UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN SENATE

COMMITTEE ON EDUCATIONAL POLICY (Final; Information)

EP.25.014 Report of Administrative Approvals Through October 7, 2024

In accordance with Part B.9.a of the Senate *Bylaws*, "Senate committees are authorized to act for and in the name of the Senate on minor matters. Such actions shall be reported promptly to the Senate..." Below is a listing of items categorized as administrative approvals and approved by the Senate Committee on Educational Policy in the name of the Senate on the dates indicated. For each program listing, there is no change to the total hours required. Additional information for each approval is attached.

Section 1. This Section Approved by EP on September 30, 2024

A. Graduate Programs

- 1. Revise the Master of Education in Elementary Education in the College of Education and the Graduate College (key 199) eliminates the headings of the existing foundations requirement of four hours of Psychological Foundations Courses in Educational Psychology and 4 hours of Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership and Curriculum & Instruction and combines the existing course options into one Foundations category for 8 hours. There will not be any additional course options added.; moves the text "Masters degree students must take a graduate level College of Education course outside their degree granting department" listed under the Other Requirements heading to the new Foundations Courses Requirement, Additionally, revises the text to say, "Select two of the following foundations courses, taken for four credit hours each. At least one of these two courses must be a course from outside the degree granting department".; and reorganizes the courses in alphabetical and numerical order. We are not adding existing courses to the program.
- 2. Revise the Master of Science in Educational Psychology in the College of Education and the Graduate College (key 217) eliminates the headings of the existing foundations requirement of four hours of Psychological Foundations Courses in Educational Psychology and 4 hours of Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership and Curriculum & Instruction and combines the existing course options into one Foundations category for 8 hours. There will not be any additional course options added.; moves the text "Masters degree students must take a graduate level College of Education course outside their degree granting department" listed under the Other Requirements heading to the new Foundations Courses Requirement to now say, "Select two of the following foundations courses, taken for four credit hours each. At least one of these two courses must be a course from outside the degree granting department"; reorganizes the courses in alphabetical and numerical order. We are not adding existing courses to the program.; adjusts the elective hours range for accuracy,

- given the eight hours of foundations plus the range of 599 (2-8) to equal 32 due to mathematical error.; and updates the "Research/Project/Independent Study Hours (min/max applied toward degree):" under the section of "Elective Hours" to say Research/Project/Independent Study Hours (min/max applied toward degree): 0-8.
- 3. Revise the Joint Program in the Bachelor of Science in Sustainable Design and the Concentration in Design for Responsible Innovation in the Master of Fine Arts in Art & Design in the College of Fine and Applied Arts and the Graduate College (key 1057) inputs new campus gen ed requirement template per office of the provost initiative; embedding BSSD FA 24 curricular changes; and updates special topics courses in Art & Design to include new permanent courses.
- 4. Revise the Joint Program in the Bachelor of Science in Sustainable Design and the Master of Landscape Architecture in Landscape Architecture in the College of Fine and Applied Arts and the Graduate College (key 1166) inputs new campus gen ed requirement template per office of the provost initiative; and embeds BSSD FA 24 curricular changes.
- 5. Revise the Master of Science in Integrative Biology in the College of Liberal Arts and Sciences and the Graduate College (key 966) removes nine recently deactivated courses across core courses and electives from the program of study table. Adds six recently approved core courses, in addition to two new elective courses. The total hours have not changed.; moves two courses from the elective category to the area category of IB core curriculum.; lists blocked course lists line-by-line; revises Other Requirements and Conditions section of the POS; reorganizes and edits POS table by only listing IB 592 once, updating core curriculum category title to decrease long course lists to 'Select from the following three Areas. At least one course must be a lab and the courses must be in at least two different Areas.', revises category title 'Elective hours required 6-8 hrs' to 'Additional electives chosen from the following list to meet the 32-hour minimum' and includes 'Courses from the any of the Areas above that did not fulfill another requirement may also count toward elective credit.', removes 'Minimum 500-level Hours Required' as the 500-level courses in the category are moved for clarity to the elective section; and corrects range of hours of core curriculum from 12-24 to 12 hour minimum; and edits catalog page text.
- 6. Revise the Joint Program in the Bachelor of Science in Liberal Arts and Sciences in Integrative Biology and the Master of Science in Integrative Biology in the College of Liberal Arts and Sciences and the Graduate College (key 1159) removes six recently deactivated core or elective courses from the program of study tables. Adds six recently approved core courses, in addition to three new elective courses. The total hours have not changed.; moves two courses from the elective category to the area category of IB core curriculum.; updates student learning outcomes; modifies the formatting of the POS and additional text (e.g., graduation requirements, university requirements, and general education requirements) to adhere to the campus General Education Template. Additionally, revises some area headers and adds a statement on the Honors concentration.; reorganizes and edits POS table by only listing IB 592 once, updating core curriculum category title to decrease long course lists to 'Select from the following three Areas. At least one course must be a lab and the courses must be in at least two different Areas.', revises category title 'Elective hours required 6-8 hrs' to 'Additional electives chosen from the following list to meet the 32-hour minimum' and includes 'Courses from the any of the Areas above that did not fulfill another requirement may also count toward elective credit.', removes 'Minimum 500-

