APPROVED BY SENATE 03/06/2023 EP.23.039_FINAL Approved by EP 02/20/2023

Deactivation Proposal Date Submitted: 11/18/22 10:51 am	In Workflow		
Viewing: 5562 : Biomechanics	1. U Program Review		
Concentration - Floating Last approved: 06/25/19 11:28 am	2. 1343 Head 3. KP Committee Chair 4. KP Dean		
Last edit: 02/07/23 12:34 pm Changes proposed by: Maddie Darling	5. University Librarian		
Biomechanics Catalog Pages Using this Program	6. Grad_College 7. Provost 8. Senate EPC 9. Senate 10. U Senate Conf		
Proposal Type:	 Board of Trustees IBHE HLC DOE DMI 		
	Approval Path 1. 11/21/22 9:48 am Deb Forgacs		

- Deb Forgacs (dforgacs): Approved for U Program Review
- 2. 11/21/22 2:06 pm Mark Anastasio (maa): Approved for 1343 Head
- 3. 12/06/22 1:48 pm Keri Pipkins (kcp): Approved for KP Committee Chair
- 4. 12/06/22 1:52 pm Cindy Pruitt (cpruitt): Approved for KP Dean
- 5. 12/07/22 8:54 am Chris Prom (prom): Approved for University

Librarian

- 6. 02/01/23 3:33 pm Allison McKinney (agrindly): Approved for Grad_College
 7. 02/07/23 11:27 am
 - Brooke Newell (bsnewell): Approved for Provost

History

1. Jun 25, 2019 by Deb Forgacs (dforgacs)

Concentration (ex. Dietetics)

This proposal is for a: <u>Phase Down/Elimination</u>

Administration Details

Official Program Name	Biomechanics Concentration - Floating	
Diploma Title		
Sponsor College	Grainger College of Engineering	
Sponsor Department	Bioengineering	
Sponsor Name	<u>Mark Anastasio, Maddie Darling</u>	
Sponsor Email	<u>maa@illinois.edu, darling4@illinois.edu</u>	
College Contact	<u>Keri Carter Pipkins</u>	College Contact Email
<u>kcp@illinois.edu</u>		
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.

> <u>Maddie Darling-BIOE, (darling4@illinois.edu); Keri Carter Pipkins-GCOE</u> (kcp@illinois.edu)

Does this program have inter-departmental administration?

<u>No</u> Yes

Proposal Title

Effective Catalog Fall 2023 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 Biomechanics 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)."

Program Justification

Provide a brief Eliminating the biomechanics concentration from all associated programs. Eliminating the biomechanics concentration from all associated programs.

Why are these changes necessary?

We have not received any interest from students and have not admitted students into this concentration in several years. Since its approval in 2015, one student has enrolled in the biomechanics concentration (PhD in MechSE). In addition, concentration classes have not been taught for several years:

BIOE 406 (Bone Biology and Biomechanics) – Never offered BIOE 479 (Cancer Nanotechnology) – Course not approved for graduate credits PHYS 475 (Biological Physics) – last offered Fall 2017 ECE/ME 485 (Intro to Electromechanical Devices and Systems) – last offered Fall 2017

Bioengineering students are not enrolled in this concentration. Graduate programs staff from impacted programs (MechSE, ECE and MatSE) have confirmed that they also do not have any students enrolled in this concentration and terminating this concentration will not impact their programs (letters attached).

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?

Yes

Please describe:

<u>The biomechanics concentration will no longer be offered on campus, letters of support</u> <u>from each impacted department are attached.</u>

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?

Yes

Courses outside of the sponsoring department/interdisciplinary departments <u>ABE 446</u> - <u>Biological Nanoengineering</u> <u>ME 483</u> - <u>Mechanobiology</u> <u>MSE 474</u> - <u>Biomaterials and Nanomedicine</u> <u>PHYS 550</u> - <u>Biomolecular Physics</u> <u>TAM 461</u> - <u>Cellular Biomechanics</u>

Please attach anyGCC Biomech.pdfletters ofECE Letter.pdfsupport/acknowledgeMeEntLetter Biomech.pdffor anyMechSE Letter Biomech.pdfInstructionalABE Biomechanics.pdfResourcesPHYS Biomechanics.pdf

consider faculty,
students, and/or
other impacted
units as
appropriate.

