Deactivation Proposal

Date Submitted: 07/14/23 7:34 am

Viewing: 10KS5369MS: Bioinformatics:

Bioengineering, MS

Last approved: 03/14/22 11:43 am

Last edit: 11/17/23 11:57 am

Changes proposed by: Maddie Darling

Bioinformatics: Bioengineering, MS

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program **Review**
- 2. 1343 Head
- 3. KP Committee Chair
- 4. KP Dean
- 5. University Librarian
- 6. Grad_College
- 7. COTE Programs
- 8. Provost
- 9. Senate EPC
- 10. Senate
- 11. U Senate Conf
- 12. Board of Trustees
- 13. IBHE
- 14. HLC
- 15. DOE
- 16. DMI

Approval Path

- 1. 07/19/23 3:10 pm Donna Butler (dbutler): Approved for U Program Review
- 2. 08/21/23 4:00 pm Wawosz Dobrucki (dobrucki): Approved for 1343
 - Head
- 3. 09/22/23 9:26 am Ashley Hallock (ahallock): Approved for KP Committee Chair
- 4. 09/22/23 9:56 am Michael Stoller (stoller4):
 - Approved for KP Dean
- 5. 09/29/23 3:26 pm

Claire Stewart (clairest): Approved for University Librarian

- 6. 11/08/23 4:08 pm Allison McKinney (agrindly): Approved for Grad_College
- 7. 11/08/23 4:28 pm Suzanne Lee (suzannel): Approved for COTE Programs
- 8. 11/09/23 12:26 pm Brooke Newell (bsnewell): Approved for Provost

History

- 1. Sep 6, 2019 by Mary Lowry (lowry)
- 2. Sep 9, 2019 by Mary Lowry (lowry)
- 3. Mar 14, 2022 by Mary Lowry (lowry)

Concentration (ex. Dietetics)

This proposal is

for a:

Revision

Phase Down/Elimination

Administration Details

Official Program

Bioinformatics: Bioengineering, MS

Name

Diploma Title

Sponsor College Grainger College of Engineering

Sponsor

Bioengineering

Department

Sponsor Name

Mark Anastasio, Maddie Darling Mary Lowry

Sponsor Email

maa@illinois.edu, darling4@illinois.edu lowry@illinois.edu

College Contact

Keri Carter Pipkins Mary Lowry

College Contact

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College Budget

Tessa Hile

Officer

College Budget

tmhile@illinois.edu

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.

Maddie Darling-BIOE, (darling4@illinois.edu); Keri Carter Pipkins-GCOE,

(kcp@illinois.edu)

Does this program have inter-departmental administration?

No

Proposal Title

Effective Catalog

Fall 2024

Term

Proposal Title (either Establish/Revise/Eliminate the Degree Name in Program Name in the College of XXXX, i.e., Establish the Bachelor of Science in Entomology in the College of Liberals Art and Sciences, include the Graduate College for Grad Programs)

Eliminate the concentration in Bioengineering in the Master of Science in Bioinformatics in the Grainger College of Engineering and the Graduate College

Does this proposal have any related proposals that will also be revised during the next 6 weeks? Consider Majors, Minors, Concentrations & Joint Programs in your department. Please know that this information is used administratively to move related proposals through workflow efficiently. Example: If you are revising the BS proposal and one related concentration within the next 6 weeks, "This BS proposal (key 567) is related to the Concentration A proposal (key 145)."

No.

Program Justification

Provide a brief description of what changes are being made to the We propose to eliminate the program. We have not had any faculty to teach the program and this is also not an area we plan to hire in. We have never had students enroll in the program; none are currently enrolled.

program.

Historical Context:

The MS in Bioinformatics is an interdisciplinary program with multiple concentrations, currently residing in the i-School. A campus-wide committee oversees the program, including all concentrations. The major courses are common to all the concentrations, and each concentration has department-specific course requirements. Students apply directly to a concentration within the MS in Bioinformatics. This proposal is to deactivate Bioengineering concentration only, thus the courses listed in the Program of Study outside of the BIOE department are not impacted, nor are students in any of the active Bioinformatics, MS concentrations (e.g. CS).

Why are these changes necessary?

We have no capacity to run the program, nor interest to do so.

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 this new program/proposed change result in the replacement of another program?

No

Does the program include other courses/subjects outside of the sponsoring department impacted by the creation/revision of this program?

No

Program Regulation and Assessment

Plan to Assess and Improve Student Learning

Illinois Administrative Code: 1050.30(b)(1)(D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives and appropriate academic record keeping.

List the program's student learning outcomes. Each outcome should identify what students are expected to know and/or be able to do upon completing this program.

N/A, as we are proposing to eliminate the program.

Describe how, when, and where these learning outcomes will be assessed.

Describe here:

Identify faculty expectations for students' achievement of each of the stated student learning outcomes. What score, rating, or level of expertise will signify that students have met each outcome? Provide rating rubrics as necessary.

Explain the process that will be implemented to ensure that assessment results are used to improve student learning.