level Hours Required' as the 500-level courses in the category are moved for clarity to the elective section; and corrects range of hours of core curriculum from 12-24 to 12 hour minimum, and removes the mention that only 400-level courses may double-count as 500-level approved courses may as well; revises Other Requirements and Conditions section of the graduate POS table; lists blocked course lists line-by-line; and edits catalog page text.

7. Revise the Master of Fine Arts in Art & Design in the College of Fine and Applied Arts and the Graduate College (key 31) — updates POS table to remove the New Media specialization and removes the line about the requirements for programs other than Industrial Design.; revises the format of the Concentration names in the tables as requested by campus as part of the Concentration Project; updates the Program Features information, (which isn't a change in practice).; updates the official program name for CIM-P purposes only; removes the 'Seminar, 8 hours min requirement' from the major and replaces it with 'Studio, 6 hours min requirement.'; adds "Thesis hours" to the Research/Project hours row.

B. <u>Undergraduate Programs</u>

- 1. Revise the Bachelor of Science in Neural Engineering in the Grainger College of Engineering (key 1044) modifies the formatting of the POS and additional text (e.g., graduation requirements, university requirements, and general education requirements) to adhere to the campus General Education Template; removes the note on PSYC 100 stating the course does not apply toward social and behavioral sciences general education requirements.; includes 4 additional free elective hours; and replaces 3 BIOE special topics courses in the Bioengineering Technical Electives list with their permanent numbers.
- 2. Revise the Bachelor of Music in Musicology in the College of Fine and Applied Arts (key 469) adds Gen Ed template and moves coursework that didn't already appear in the major into a newly added subcategory in the major; removes footnotes and embeds into degree tables; adds standard music requirements in college/unit designated space under graduation requirements above degree tables; and creates lists for applied music lesson and ensemble course options, now listed in POS.
- 3. Revise the Bachelor of Fine Arts in Art & Art History in the College of Fine and Applied Arts (key 537) adds 3 credit hours of an ARTS or ARTD course (any level) to major requirements and clarifies ARTH as rubric for Art History in major requirements
- 4. Revise the Bachelor of Science in Computer Science plus Music in the College of Fine and Applied Arts (key 136) modifies the formatting of the POS and additional text (e.g., graduation requirements, university requirements, and general education requirements) to adhere to the campus General Education Template; removes MUS 409 as a course requirement 2 credit hours; adds MUS 209 as a course requirement 3 credit hours; increases the major required coursework by 1 credit hour; the overall total hours of the degree program remains unchanged; and clarifies that MUS 299 is the thesis/project course.
- 5. Revise the Bachelor of Arts in Studio Art in Studio Art in the College of Fine and Applied Arts (key 665) adds 3 credit hours of a 200-level ARTS (Studio Art rubric) course from a list to major requirements and changes number of total Studio Art requirements from 16 to 19 credit hours.

