

Date Submitted: 01/10/22 12:35 pm

Viewing: **0025 : Engineering**
Technology and ~~Technical Systems~~
Management for Agricultural
Systems Minor

Last approved: 03/09/19 3:45 pm

Last edit: 01/26/22 10:01 am

Changes proposed by: Heather Crump

[Technical Systems Management Minor, UG](#)

Catalog Pages
Using this
Program

Proposal Type:

In Workflow

1. U Program Review
2. 1741 Committee Chair
3. 1741 Head
4. KL Committee Chair
5. KL Dean
6. University Librarian
7. Provost
8. Senate EPC
9. Senate
10. U Senate Conf
11. Board of Trustees
12. IBHE
13. HLC
14. DMI

Approval Path

1. 01/11/22 10:46 am
Deb Forgacs (dforgacs):
Approved for U Program Review
2. 01/12/22 2:36 pm
Kent Rausch (krausch):
Approved for 1741 Committee Chair
3. 01/12/22 3:20 pm
Ronaldo Maghirang (ronaldom):
Approved for 1741 Head
4. 01/13/22 9:02 am
Brianna Gregg (bjgray2):
Approved for KL Committee Chair

5. 01/18/22 12:25 pm
Anna Ball (aball):
Approved for KL
Dean
6. 01/18/22 12:26 pm
John Wilkin
(jpwilkin):
Approved for
University
Librarian
7. 01/19/22 9:53 am
Kathy Martensen
(kmartens):
Approved for
Provost
8. 01/25/22 10:37 am
Barbara Lehman
(bjlehman):
Rollback to KL
Committee Chair
for Senate EPC
9. 01/26/22 10:03 am
Brianna Gregg
(bjgray2):
Approved for KL
Committee Chair
10. 01/26/22 10:05 am
Anna Ball (aball):
Approved for KL
Dean
11. 01/26/22 10:57 am
John Wilkin
(jpwilkin):
Approved for
University
Librarian
12. 01/26/22 12:43 pm
Kathy Martensen
(kmartens):
Approved for
Provost

History

1. Mar 9, 2019 by
Deb Forgacs
(dforgacs)

Minor (ex. European Union Studies)

This proposal is
for a:

[Revision](#)

Administration Details

Official Program Name [Engineering Technology and ~~Technical Systems~~](#)
Management [for Agricultural Systems](#) Minor

Sponsor College Agr, Consumer, & Env Sciences

Sponsor Department Agricultural & Biological Engr

Sponsor Name [Ronaldo Maghirang](#)

Sponsor Email ronaldom@illinois.edu

College Contact [Brianna Gregg](#) College Contact Email
bjgray2@illinois.edu

College Budget Officer

College Budget Officer Email

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.*

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.

Proposal to rename and revise the undergraduate minor in Technical Systems Management

program name change from Technical Systems Management (TSM) to Engineering Technology and Management for Agricultural Systems (ETMAS)

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

Program Justification

Why are these changes necessary?

Feedback from faculty, staff, students, and alumni indicated the Technical Systems Management (TSM) program was in need of revision. In Fall 2019, the Department of Agricultural and Biological Engineering formed a task force to assess needs and propose necessary changes to the program. The task force collected feedback from current faculty and staff along with surveys of current students and alumni who graduated between 1980 and 2019. Proposed changes intend to increase the appeal of the program to a wider audience, making it more accessible to students whose interests align with the program. Feedback strongly indicated the name "Technical Systems Management" was confusing and difficult to explain to prospective students, employers, and a general audience. Based on this feedback, a new, more descriptive name of "Engineering Technology and Management for Agricultural Systems" is proposed. The name of the program of the Bachelor of Science in Technical Systems Management has been approved to change to "Bachelor of Science in Engineering Technology and Management for Agricultural Systems" (B.S. in ETMAS). In a line with the program name change for the Bachelor of Science, it is proposed to change the name of undergraduate program from Technical Systems Management (TSM) to Engineering Technology and Management for Agricultural Systems (ETMAS).

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).

