Program Change Request

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

Proposal Type:

Technical Systems Management Minor, UG

Catalog Pages
Using this Program

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

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
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
Minor (ex. European Union Studies)

This proposal is for a:

Revision

Administration Details

Official Program  Engineering Technology and Technical Systems
Name  Management for Agricultural Systems Minor
Sponsor College  Agr, Consumer, & Env Sciences
Sponsor  Agricultural & Biological Engr
Department
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
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
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
- 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 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

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSM 100</td>
<td>Course TSM 100 Not Found</td>
<td>3</td>
</tr>
<tr>
<td>ETMA 100</td>
<td>Technical Systems in Agr</td>
<td>3</td>
</tr>
<tr>
<td>TSM 232</td>
<td>Course TSM 232 Not Found</td>
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<tr>
<td>TSM 233</td>
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<td>TSM 234</td>
<td>Course TSM 234 Not Found</td>
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<td>TSM 262</td>
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<td>TSM 352</td>
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<td>TSM 363</td>
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<td>TSM 371</td>
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<tr>
<td>TSM 372</td>
<td>Course TSM 372 Not Found</td>
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<td>TSM 381</td>
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<tr>
<td>TSM 435</td>
<td>Course TSM 435 Not Found</td>
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<tr>
<td>TSM 464</td>
<td>Course TSM 464 Not Found</td>
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<tr>
<td>TSM 465</td>
<td>Course TSM 465 Not Found</td>
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<tr>
<td>TSM 496</td>
<td>Course TSM 496 Not Found</td>
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<tr>
<td>ETMA 232</td>
<td>Materials and Construction Sys</td>
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<td>ETMA 233</td>
<td>Metallurgy &amp; Welding Process</td>
<td></td>
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<tr>
<td>ETMA 234</td>
<td>Wiring, Motors and Control Sys</td>
<td></td>
</tr>
<tr>
<td>ETMA 262</td>
<td>Off-Road Equipment Management</td>
<td></td>
</tr>
<tr>
<td>ETMA 352</td>
<td>Land and Water Mgt Systems</td>
<td></td>
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<tr>
<td>ETMA 363</td>
<td>Fluid Power Systems</td>
<td></td>
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<tr>
<td>ETMA 371</td>
<td>Residential Housing Design</td>
<td></td>
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<tr>
<td>ETMA 372</td>
<td>Environ Control &amp; HVAC Systems</td>
<td></td>
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<tr>
<td>ETMA 381</td>
<td>Grain Drying &amp; Storage Systems</td>
<td></td>
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<tr>
<td>ETMA 435</td>
<td>Elec Computer Ctrl Sys</td>
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<tr>
<td>ETMA 464</td>
<td>Engine and Tractor Power</td>
<td></td>
</tr>
<tr>
<td>ETMA 465</td>
<td>Chemical Applications Systems</td>
<td></td>
</tr>
<tr>
<td>ETMA 496</td>
<td>Independent Study</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 18

Program Features

Academic Level Undergraduate

Is this minor?
A Comprehensive study in a single discipline

Is This a Teacher Certification Program?
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 Rollback/Approval Notices  ep22081_email to sponsor_20220125.pdf
This proposal requires HLC inquiry

DMI Documentation

Attach Final Approval Notices

Banner/Codebook Name: Technical Systems Management

Program Code: 0025

Minor Code 0025 Conc Code Degree Code Major Code

Senate Approval Date

Senate Conference Approval Date

BOT Approval Date

IBHE Approval Date

HLC Approval Date

Effective Date:

Attached Document

Justification for this request

Program Reviewer Comments

**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.


Key: 457
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

217.333.4212 | jamos@illinois.edu
LinkedIn | @jennyamos_uicu
publish.illinois.edu/jennyamoslab/
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

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**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

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**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.
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)

3242 Everitt Lab
1406 W. Green | MC 278
Urbana, IL 61801
217.333.4212 | jamos@illinois.edu
LinkedIn | @jennyamos_uiuc
publish.illinois.edu/jennyamoslab/
https://bioengineering.illinois.edu/
https://medicine.illinois.edu/

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