- 6. Revise the Bachelor of Science in Natural Resources & Environmental Sciences in the College of Agricultural, Consumer and Environmental Sciences (key 86) - adds ABE 152, ACES 102, ATMS 140, CPSC 113, GEOL 118, MCB 150 and NPRE 101 as electives in our Science requirement.; adds ACE 262 and STAT 107 as an electives in the Statistics requirement.; removes ACE 261 as an elective in the Statistics requirement.; removes RHET 105.; adds ALEC 115 to the Communications requirement.; revises responses to concentration questions in Program Features.; changes the name of the Human Dimensions of the Environment concentration to Environmental Social Sciences.; adds graduation requirements, university requirements, and general education requirements per Office of the Provost General Education Initiative.; moves the coursework required in the Speech Requirement, Quantitative Reasoning, Natural Sciences and Technology, and Social and Behavioral Sciences into a new subheading called Major Requirements. Also, creates additional headings underneath this requirement to appropriately identify the coursework.; lists courses in the POS Table vertically.; revises text in the Program Regulation and Assessment section.; updates course number for NRES 285 to NRES 385.; includes the names of the concentrations in the Program of Study table.; and changes range of hours for concentration prescribed courses from 19-29 to 18-22.
- 7. Revise the Concentration in Environmental Science & Management in the Bachelor of Science in Natural Resources & Environmental Sciences in the College of Agricultural, Consumer and Environmental Sciences (key 632) - adds ABE 152, ACES 102, ATMS 140, CPSC 113, GEOL 118, MCB 150 and NPRE 101 as electives in our Science requirement.; adds ACE 262 and STAT 107 as an electives in the Statistics requirement.; removes ACE 261 as an elective in the Statistics requirement.; removes RHET 105.; adds ALEC 115 to the Communications requirement.; adds graduation requirements, university requirements, and general education requirements per Office of the Provost General Education Initiative.; moves the coursework required in the Speech Requirement, Quantitative Reasoning, Natural Sciences and Technology, and Social and Behavioral Sciences into a new subheading called Major Requirements. Also, creates additional headings underneath this requirement to appropriately identify the coursework.; lists courses in the POS Table vertically.; revises text in the Program Regulation and Assessment section.; updates course number for NRES 285 to NRES 385.; adds the major requirements into the Program of Study table as per campus request.; removes NRES 402 as a core requirement in the NRES ESM concentration and replacing it with NRES 401; removes CEE (GGIS) 459, NRES 438, CPSC 336, UP 405 as electives in the NRES ESM concentration.; and adds NRES 482, NRES 455, ESE 445, ESE 482, GGIS 476, and IB 361 to the NRES ESM concentration.
- 8. Revise the Concentration in Ecosystem Stewardship & Restoration Ecology in the Bachelor of Science in Natural Resources & Environmental Sciences in the College of Agricultural, Consumer and Environmental Sciences (key 634) adds ABE 152, ACES 102, ATMS 140, CPSC 113, GEOL 118, MCB 150 and NPRE 101 as electives in our Science requirement.; adds ACE 262 and STAT 107 as an electives in the Statistics requirement.; removes ACE 261 as an elective in the Statistics requirement.; removes RHET 105.; adds ALEC 115 to the Communications requirement.; adds graduation requirements, university requirements, and general education requirements per Office of the Provost General Education Initiative.; moves the coursework required in the Speech Requirement, Quantitative Reasoning, Natural Sciences and Technology, and Social and

Behavioral Sciences into a new subheading called Major Requirements. Also, creates additional headings underneath this requirement to appropriately identify the coursework.; lists courses in the POS Table vertically.; revises text in the Program Regulation and Assessment section.; updates course number for NRES 285 to NRES 385.; adds the major requirements into the Program of Study table as per campus request.; removes NRES 402, CEE 432, and UP 405 as electives in the NRES ESRE concentration.; adds NRES 407, IB 329, IB 444, NRES 409, NRES 434, NRES 455, NRES 480, NRES 482, and GGIS 476 as electives in the NRES ESRE concentration.; and changes the range of course hours under Concentration Elective Requirements - Two Ecology courses from 6-7 to 6-8 which also shifts the total concentration hours from 19-21 to 19-22.

9. Revise the Concentration in Fish Wildlife & Conservation Biology in the Bachelor of Science in Natural Resources & Environmental Sciences in the College of Agricultural, Consumer and Environmental Sciences (key 631) - adds ABE 152, ACES 102, ATMS 140, CPSC 113, GEOL 118, MCB 150 and NPRE 101 as electives in our Science requirement.; adds ACE 262 and STAT 107 as an electives in the Statistics requirement.; removes ACE 261 as an elective in the Statistics requirement.; removes RHET 105.; adds ALEC 115 to the Communications requirement.; adds graduation requirements, university requirements, and general education requirements per Office of the Provost General Education Initiative.; moves the coursework required in the Speech Requirement, Quantitative Reasoning, Natural Sciences and Technology, and Social and Behavioral Sciences into a new subheading called Major Requirements. Also, creates additional headings underneath this requirement to appropriately identify the coursework.; lists courses in the POS Table vertically.; revises text in the Program Regulation and Assessment section.; updates course number for NRES 285 to NRES 385.; adds the major requirements into the Program of Study table as per campus request.; removes IB 335 as an elective in the NRES FWLCB concentration.; and adds NRES 480, IB 361, IB 444, and IB 407 as electives in the NRES FWLCB concentration.

Section 2. This Section Approved by EP on October 7, 2024

A. Graduate Programs

1. Revise the Joint Program in the Bachelor of Arts in Urban Studies & Planning and the Master of Urban Planning in Urban Planning in the College of Fine and Applied Arts and the Graduate College (key 943) – adds General Education template; embeds BAUSP FA 24 curricular changes; updates headers from header acronyms to typed out names; and creates joint program summary table.