Program
Description and
Requirements
Attach Documents

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/PublicAdminRules2017.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.

Catalog Page Text - Overview Tab

Description of program for 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.

EP.17.28 attached

Statement for Programs of Study Catalog

Thesis Option

Course List

Code	Title	Hours
BIOE 599	Thesis Research (min applied toward degree)4
BIOE 504	Analytical Methods in Bioeng	4
or <u>BIOE 505</u>	Computational Bioengineering	
Computer So	cience and Informatics (choose one)	4
<u>CS 411</u>	Database Systems	
<u>CS 466</u>	Introduction to Bioinformatics	
<u>CS 473</u>	Algorithms	
<u>CPSC 565</u>	Perl & UNIX for Bioinformatics	
<u>IS 455</u>	Database Design and Prototyping	
<u>IS 542</u>	Research and Inquiry for Youth	
STAT 428	Statistical Computing	
STAT 440	Statistical Data Management	
STAT 448	Advanced Data Analysis	
STAT 480	Big Data Analytics	
STAT 525	Topics in Computational Statistics	
Fundamenta	l Bioinformatics (choose one)	4

Code	Title		Hours	
ANSC 542 Applied Bioinformatics				
ANSC 545 Statistical Genomics				
CHBE 571	Bioinformatics			
CPSC 567	Bioinformatics & Systems Biol			
CS 466	Introduction to Bioinformatics			
<u>IB 467</u>	Principles of Systematics			
MCB 432	Computing in Molecular Biology			
Biology (choo	ose one)		4	
ANSC 441	Human Genetics			
ANSC 444	Applied Animal Genetics			
ANSC 446	Population Genetics			
BIOP 401	Introduction to Biophysics			
	Biomolecular Physics			
<u>CPSC 452</u>	Advanced Plant Genetics			
	Genomics for Plant Improvement			
	Chromosomes			
CPSC 564	Course CPSC 564 Not Found			
CPSC 566	Plant Gene Regulation			
MCB 400	Cancer Cell Biology			
	Introductory Biochemistry			
	Advanced Biochemistry			
	Advanced Molecular and Cell Biology			
	<u>n systems biology from departmental lis</u>		3	
Elective Courses			9	
			_	
Total Hours			32	
_	sis Option		_	
_			32	
_	sis Option		32	
Non-Thes	sis Option Course List		32	
Non-Thes Code BIOE 504 or BIOE 505	Course List Title Analytical Methods in Bioeng Computational Bioengineering	Hours	32	
Non-Thes Code BIOE 504 or BIOE 505 Computer Sc	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one)	Hours	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems	Hours	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics	Hours	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms	Hours	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473 CPSC 565	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms Perl & UNIX for Bioinformatics	Hours	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473 CPSC 565 IS 455	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms Perl & UNIX for Bioinformatics Database Design and Prototyping	Hours	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473 CPSC 565 IS 455 IS 542	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms Perl & UNIX for Bioinformatics Database Design and Prototyping Research and Inquiry for Youth	Hours	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473 CPSC 565 IS 455 IS 542 STAT 428	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms Perl & UNIX for Bioinformatics Database Design and Prototyping Research and Inquiry for Youth Statistical Computing	Hours	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473 CPSC 565 IS 455 IS 542 STAT 428 STAT 440	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms Perl & UNIX for Bioinformatics Database Design and Prototyping Research and Inquiry for Youth Statistical Computing Statistical Data Management	Hours	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473 CPSC 565 IS 455 IS 542 STAT 428 STAT 440 STAT 448	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms Perl & UNIX for Bioinformatics Database Design and Prototyping Research and Inquiry for Youth Statistical Computing Statistical Data Management Advanced Data Analysis	Hours	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473 CPSC 565 IS 455 IS 542 STAT 428 STAT 440 STAT 448 STAT 480	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms Perl & UNIX for Bioinformatics Database Design and Prototyping Research and Inquiry for Youth Statistical Computing Statistical Data Management Advanced Data Analysis Big Data Analytics	Hours	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473 CPSC 565 IS 455 IS 542 STAT 428 STAT 440 STAT 448 STAT 480 STAT 525	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms Perl & UNIX for Bioinformatics Database Design and Prototyping Research and Inquiry for Youth Statistical Computing Statistical Data Management Advanced Data Analysis Big Data Analytics Topics in Computational Statistics	Hours 4 4	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473 CPSC 565 IS 455 IS 542 STAT 428 STAT 440 STAT 448 STAT 480 STAT 525 Fundamental	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms Perl & UNIX for Bioinformatics Database Design and Prototyping Research and Inquiry for Youth Statistical Computing Statistical Data Management Advanced Data Analysis Big Data Analytics Topics in Computational Statistics Bioinformatics (choose one)	Hours	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473 CPSC 565 IS 455 IS 542 STAT 428 STAT 440 STAT 448 STAT 480 STAT 525 Fundamental ANSC 542	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms Perl & UNIX for Bioinformatics Database Design and Prototyping Research and Inquiry for Youth Statistical Computing Statistical Data Management Advanced Data Analysis Big Data Analytics Topics in Computational Statistics Bioinformatics (choose one) Applied Bioinformatics	Hours 4 4	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473 CPSC 565 IS 455 IS 542 STAT 428 STAT 428 STAT 440 STAT 448 STAT 480 STAT 525 Fundamental ANSC 542 ANSC 545	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms Perl & UNIX for Bioinformatics Database Design and Prototyping Research and Inquiry for Youth Statistical Computing Statistical Data Management Advanced Data Analysis Big Data Analytics Topics in Computational Statistics Bioinformatics (choose one) Applied Bioinformatics Statistical Genomics	Hours 4 4	32	
Code BIOE 504 or BIOE 505 Computer Sc CS 411 CS 466 CS 473 CPSC 565 IS 455 IS 542 STAT 428 STAT 428 STAT 440 STAT 448 STAT 480 STAT 525 Fundamental ANSC 542 ANSC 545 CHBE 571	Course List Title Analytical Methods in Bioeng Computational Bioengineering ience and Informatics (choose one) Database Systems Introduction to Bioinformatics Algorithms Perl & UNIX for Bioinformatics Database Design and Prototyping Research and Inquiry for Youth Statistical Computing Statistical Data Management Advanced Data Analysis Big Data Analytics Topics in Computational Statistics Bioinformatics (choose one) Applied Bioinformatics	Hours 4 4	32	

