this program requires a tuition or differential change, initiate a discussion with the LAS curricula contact, LAS budget officer, and LAS Associate Dean.*

No

4) Is this program requesting self-supporting status? (degrees, majors and concentrations ONLY)? If yes, please explain.

N/A

PROGRAM REGULATION & ASSESSMENT

1) **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.

N/A; this minor is not aligned with licensure or certification requirements.

2) Is the career/profession for graduates of this program regulated by the State of Illinois? If yes, please describe.

No

ACADEMIC CATALOG ENTRY

1) **All proposals must submit the major requirements (courses, hours) for the proposed curricula. Please see the University of Illinois Academic Catalog- http://catalog.illinois.edu/ for your unit for an example of the entry.**

department website: https://www.math.illinois.edu/
department faculty: Mathematics Faculty

overview of college admissions & requirements: Liberal Arts & Sciences
college website: https://las.illinois.edu/

email: mathadvising@illinois.edu

Students must complete MATH 241, and at least one 400-level MATH course with a grade of C+ or higher for admission into the minor. The Mathematics minor is designed to prepare students majoring in some other discipline with a background in mathematics that is both broad and deep. Students interested in pursuing the minor should have completed the calculus sequence through MATH 241, and one additional Math course at the 400-level demonstrating a strong record of success in college-level mathematics courses. Given the cumulative character of mathematics preparation, students earning grades of C or below in previous mathematics courses are advised not to pursue the minor.

MATH 241	Calculus III	4
Five courses chosen from the following lists:		15
Algebra		
ASRM 406	Linear Algebra with Financial Applications	
MATH 257	Linear Algebra with Computational Applications	
MATH 415	Applied Linear Algebra	
MATH 416	Abstract Linear Algebra	
MATH 417	Intro to Abstract Algebra	
MATH 418	Intro to Abstract Algebra II	
MATH 427	Honors Abstract Algebra	
MATH 453	Elementary Theory of Numbers	
Discrete Mathematics		
MATH 412	Graph Theory	
MATH 413	Intro to Combinatorics	
MATH 414	Mathematical Logic	
MATH 482	Linear Programming	
Analysis		

MATH 284	Intro Differential Systems
MATH 285	Intro Differential Equations
MATH 286	Intro to Differential Eq Plus
MATH 424	Honors Real Analysis
MATH 425	Honors Advanced Analysis
MATH 441	Differential Equations
MATH 442	Intro Partial Diff Equations
MATH 444	Elementary Real Analysis
MATH 446	Applied Complex Variables
MATH 447	Real Variables
MATH 448	Complex Variables
CS 450	Numerical Analysis
MATH 484	Nonlinear Programming
MATH 487	Advanced Engineering Math
MATH 489	Dynamics & Differential Eqns
Fundamentals	
MATH 347	Fundamental Mathematics
Geometry	
MATH 402	Non Euclidean Geometry
MATH 403	Euclidean Geometry
MATH 423	Differential Geometry
MATH 428	Honors Topics in Mathematics
MATH 432	Set Theory and Topology
MATH 481	Vector and Tensor Analysis
Probability and Statistics	
MATH 461	Probability Theory
STAT 400	Statistics and Probability I
STAT 410 (Students may use STAT 410 or STAT 420, but not both toward the minor) or STAT 420	Statistics and Probability II (Students may use STAT 410 or STAT 420, but not both toward the minor) Methods of Applied Statistics
Total Hours	**19**

2) Include a comparative table of the current and proposed requirements.

Comparative Table of Proposed Changes

Current Requirements	Current Hours	Proposed Requirements	Proposed Hours
MATH 241 Calculus III	4	MATH 241 Calculus III	4
Completed in one of two ways:	15	Five courses chosen from the following lists:	15
MATH 347 Fundamental Mathematics (and four courses chosen from at least two of the following lists of courses)			
OR			
five courses chosen from at least two of the following lists of courses.			
Algebra		**Algebra**	
ASRM 406 Linear Algebra with Financial Applications (formerly MATH 410)		ASRM 406 Linear Algebra with Financial Applications	
		MATH 257 Linear Algebra with Computational Applications	
MATH 415 Applied Linear Algebra		MATH 415 Applied Linear Algebra	
MATH 416 Abstract Linear Algebra		MATH 416 Abstract Linear Algebra	
MATH 417 Intro to Abstract Algebra		MATH 417 Intro to Abstract Algebra	
MATH 418 Intro to Abstract Algebra II		MATH 418 Intro to Abstract Algebra II	
MATH 427 Honors Abstract Algebra		MATH 427 Honors Abstract Algebra	
MATH 453 Elementary Theory of Numbers		MATH 453 Elementary Theory of Numbers	
Discrete Mathematics		**Discrete Mathematics**	
MATH 412 Graph Theory		MATH 412 Graph Theory	