B. Undergraduate Programs

1. Revise the Undergraduate Minor in Social Work in the School of Social Work (key 295) - adds new course to the choose-from list: SOCW 220: Technology and Social Issues; updates renumbered courses with accurate course numbers in the choose-from list: SOCW 210 was renumbered to SOCW 425 and SOCW 375 was renumbered to SOCW 445; removes course that is not currently offered from the choose-from list: SOCW 436: Intl SW & Development; updates the Program Regulation and Assessment: Student Learning Outcomes; and adds minimum required hours wording to Study Table ("Minimum required hours and supporting coursework: At least six hours of advanced (300-400 level) coursework must be distinct from credit earned for the student's major or another minor. Minimum hours for minor: 18 credit hours.").

- 2. Revise the Concentration in Interdisciplinary Practice in the Bachelor of Fine Arts in Studio Art in Studio Art in the College of Fine and Applied Arts (key 645) specifies 3 credit hours from the 12 hours of 200-level ARTS (Studio Art rubric) course requirement to be from a set list of 10 course options.
- 3. Revise the Bachelor of Science in Chemical Engineering in the College of Liberal Arts and Sciences (key 268) - updates ENG 100 to the appropriate 1 credit hour. Due to this increase, we are decreasing Technical Electives by 1 credit hour. This decrease is reflected in the currently approved requirement, which states that students can take "Any 400 level course from List 2" and is being revised to say "One additional 400level course from List 1 or List 2."; adds MATH 257 as alternative course choice for MATH 415.; adds CHBE 411 and STAT 400 as alternative course options to IE 300.; removes the additional 4 hours of Humanities/Social Science elective to be in line with campus standards.; adds list of courses to the technical electives and removes the link to an external department website with the course listings. The 548 tech elective options were edited down to a list of 138 tech elective options.; modifies the formatting of the POS and additional text (e.g., graduation requirements, university requirements, and general education requirements) to adhere to the campus General Education Template. Removes RHET 105 as being a requirement in the POS.; updates the header names to more clearly indicate what is major vs. concentration coursework.; removes footnotes and moved relevant material from footnotes into the POS table.; updates program features and concentration questions for accuracy.; adds text about optional concentration within the POS table.; updates/rewords text in Technical Elective heading to read, "These courses stress the rigorous analysis and design principles practiced in the major subdisciplines of chemical engineering, embodied in the standard chemical engineering program and in the biomolecular engineering concentration."; rewords "total hours" statement for technical core and tech electives.
- 4. Revise the Concentration in Biomolecular Engineering in the Bachelor of Science in Chemical Engineering in the College of Liberal Arts and Sciences (key 734) - updates ENG 100 to the appropriate 1 credit hour. Due to this increase, we are decreasing Technical Electives by 1 credit hour.; adds MATH 257 as alternative course choice for MATH 415.; adds CHBE 411 and STAT 400 as alternative course options to IE 300.; removes the additional 4 hours of Humanities/Social Science elective to be in line with campus standards.; adds list of courses to the technical electives and removes the link to an external department website with the course listings. The 548 tech elective options were edited down to a list of 138 tech elective options.; modifies the formatting of the POS and additional text (e.g., graduation requirements, university requirements, and general education requirements) to adhere to the campus General Education Template. Removes RHET 105 as being a requirement in the POS.; updates the header names to more clearly indicate what is major vs. concentration coursework.; removes footnotes and moved relevant material from footnotes into the POS table.; updates the previous requirement of "Two Courses from Category B" to state, "Two Additional Courses from Category A or Category B".; changes the wording from "Any 400 level course from List" to "One additional 400-level course from List 1 and List 2."; edits text that previously read, "These courses stress the rigorous analysis and design principles practiced in the major subdisciplines of chemical engineering embodied in the chemical engineering and biomolecular engineering concentrations." to now read, "These courses stress the rigorous analysis and design principles practiced in the major subdisciplines of chemical engineering, embodied in the standard chemical engineering program and in the biomolecular engineering concentration."

Date Submitted: 07/31/24 12:05 pm

Viewing: 10KS0095EDM: Elementary

Education, EDM

Last approved: 03/19/24 2:55 pm

Last edit: 09/27/24 8:07 am

Changes proposed by: Lori Fuller

Elementary Education, EdM

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1613 Committee Chair
- 3. 1613 Head
- 4. KN Committee Chair
- 5. KN Dean
- 6. University
 Librarian
- 7. Grad_College
- 8. COTE Programs
- 9. Provost

10. Senate EPC

- 11. Senate
- 12. U Senate Conf
- 13. Board of Trustees
- 14. IBHE
- 15. HLC
- 16. DOE
- 17. DMI