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.

Not applicable

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.

Statement for

Programs of		Course List		
Study Catalog	Code	Title	Hours	
Current course options include:				
	ABE 446 Biological Nanoengineering			
	<u>BIOE 482</u>	Musculoskel Tissue Mechanics		
	<u>ME 483</u>	Mechanobiology		
	<u>MSE 474</u>	Biomaterials and Nanomedicine		
	<u>PHYS 550</u>	Biomolecular Physics		
	<u>TAM 461</u>	Cellular Biomechanics		
Alternate courses may be applicable to the Biomechanics Concentration pending				
joint approval by the Bioengineering and Mechanical Science and Engineering				
Graduate Programs.				
Total hours required for the concentration:			12	
Grad Other Degree Requirements				
Requirement			Description	
Courses taken toward this concentration will count toward the student's graduate degree.				
Students must n	Students must notify their department of their plan to pursue this concentration.			
When choosing courses, students must work directly with their department to ensure that all				
degree requirements will be met.				
Note that students who intend to complete both a Biomechanics Concentration and a Cancer				
Nanotechnology Concentration may only overlap one course between the two concentrations.				

Program Relationships

Corresponding	
Program(s):	
Corresponding Program(s)	
Bioengineering, MS	
Bioengineering, PhD	
Bioinformatics: Bioengineering, MS	
Electrical & Computer Engineering, MS	
Electrical and Computer Engineering, PhD	
Materials Engineering, MEng	
Materials Science & Engineering, BS and Materials Science & Engineering, MS	
JP: Materials Science & Engineering, BS and Materials Engineering, MEng	
Materials Science & Engineering, MS	
Materials Science and Engineering, PhD	
JP: Mechanical Engineering BS & MS	
Mechanical Engineering, MEng (on campus & online)	
Mechanical Engineering, MS	
Mechanical Engineering, PhD	
Theoretical & Applied Mechanics, MS	
Theoretical & Applied Mechanics, PhD	

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 <u>No</u> 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.

There are no students enrolled in the program; the elimination of this concentration will not impact degrees awarded.

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? No

Additional Budget Information

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Attach File(s)
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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.

This elimination does not impact faculty resources.

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.

Library collections, resources and services are sufficient to support this eliminiation proposal.

EP Documentation

EP Control EP.23.039 Number

Attach Rollback/Approval Notices

This proposal No requires HLC inquiry

DMI Documentation

Attach Final Approval Notices

Banner/Codebook Biomechanics Name

Program Code:	5562				
Minor Code		Conc Code	5562	Degree Code	Major Code
Senate Approval Date					
Senate Conference Approval Date					
BOT Approval Date					
IBHE Approval Date					
HLC Approval Date					
DOE Approval Date					
Effective Date:					
Attached Document Justification for this request					
Program Reviewer					
Comments					
					Key: 784



THE GRAINGER COLLEGE OF ENGINEERING

Department of Bioengineering 1102 Everitt Laboratory, MC-278 1406 W. Green St. Urbana, IL 61801

November 1, 2022

Mark Anastasio Donald Biggar Willett Professor in Engineering Head, Department of Bioengineering

Dear Mark,

I am writing in my capacity as the Chair of the Graduate Executive Committee to notify you that the committee voted to permanently remove the Biomechanics concentration from the graduate programs.

There are no students currently enrolled or being admitted to this concentration, and there are classes included in the concentration that are not active at this time, which would require revisions of the concentration curriculum. Therefore, the Executive Committee has now voted to eliminate this concentration from our graduate programs.