Code	Title	Hours		
CS 466	Introduction to Bioinformatics			
<u>IB 467</u>	Principles of Systematics			
MCB 432	Computing in Molecular Biology			
Biology (choose one) 4				
ANSC 441	Human Genetics			
ANSC 444	Applied Animal Genetics			
ANSC 446	Population Genetics			
BIOP 401	Introduction to Biophysics			
BIOP 550	Biomolecular Physics			
CPSC 452	Advanced Plant Genetics			
<u>CPSC 466</u>	Genomics for Plant Improvement			
<u>CPSC 563</u>	Chromosomes			
CPSC 564	Course CPSC 564 Not Found			
<u>CPSC 566</u>	Plant Gene Regulation			
MCB 400	Cancer Cell Biology			
MCB 450	Introductory Biochemistry			
MCB 501	Advanced Biochemistry			
MCB 502	Advanced Molecular and Cell Biology			
One course in systems biology from departmental list3				
Elective Courses				
Total Hours		36		

Other Requirements

Grad Other Degree Requirements

Requirement Description

Other Requirements and Conditions may overlap

A concentration is required.

A minimum of 12 500-level credit hours overall applied toward the degree, with 8 hours being Bioengineering courses; a maximum of 2 hours of seminar courses can be counted to towards these 12 hours.

The non-thesis option is only available with permission of the advisor. Requirements include an additional 8 hours of elective courses which, with the approval of an advisor, may include supervised research experiences including internships and projects.

Minimum GPA: 3.0

Program Relationships

Corresponding

Program(s):

Corresponding Program(s)

Bioinformatics, MS

Program Features

Academic Level Graduate

Is This a Teacher Certification Program?

No

Will specialized accreditation be sought for this program?

No

Additional concentration notes (e.g., estimated enrollment, advising plans, etc.)

Delivery Method

This program is available:

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

Enrollment

List the prerequisites including course titles and number of credit hours for each prerequisite course, and whether or not these prerequisites count in the total hours required for the minor.

Phase Down/Elimination Enrollment

Does this program No currently have enrollment?

Describe how this revision or phase down/elimination will impact enrollment and degrees awarded. If this is an elimination/phase down proposal include the plans for the students left in the program.

We have never had any students in the program.

Number of Students in Program (estimate)

Year One Estimate

5th Year Estimate (or when fully implemented)

Budget

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

Nο

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

Is this program requesting self-supporting status?

No

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc.

No impact as the program has not been offered.

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.

The phase down/elimination of this program should not impact any library resources.

EP Documentation

EP Control

EP.24.048

Number

Attach

Rollback/Approval

Notices

This proposal

No

requires HLC

inquiry

DMI Documentation

Attach Final

Approval Notices

Banner/Codebook

MS:Bioinformatics:Bioeng -UIUC

Name

Program Code: 10KS5369MS

Minor Conc 5369 Degree MS Major Code Code Code Code

4026

Senate Approval Date Senate Conference Approval Date **BOT Approval** Date **IBHE Approval** Date **HLC Approval** Date **DOE Approval** Date Effective Date: Attached Document

Program Reviewer Comments

Justification for this request

Brooke Newell (bsnewell) (11/14/22 2:08 pm): Rollback: email to Maddie Brooke Newell (bsnewell) (07/13/23 12:21 pm): Rollback: Requested revisions to Justification and Library Resources. Detailed email sent to Maddie Darling and Keri Carter Pipkins

Key: 619