Approval Path

- 1. 08/22/24 4:00 pm Donna Butler (dbutler): Approved for U
- Program Review
 2. 09/04/24 8:16 am
- Emma Mercier
- (mercier):
- Approved for 1613
- Committee Chair
- 3. 09/04/24 11:44 am
 - Helen Neville
 - (hneville):
 - Approved for 1613 Head
- 4. 09/05/24 3:24 pm Lori Fuller (harvey1):

- Approved for KN Committee Chair
- 5. 09/05/24 3:56 pm Karla Moller (kjmoller): Approved for KN Dean
- 6. 09/05/24 4:32 pm
 Claire Stewart
 (clairest):
 Approved for
 University
 Librarian
- 7. 09/06/24 11:15
 am
 Allison McKinney
 (agrindly):
 Approved for
 Grad_College
- 8. 09/06/24 1:30 pm Suzanne Lee (suzannel): Approved for COTE Programs
- 9. 09/13/24 10:30 am Brooke Newell (bsnewell): Approved for Provost

History

- 1. Apr 6, 2019 by Deb Forgacs (dforgacs)
- 2. Jun 21, 2019 by Kathy Stalter (kstalter)
- 3. Jun 5, 2020 by Kathy Stalter (kstalter)
- 4. Sep 29, 2021 by Kathy Stalter (kstalter)
- 5. Mar 15, 2023 by Lori Fuller (harvey1)

6. Jun 27, 2023 by Brooke Newell (bsnewell)

7. Mar 19, 2024 by Lori Fuller (harvey1)

Major (ex. Special Education)

This proposal is

for a: Revision

Administration Details

Official Program

Elementary Education, EDM

Name

Diploma Title Master of Education

Sponsor College Education

-p-----

. Department

Sponsor

Curriculum and Instruction

D opai cirioric

Sponsor Name Karla Moller

Sponsor Email kjmoller@illinois.edu

College Contact Lori Fuller College Contact

Email

harvey1@illinois.edu

College Budget

Amanda Brown

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

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)

Revise the Master of Education in Elementary Education in the College of Education 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 program.

- 1. Revisions will include the elimination of the headings of the existing foundations requirement of four hours of Psychological Foundations Courses in Educational Psychology and 4 hours of Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership and Curriculum & Instruction and combine the existing course options into one Foundations category for 8 hours. There will not be any additional course options added.
- 2.We have moved the text "Masters degree students must take a graduate level College of Education course outside their degree granting department" listed under the Other Requirements heading to the new Foundations Courses Requirement, Additionally, we have revised the text to say, "Select two of the following foundations courses, taken for four credit hours each. At least one of these two courses must be a course from outside the degree granting department".
- 3. We have reorganized the courses in alphabetical and numerical order. We are not adding existing courses to the program.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

No

Why are these changes necessary?

- 1. Student feedback has resulted in these changes. EPSY Foundations courses were not offered online and thus were not accessible to students. By eliminating the requirement to take specific courses, students will have access to a greater variety of courses.
- 2. We have revised the statement that originally stated, "Master's degree students must take at least one course outside of their degree-granting department" to encourage critical thinking and consider multiple perspectives through different disciplinary lenses. The statement was moved to be listed under the "Foundations Courses" requirement since we would like graduate students to select at least one foundation course outside of their dept.
- 3. We have reorganized the existing courses to provide clarity to the viewer.

There will be no change in total hours for 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 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

Please attach any

Letter of Dept Support.pdf

letters of

support/acknowledgement

for any

Instructional

Resources

consider faculty,

students, and/or

other impacted

units as

appropriate.

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.

- 1. Students will acquire deep knowledge of content in the field of Education.
- 2. Students will demonstrate awareness and application of the Illinois Culturally Responsive Teaching and Leading (CRTL) standards in their teacher preparation course work and field experiences.
- 3. Students will display the expectations of professionalism related to success in the field of education and beyond (fairness, commitment to collaboration, community, reflective practice, and attention to 21st century skills and practices).

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.

Revised programs <u>ELED EDM side by side.xlsx</u>
Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

Field Placement Information http://education.illinois.edu/sce

Statement for Programs of Study Catalog

Course List

8

Code Title Hours

Psychological Foundations Courses in Educational Psychology 4

Foundations Courses

Select two of the following foundations courses, taken for four credit hours each.

At least one of these two courses must be a course from outside the degree granting department.