Sincerely,

Wanput

Wawrzyniec L. Dobrucki Associate Professor of Bioengineering and Medicine Associate Head of Graduate Programs



THE GRAINGER COLLEGE OF ENGINEERING

Department of Electrical & Computer Engineering 2120 Electrical & Computer Engineering Building, MC-702 306 N. Wright St. Urbana, IL 61801-2991

October 25, 2022

Prof. Mark Anastasio Head, Department of Bioengineering 1406 W. Green St. Urbana, IL 61801

Dear Mark,

The Department of Electrical and Computer Engineering supports the termination of the biomechanics and cancer nanotechnology graduate concentrations effective AY2023-24. There are no students currently enrolled or being admitted to these concentrations. Thank you.

Sincerely,

Bruce Hajeh

Bruce Hajek Head, Department of Electrical and Computer Engineering Center for Advanced Study Professor of Electrical and Computer Engineering Hoeft Endowed Chair in Engineering Professor, Coordinated Science Laboratory



Department of Materials Science & Engineering 201 Materials Science & Engineering Building, MC-246 1304 W. Green St. Urbana, IL 61801

November 3, 2022

To: Prof. Mark Anastasio - Head, Department of Bioengineering

From: Prof. Nancy Sottos - Head, Materials Science and Engineering

Dear Mark,

The Department of Materials Science and Engineering supports the termination of the biomechanics and cancer nanotechnology graduate concentrations effective AY2023-24. There are no students currently enrolled or being admitted to these concentrations. Thank you.

Best regards,

Tancy Sotta

Nancy Sottos Head, Department of Materials Science and Engineering

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN



UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN





THE GRAINGER COLLEGE OF ENGINEERING

Department of Mechanical Science & Engineering Office of the Department Head 144 Sidney Lu Mechanical Engineering Building, MC-244 1206 W. Green St. Urbana, IL 61801

3 November 2011

Professor Mark Anastasio Head, Department of Bioengineering

Dear Mark,

The Department of Mechanical Science & Engineering supports the termination of the biomechanics and cancer nanotechnology graduate concentrations effective AY2023-24. There are no students currently enrolled or under consideration for future admission to these concentrations. Thank you.

Best regards,

aco

Anthony M. Jacobi Richard W. Kritzer Distinguished Professor, and Head, Department of Mechanical Science & Engineering



From: "Grosse Perdekamp, Matthias" <mgp@illinois.edu>
Date: Thursday, November 17, 2022 at 2:34 PM
To: "Anastasio, Mark -- BIOE Department Head" <bioe-head@illinois.edu>
Cc: "Bowman, Liezl" liezlb@illinois.edu>
Subject: RE: Concentration termination

Dear Donna, Yes we did, and of course this will be fine. Best, Matthias

Matthias Grosse Perdekamp Professor and Head Department of Physics University of Illinois – Urbana Champaign +1 217 333 6544, mgp@illinois.edu

From: Anastasio, Mark -- BIOE Department Head <bioe-head@illinois.edu>
Sent: Thursday, November 17, 2022 2:18 PM
To: Grosse Perdekamp, Matthias <mgp@illinois.edu>
Cc: Bowman, Liezl <liezlb@illinois.edu>
Subject: RE: Concentration termination

Hi Prof. Perdekamp,

I may have missed your response to this particular notification regarding the elimination of our biomechanics and cancer nanotechnology graduate concentrations.

Could you kindly just reply that you've received this information?

Thank you, Donna

From: Anastasio, Mark -- BIOE Department Head
Sent: Tuesday, November 1, 2022 1:55 PM
To: Grosse Perdekamp, Matthias <<u>mgp@illinois.edu</u>>
Cc: Anastasio, Mark A <<u>maa@illinois.edu</u>>
Subject: Concentration termination

Dear Prof. Perdekamp,

Per the campus process for revising and eliminating academic degree program concentration options, we are writing you to communicate a program change that minimally impacts your department course(s).