Obtain subject matter expertise

Identify problems and develop problem-solving abilities / critical thinking

Function effectively on multidisciplinary teams

Demonstrate professional and ethical values

Communicate effectively in written and oral forms

Engage in life-long learning skills

Develop leadership and interpersonal skills

Analyze and interpret data

Understand social and cultural contexts

Develop global perspective
11. Carry out independent research with expertise in research design, methods, and analysis

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

Catalog Page Text - Overview Tab

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

Statement for Programs of Study Catalog

Admissions Prerequisites: This minor has prerequisites of a minimum of 60 hours with a 2.5 GPA; completion of [MATH 234](#) or equivalent; [PHYS 101](#) or equivalent; [CHEM 102](#) and [CHEM 103](#) or equivalent; and [PHYS 102](#) or [CHEM 104](#) and [CHEM 105](#) or equivalent.

Course List

Code	Title	Hours
FSM 100	Course TSM 100 Not Found	3
ETMA 100	Technical Systems in Agr	3

Fifteen Hours, at least six of which must be at the 400 level, selected from:15

TSM 232	Course TSM 232 Not Found
TSM 233	Course TSM 233 Not Found
TSM 234	Course TSM 234 Not Found
TSM 262	Course TSM 262 Not Found
TSM 352	Course TSM 352 Not Found
TSM 363	Course TSM 363 Not Found
TSM 371	Course TSM 371 Not Found
TSM 372	Course TSM 372 Not Found
TSM 381	Course TSM 381 Not Found
TSM 435	Course TSM 435 Not Found
TSM 464	Course TSM 464 Not Found
TSM 465	Course TSM 465 Not Found
TSM 496	Course TSM 496 Not Found
ETMA 232	Materials and Construction Sys
ETMA 233	Metallurgy & Welding Process
ETMA 234	Wiring, Motors and Control Sys
ETMA 262	Off-Road Equipment Management
ETMA 352	Land and Water Mgt Systems
ETMA 363	Fluid Power Systems
ETMA 371	Residential Housing Design
ETMA 372	Environ Control & HVAC Systems
ETMA 381	Grain Drying & Storage Systems
ETMA 435	Elec Computer Ctrl Sys
ETMA 464	Engine and Tractor Power
ETMA 465	Chemical Applications Systems
ETMA 496	Independent Study

Total Hours

18

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.

migration

Are there any prerequisites for the proposed minor?

No

Describe how this revision will impact enrollment and degrees awarded.

this is a request to update the program name from Technical Systems Management (TSM) to Engineering Technology and Management for Agricultural Systems (ETMAS)

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

Attach File(s)

Financial Resources

How does the unit intend to financially support this proposal?

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

No

Attach letters of support

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.

Attach File(s)

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.

this is a request to update the program name from Technical Systems Management (TSM) to Engineering Technology and Management for Agricultural Systems (ETMAS)

EP Documentation

EP Control Number EP.22.081

Attach [ep22081_email_to_sponsor_20220125.pdf](#)

Rollback/Approval Notices

This proposal requires HLC inquiry No

DMI Documentation

Attach Final Approval Notices

Banner/Codebook Name Technical Systems Management

Program Code: 0025

Minor Code	0025	Conc Code	Degree Code	Major Code
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Senate Approval Date

Senate Conference Approval Date

BOT Approval Date

IBHE Approval Date

HLC Approval Date

Effective Date:

Attached Document Justification for this request

Program Reviewer Comments **Deb Forgacs (dforgacs) (12/16/21 9:19 am):** Rollback: update TSM courses.
Kathy Martensen (kmartens) (01/18/22 3:21 pm): Previous comment does not apply -- since this is a change in the name of the minor, it is not an administrative approval.
Barbara Lehman (bjlehman) (01/25/22 10:37 am): Rollback: rolling back. See attached EP Documentation.

From: [Amos, Jenny](#)
To: [CMSS Catalog Management](#); [Martensen, Kathy](#); [Lehman, Barbara J](#)
Cc: [Stuby, Emily Ann](#); [CMSS Catalog Management](#)
Subject: Re: EP.22.081 Engineering Technology and Management for Agricultural Systems Minor
Date: Tuesday, January 25, 2022 9:13:52 AM
Attachments: [image001.png](#)
[image002.png](#)

Thank you all, yes, I agree, with how many proposals they had going through for the major, minor, and concentrations, I really thought it was a simple error.

I would appreciate having us roll it back to get those minor items changed so that we can approve at the next meeting.

Thank you all!