CI 446 Culture in the Classroom

<u>CI 501</u> Curriculum Development for the 21st Century

EPOL 401 History of American Education
EPOL 402 Asian American Education
EPOL 403 Historical and Social Barriers

EPOL 405 School and Society

EPOL 406 Professional Ethics in Education
EPOL 407 Critical Thinking in Education

EPOL 408 Aesthetic Education
EPOL 409 Sociology of Education
EPOL 410 Racial and Ethnic Families

EPOL 412 Politics of Education
EPOL 413 Economics of Education

EPOL 480 Technology and Educational Reform
EPOL 552 Foundation of Higher Education

Any 400 level EPSY course

OR

EPSY 553 Global Issues in Learning

Philosophical and Social Foundations Courses in Education Policy, Organization and 4 Leadership and Curriculum & Instruction

Elective Hours: 24

Project/Independent Study Hours (min/max applied toward degree): 0-8

Total Hours 32

Other Requirements:

Grad Other Degree Requirements

Requirement Description

Field Placement information is linked above

Minimum GPA 3.0

500-Level Hours Required in Education 12 hours

Masters degree students must take a graduate level College of Education course outside their degree granting department

Corresponding

EdM Master of Education

Degree

Program Features Academic Level Graduate Does this major Yes have transcripted concentrations? Will you admit to No the concentration directly? Is a concentration No required for graduation? What is the typical time to completion of this program? 3 years What are the minimum Total Credit Hours required for this program? 32 What is the 3.0 required GPA? CIP Code 131202 - Elementary Education and Teaching. Is This a Teacher Certification Program? Yes

Delivery Method

This program is

available:

No

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

Admission Requirements

Desired Effective

Admissions Term

Is this revision a change to the admission status of the program?

Will specialized accreditation be sought for this program?

No

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.

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.

No changes to enrollment are expected.

Estimated Annual Number of Degrees Awarded

Year One Estimate 5th Year Estimate (or when

fully implemented)

What is the

Fall

matriculation term for this program?

Budget

Are there No

budgetary

implications for this revision?

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?

There will not be a financial impact as a result of this revision.

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

No

Attach letters of

support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

Are you seeking a change in the tuition rate or differential for this program?

No

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.

There will not be an impact as a result of this revision.

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 revision.

EP Documentation

EP Control EP.25.014

Number

Attach

Rollback/Approval

Notices

This proposal No

requires HLC

inquiry

DMI Documentation

Attach Final <u>U Program Review Comments KEY 199 8-19-24.docx</u>

Approval Notices

Banner/Codebook EDM: Elementary Education - UIUC

Name

Program Code: 10KS0095EDM

Minor Conc Degree EDM Major Code Code Code Code

0095

Senate Approval

Date

Senate

Conference

Approval Date	
BOT Approval Date	
IBHE Approval Date	
HLC Approval Date	
	D. I. A.
DOE Approval Date	NA
	NA

Program Reviewer Comments

Allison McKinney (agrindly) (09/06/24 11:15 am): Administratively approved by the Graduate College.

Key: 199

Date Submitted: 07/31/24 10:00 am

Viewing: 10KS5865MS: Educational

Psychology, MS

Last approved: 03/19/24 2:58 pm

Last edit: 09/27/24 8:06 am

Changes proposed by: Lori Fuller

Educational Psychology, MS

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1616 Committee Chair
- 3. 1616 Head
- 4. KN Committee Chair
- 5. KN Dean
- 6. University
 Librarian
- 7. Grad_College
- **8. COTE Programs**
- 9. Provost

10. Senate EPC

- 11. Senate
- 12. U Senate Conf
- 13. Board of Trustees
- 14. IBHE
- 15. HLC
- 16. DOE
- 17. DMI

Approval Path

1. 08/14/24 12:12

pm

Donna Butler

(dbutler):

Approved for U

Program Review 2. 08/14/24 12:33

pm

H Chad Lane

(hclane):

Approved for 1616

Committee Chair

3. 08/15/24 12:59

pm

Kiel Christianson

(kiel): Approved

for 1616 Head

4. 08/15/24 3:17 pm

Lori Fuller

(harvey1): Approved for KN Committee Chair 5. 08/15/24 3:17 pm Karla Moller (kjmoller): Approved for KN Dean 6. 08/27/24 3:25 pm Claire Stewart (clairest): Approved for University Librarian 7. 09/04/24 2:05 pm Allison McKinney (agrindly): Approved for Grad_College 8. 09/04/24 2:10 pm Suzanne Lee (suzannel): Approved for **COTE Programs** 9. 09/05/24 7:43 am **Brooke Newell** (bsnewell): Rollback to KN Dean for Provost 10. 09/05/24 7:53 am Lori Fuller (harvey1): Approved for KN Dean 11. 09/05/24 10:27 am Claire Stewart (clairest): Approved for University Librarian 12. 09/06/24 11:14 am Allison McKinney (agrindly): Approved for Grad_College 13. 09/06/24 1:30 pm