The department of bioengineering is eliminating the biomechanics and cancer nanotechnology graduate concentrations (<u>https://bioengineering.illinois.edu/academics/graduate/PhD/concentrations</u>). These concentrations were administratively managed by the Department of Bioengineering and listed in the academic catalog as concentration options for graduate students in bioengineering, mechanical science and engineering and electrical engineering.

The following class was listed as a course option toward completion of these concentrations:

• PHYS 475 – Biological Physics

Because of this concentration termination, the department will no longer request access to the listed course under the biomechanics and cancer-nanotechnology concentration options.

Please reach out with any concerns and confirm your acknowledgement of this change.

Thank you,

Mark

MARK ANASTASIO Donald Biggar Willett Professor in Engineering Head, Department of Bioengineering Affiliate Professor, Department of Computer Science Affiliate Professor, Department of Electrical and Computer Engineering Affiliate Professor, Carle Illinois College of Medicine Member, Beckman Institute for Advanced Science and Technology

Department of Bioengineering | The Grainger College of Engineering 1406 W. Green Street | 1102G Everitt Lab, MC 278 | Urbana, IL 61801 (P) 217.300.0314 | <u>maa@illinois.edu</u> <u>https://bioengineering.illinois.edu/</u> Lab Website: <u>https://anastasio.bioengineering.illinois.edu</u>





From: "Maghirang, Ronaldo G" <ronaldom@illinois.edu> Date: Thursday, November 17, 2022 at 3:58 PM To: "Anastasio, Mark -- BIOE Department Head" <bioe-head@illinois.edu> Cc: "Bowman, Liezl" <liezlb@illinois.edu> Subject: RE: Concentration termination

Dear Professor Anastasio,

This is to acknowledge receipt of your notification regarding the elimination of our biomechanics and cancer nanotechnology graduate concentrations.

Thank you.

Ronaldo

From: Anastasio, Mark -- BIOE Department Head <bioe-head@illinois.edu> Sent: Thursday, November 17, 2022 2:16 PM To: Maghirang, Ronaldo G <ronaldom@illinois.edu> Cc: Bowman, Liezl <liezlb@illinois.edu> Subject: FW: Concentration termination

Hi Professor Maghirang,

I may have missed your response on this particular notification regarding the elimination of our biomechanics and cancer nanotechnology graduate concentrations.

Could you kindly just reply that you've received this information?

Thank you,

Donna

From: Anastasio, Mark -- BIOE Department Head
Sent: Tuesday, November 1, 2022 1:54 PM
To: Maghirang, Ronaldo G <<u>ronaldom@illinois.edu</u>>
Subject: Concentration termination

Dear Prof. Maghirang,

Per the campus process for revising and eliminating academic degree program concentration options, we are writing you to communicate a program change that minimally impacts your department course(s).

The department of bioengineering is eliminating the biomechanics and cancer nanotechnology graduate concentrations (<u>https://bioengineering.illinois.edu/academics/graduate/PhD/concentrations</u>). These concentrations were administratively managed by the Department of Bioengineering and listed in the academic catalog as concentration options for graduate students in bioengineering, mechanical science and engineering and electrical engineering.

The following class was listed as a course option toward completion of these concentrations:

• ABE 446 – Biological Nanoengineering

Because of this concentration termination, the department will no longer request access to the listed course under the biomechanics and cancer-nanotechnology concentration options.

Please reach out with any concerns and confirm your acknowledgement of this change.

Thank you,

Mark

MARK ANASTASIO Donald Biggar Willett Professor in Engineering Head, Department of Bioengineering Affiliate Professor, Department of Computer Science Affiliate Professor, Department of Electrical and Computer Engineering Affiliate Professor, Carle Illinois College of Medicine Member, Beckman Institute for Advanced Science and Technology

Department of Bioengineering | The Grainger College of Engineering 1406 W. Green Street | 1102G Everitt Lab, MC 278 | Urbana, IL 61801 (P) 217.300.0314 | <u>maa@illinois.edu</u> <u>https://bioengineering.illinois.edu/</u> Lab Website: <u>https://anastasio.bioengineering.illinois.edu</u>