MATH 413	Intro to Combinatorics	MATH 413	Intro to Combinatorics
MATH 414	Mathematical Logic	MATH 414	Mathematical Logic
MATH 482	Linear Programming	MATH 482	Linear Programming
Analysis		**Analysis**	
MATH 284	Intro Differential Systems	MATH 284	Intro Differential Systems
MATH 285	Intro Differential Equations	MATH 285	Intro Differential Equations
MATH 286	Intro to Differential Eq Plus	MATH 286	Intro to Differential Eq Plus
MATH 424	Honors Real Analysis	MATH 424	Honors Real Analysis
MATH 425	Honors Advanced Analysis	MATH 425	Honors Advanced Analysis
MATH 441	Differential Equations	MATH 441	Differential Equations
MATH 442	Intro Partial Diff Equations	MATH 442	Intro Partial Diff Equations
MATH 444	Elementary Real Analysis	MATH 444	Elementary Real Analysis
MATH 446	Applied Complex Variables	MATH 446	Applied Complex Variables
MATH 447	Real Variables	MATH 447	Real Variables
MATH 448	Complex Variables	MATH 448	Complex Variables
CS 450	Numerical Analysis	CS 450	Numerical Analysis
MATH 484	Nonlinear Programming	MATH 484	Nonlinear Programming
MATH 487	Advanced Engineering Math	MATH 487	Advanced Engineering Math
MATH 489	Dynamics & Differential Eqns	MATH 489	Dynamics & Differential Eqns
		Fundamentals	
		MATH 347	Fundamental Mathematics
Geometry		**Geometry**	
MATH 402	Non Euclidean Geometry	MATH 402	Non Euclidean Geometry
MATH 403	Euclidean Geometry	MATH 403	Euclidean Geometry
MATH 423	Differential Geometry	MATH 423	Differential Geometry
MATH 428	Honors Topics in Mathematics	MATH 428	Honors Topics in Mathematics
MATH 432	Set Theory and Topology	MATH 432	Set Theory and Topology
MATH 481	Vector and Tensor Analysis	MATH 481	Vector and Tensor Analysis

Probability and Statistics		Probability and Statistics	
MATH 461	Probability Theory	MATH 461	Probability Theory
STAT 400	Statistics and Probability I	STAT 400	Statistics and Probability I
STAT 410	Statistics and Probability II (Students may use STAT 410 or STAT 420, but not both toward the minor)	STAT 410	Statistics and Probability II (Students may use STAT 410 or STAT 420, but not both toward the minor)
or STAT 420	Methods of Applied Statistics	or STAT 420	Methods of Applied Statistics
Total Hours	**19**	**Total Hours**	**19**

Revision to the Undergraduate Minor in Mathematics

Comparative Table of Proposed Changes

Current Requirements	Current Hours	Proposed Requirements	Proposed Hours
MATH 241 Calculus III	4	MATH 241 Calculus III	4
Completed in one of two ways:	15	Five courses chosen from the following lists:	15
MATH 347 Fundamental Mathematics (and four courses chosen from at least two of the following lists of courses)			
OR			
five courses chosen from at least two of the following lists of courses.			
Algebra		**Algebra**	
ASRM 406 Linear Algebra with Financial Applications (formerly MATH 410)		ASRM 406 Linear Algebra with Financial Applications	
		MATH 257 Linear Algebra with Computational Applications	
MATH 415 Applied Linear Algebra		MATH 415 Applied Linear Algebra	
MATH 416 Abstract Linear Algebra		MATH 416 Abstract Linear Algebra	
MATH 417 Intro to Abstract Algebra		MATH 417 Intro to Abstract Algebra	
MATH 418 Intro to Abstract Algebra II		MATH 418 Intro to Abstract Algebra II	
MATH 427 Honors Abstract Algebra		MATH 427 Honors Abstract Algebra	
MATH 453 Elementary Theory of Numbers		MATH 453 Elementary Theory of Numbers	
Discrete Mathematics		**Discrete Mathematics**	
MATH 412 Graph Theory		MATH 412 Graph Theory	
MATH 413 Intro to Combinatorics		MATH 413 Intro to Combinatorics	

MATH 414	Mathematical Logic	MATH 414	Mathematical Logic
MATH 482	Linear Programming	MATH 482	Linear Programming
Analysis		**Analysis**	
MATH 284	Intro Differential Systems	MATH 284	Intro Differential Systems
MATH 285	Intro Differential Equations	MATH 285	Intro Differential Equations
MATH 286	Intro to Differential Eq Plus	MATH 286	Intro to Differential Eq Plus
MATH 424	Honors Real Analysis	MATH 424	Honors Real Analysis
MATH 425	Honors Advanced Analysis	MATH 425	Honors Advanced Analysis
MATH 441	Differential Equations	MATH 441	Differential Equations
MATH 442	Intro Partial Diff Equations	MATH 442	Intro Partial Diff Equations
MATH 444	Elementary Real Analysis	MATH 444	Elementary Real Analysis
MATH 446	Applied Complex Variables	MATH 446	Applied Complex Variables
MATH 447	Real Variables	MATH 447	Real Variables
MATH 448	Complex Variables	MATH 448	Complex Variables
CS 450	Numerical Analysis	CS 450	Numerical Analysis
MATH 484	Nonlinear Programming	MATH 484	Nonlinear Programming
MATH 487	Advanced Engineering Math	MATH 487	Advanced Engineering Math
MATH 489	Dynamics & Differential Eqns	MATH 489	Dynamics & Differential Eqns
		Fundamentals	
		MATH 347	Fundamental Mathematics
Geometry		**Geometry**	
MATH 402	Non Euclidean Geometry	MATH 402	Non Euclidean Geometry
MATH 403	Euclidean Geometry	MATH 403	Euclidean Geometry
MATH 423	Differential Geometry	MATH 423	Differential Geometry
MATH 428	Honors Topics in Mathematics	MATH 428	Honors Topics in Mathematics
MATH 432	Set Theory and Topology	MATH 432	Set Theory and Topology
MATH 481	Vector and Tensor Analysis	MATH 481	Vector and Tensor Analysis
Probability and Statistics		**Probability and Statistics**	

MATH 461	Probability Theory	MATH 461	Probability Theory
STAT 400	Statistics and Probability I	STAT 400	Statistics and Probability I
STAT 410 or STAT 420	Statistics and Probability II (Students may use STAT 410 or STAT 420, but not both toward the minor) Methods of Applied Statistics	STAT 410 or STAT 420	Statistics and Probability II (Students may use STAT 410 or STAT 420, but not both toward the minor) Methods of Applied Statistics
Total Hours	**19**	**Total Hours**	**19**