Suzanne Lee (suzannel): Approved for COTE Programs

14. 09/13/24 10:29 am Brooke Newell (bsnewell): Approved for Provost

History

- 1. Apr 29, 2019 by Deb Forgacs (dforgacs)
- 2. May 10, 2019 by Kathy Stalter (kstalter)
- 3. Nov 1, 2019 by Deb Forgacs (dforgacs)
- 4. Jun 5, 2020 by Kathy Stalter (kstalter)
- 5. Sep 29, 2021 by Kathy Stalter (kstalter)
- 6. Mar 14, 2022 by Mary Lowry (lowry)
- 7. Mar 15, 2023 by Lori Fuller (harvey1)
- 8. Mar 19, 2024 by Lori Fuller (harvey1)

Major (ex. Special Education)

This proposal is for a:
Revision

Administration Details

Official Program Name Educational Psychology, MS

Diploma Title Master of Science in Educational Psychology

Sponsor College Education

Sponsor

Educational Psychology

Department

Sponsor Name Karla Moller

Sponsor Email kjmoller@illinois.edu

College Contact Lori Fuller College Contact

Email

harvey1@illinois.edu

College Budget

Amanda Brown

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 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)

Revise the Master of Science in Educational Psychology in the College of Education 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

1. Revisions will include the elimination of the headings of the existing foundations requirement of four hours of Psychological Foundations Courses in Educational

what changes are being made to the program. Psychology and four hours of Philosophical and Social Foundations Courses in Education Policy, Organization and Leadership and Curriculum & Instruction and combine the existing course options into one Foundations category for eight hours. There will not be any additional course options added.

- 2. We have moved the text "Masters degree students must take a graduate level College of Education course outside their degree granting department" listed under the Other Requirements heading to the new Foundations Courses Requirement to now say, "Select two of the following foundations courses, taken for four credit hours each. At least one of these two courses must be a course from outside the degree granting department"
- 3. We have reorganized the courses in alphabetical and numerical order under the Foundations Courses heading. We are not adding existing courses to the program.
- 4. We added an additional space in the side-by-side spreadsheet between the last course in the Foundations Courses heading and the 599 requirement.
- 5. We adjusted the elective hours range for accuracy, given the eight hours of foundations plus the range of 599 (2-8) to equal 32 due to mathematical error.
- 6. We have updated the "Research/Project/Independent Study Hours (min/max applied toward degree):" under the section of "Elective Hours" to say Research/Project /Independent Study Hours (min/max applied toward degree): 0-8

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

No

Why are these changes necessary?

- 1. Student feedback has resulted in these changes. EPSY Foundations courses were not offered online and thus were not accessible to students. By eliminating the requirement to take specific courses, students will have access to a greater variety of courses.
- 2. We have moved the statement, "Master's degree students must take at least one course outside of their degree-granting department" to the foundations requirement to encourage critical thinking and consider multiple perspectives through different disciplinary lenses.
- 3. We have reorganized the existing courses under the Foundations Courses heading to provide clarity to the viewer.
- 4. We added an additional space between the last course in the Foundations Courses heading and the 599 requirement on the side-by-side spreadsheet to limit confusion.
- 5. the elective hours were initially calculated incorrectly.
- 6. The 0-8 hours was added to this requirement since the hours were not displaying correctly as they were listed in the CIM. We are not adding additional hours to this section, only correctly the error currently listed.

There will be no change in total hours for 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 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

CI 446 - Culture in the Classroom
CI 501 - Curr Dev for the 21st Century

Please attach any Letter of Dept Support.pdf
letters of
support/acknowledgement
for any
Instructional

Resources 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.

Counseling Psychology Division

Counseling Psychology students will possess a broad knowledge of the core areas of psychology.

Counseling Psychology students will have an understanding of the basic statistical analytical methods, research designs, measurement models, and research approaches.3

Counseling Psychology students will demonstrate skills at independently designing, conducting, writing, and presenting research studies.

Counseling Psychology students will be skilled in psychological assessment in all aspects (design, psychometric evaluation, administering, and communicating results) as well as in a variety of contexts (e.g., both environmental and individual assessment).

Counseling Psychology students will have the ability to conceptualize clients from a variety of theoretical and scientifically-informed frameworks, present such a conceptualization to others and establish means and methods to evaluate its accuracy Counseling Psychology students will possess theoretical and scientific knowledge regarding skills in the provision of interventions.

Counseling Psychology students will value and develop competence in aspects of diversity and individual differences.

Counseling Psychology students will have knowledge and appreciation of the ethical issues involved in being a psychologist.

Counseling Psychology students will adopt a critical, scientific approach to professional activities.