Best,

JENNY AMOS, PHD (she/her)
Teaching Professor
Laura Hahn Faculty Scholar

Bioengineering | The Grainger College of Engineering
Biomedical and Translational Sciences | Carle Illinois College of Medicine
Health Sciences Engineering Center | Coordinated Sciences Laboratory
Educational Psychology | College of Education

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publish.illinois.edu/jennyamoslab/

From: CMSS Catalog Management <cmss-catalog@illinois.edu>
Date: Tuesday, January 25, 2022 at 9:11 AM
To: Martensen, Kathy <kmartens@illinois.edu>, Amos, Jenny <jamos@illinois.edu>, Lehman, Barbara J <bjlehman@illinois.edu>
Cc: Stuby, Emily Ann <eastuby@illinois.edu>, CMSS Catalog Management <cmss-catalog@illinois.edu>
Subject: RE: EP.22.081 Engineering Technology and Management for Agricultural Systems Minor

Hi All,

This was just an unclear justification. There are actually the graduate programs coming through that have the name change also, they are at the Grad College:

Engineering Technology and Management for Agricultural Systems, MS key 17

Engineering Technology and Management for Agricultural Systems, MS – PSM key 611.

Emily and I were not sure if we should jump in and mention it during the meeting yesterday. But I did agree that the justification needs to be clear so that when we go back to try and figure things out

we know exactly what was approved.

The problem was that they didn't send them at the same time and link them together – and they are Grad vs. UG so it caused this confusion.

The course change is the way it is because the course hadn't been updated when they submitted the program change so they couldn't add it.

I do think it would help to roll it back to Brianna, we can fix it and send it back through.

Deb

From: Martensen, Kathy <kmartens@illinois.edu>
Sent: Tuesday, January 25, 2022 8:50 AM
To: Amos, Jenny <jamos@illinois.edu>; Lehman, Barbara J <bjlehman@illinois.edu>; CMSS Catalog Management <cmss-catalog@illinois.edu>
Subject: RE: EP.22.081 Engineering Technology and Management for Agricultural Systems Minor

Hi Jenny,

I'm with you in being certain the "graduate" is just a typo and they mean "undergraduate."

It looks like the issue is that the revision for this was put in (see attached) and approved with a FA 22 effective term, so the course isn't showing up because that's a future term.

Deb, can you confirm if that is correct?

However, while I'm really confident in both of these things, the department really should have struck the TSM 100 and added ETMA 100 if that's their intention. We believe it is, but we shouldn't have to infer. For this reason, I do think we should actually roll it back to them...

Thanks!

Kathy

From: Amos, Jenny <jamos@illinois.edu>
Sent: Monday, January 24, 2022 2:08 PM
To: Martensen, Kathy <kmartens@illinois.edu>; Lehman, Barbara J <bjlehman@illinois.edu>
Subject: EP.22.081 Engineering Technology and Management for Agricultural Systems Minor

Kathy

I hope you are doing well.

I tried to push this proposal through today in EP, but there were some concerns about the readability and reference to a "graduate" program when we believe they intended to say "undergraduate" program. See below a snippet of the Program Justification.

name of "Engineering Technology and Management for Agricultural Systems" is proposed. The name of the program of the Bachelor of Science in Technical Systems Management has been approved to change to "Bachelor of Science in Engineering Technology and Management for Agricultural Systems" (B.S. in ETMAS). In a line with the program name change for the Bachelor of Science, it is proposed to change the name of **graduate** program from Technical Systems Management (TSM) to Engineering Technology and Management for Agricultural Systems (ETMAS).

There was also a question about why TSM 100 was not showing as approved like the other TSM/ETMA courses.

We will revisit next week if we can get these minor edits and clarifications done in time. I wanted to reach out to you before asking the program, since they are minor edits/clarifications.

Best,

JENNY AMOS, PHD (she/her)

Teaching Professor

Laura Hahn Faculty Scholar

Bioengineering | The Grainger College of Engineering
Biomedical and Translational Sciences | Carle Illinois College of Medicine
Health Sciences Engineering Center | Coordinated Sciences Laboratory
Educational Psychology | College of Education

Fellow | Biomedical Engineering Society (BMES)

Fellow | American Institute for Medical and Biological Engineers (AIMBE)

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I ILLINOIS

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