Developmental Sciences Division

Developmental Sciences students will obtain a broad knowledge of the core areas of developmental research across the lifespan. This includes but is not limited to: a) social and emotional development; b) language and mathematical development; c) academic motivation and future planning/orientation; d) bullying and peer harassment; and e) identity formation with respect to gender, race, and ethnicity.

Developmental Sciences students will develop a deep expertise in a relevant specialized topic within or across these core areas. This includes mastering research findings in a topic area selected by the student, understanding the relevant theoretical perspectives related to this topic and learning about the appropriate methodological approaches to understanding the core area.

Developmental Sciences students will obtain a sophisticated knowledge base of research approaches and analytic tools necessary for contribution to scholarly literature in Developmental Sciences broadly and their specialized topic in particular. Specifically, they will develop skills to independently design, conduct, write, and present/publish research studies related to their area of focus/career path.

Cognitive Science of Teaching and Learning (CSTL) Division

CSTL students will obtain a broad knowledge of the core areas related to the cognitive science of teaching and learning. This includes knowledge of theoretical perspectives, methodological approaches, and key research findings in the core areas of (a) cognition and learning across the lifespan, (b) learning and the psychology of language, (c)

multimodal information processing, and (d) sociocultural dimensions of learning. CSTL students will obtain a deep expertise in a relevant topic within or cutting across these core areas. This involves mastering theoretical perspectives, methodological approaches, and key research findings in a topic selected by the student. In addition, they will develop skills at independently designing, conducting, writing, and presenting/publishing research studies.

CSTL students will obtain a sophisticated knowledge base of research approaches and analytic tools necessary for contribution to the professional literature and their chosen professional identity/career path. This involves understanding the basic statistical analytical methods, research designs, measurement models, and research approaches. Studies in Interpretive, Statistical, Measurement, and Evaluative Methodologies for Education (QUERIES) Division

QUERIES students will obtain a broad basic knowledge of the core areas of educational research methodologies, quantitative, qualitative, and evaluative research methods. QUERIES students will obtain a sophisticated knowledge base of quantitative and/or qualitative research approaches and analytic tools necessary for contribution to the professional literature.

QUERIES students in Measurement will become skilled in the development and use of techniques for collecting and analyzing 'test' data through the study of measurement methods.

QUERIES students in Statistics will be skilled in traditional and modern quantitative analytic methods.

QUERIES students in Evaluation will have the skills required for Evaluation scholars –in education, social welfare, health services, community development, human resource development, and other domains.

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.

Revised programs POS EPSY MS side by side.xlsx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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 Study Catalog

Course List Code Title Hours Psychological Foundations Courses In Educational Psychology Foundations Courses 8 Select two of the following foundations courses, taken for four credit hours each. At least one of these two courses must be a course from outside the degree granting department. CI 446 Culture in the Classroom CI 501 Curriculum Development for the 21st Century EPOL 401 History of American Education **EPOL 402** Asian American Education **EPOL 403** Historical and Social Barriers

EPOL 405 School and Society

EPOL 406 Professional Ethics in Education
EPOL 407 Critical Thinking in Education

EPOL 408
EPOL 409
Sociology of Education
EPOL 410
Racial and Ethnic Families
EPOL 412
Politics of Education

EPOL 413 Economics of Education

<u>EPOL 480</u> Technology and Educational Reform

Any 400 level EPSY course

OR

EPSY 553 Global Issues in Learning

Philosophical and Social Foundations Courses in Education Policy, Organization and 4 Leadership and Curriculum & Instruction

EPOL 552 Foundation of Higher Education

EPSY 599 Thesis Research (min/max applied toward degree) 2-8 Elective Hours:

Students pursuing the Concentration in African American Studies are required to take 24 hours of Concentration courses, for a total of 56 hours.

Research/Project/Independent Study Hours (min/max applied toward degree):

0-8

Code Title Hours
Total Hours 32

Other Requirements

Grad Other Degree Requirements
Requirement Description

Human Subjects Approval

Minimum GPA 3.0 500-Level Hours in Education12

Masters degree students must take a graduate level College of Education course outside their degree grantingdepartment.

Corresponding

MS Master of Science

Degree

Program Features

Academic Level Graduate

Does this major Yes

have transcripted concentrations?

Will you admit to No

the concentration

directly?

Is a concentration No

required for graduation?

What is the typical time to completion of this program?

2 years

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

32

What is the 3.0

required GPA?

CIP Code 130603 - Educational Statistics and

Research Methods.

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

Is this revision a change to the admission status of the program?

No

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.

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.

No changes to enrollment are expected.

Estimated Annual Number of Degrees Awarded

Year One Estimate

5th Year Estimate (or when fully implemented)

What is the

Fall

matriculation term for this program?

Budget

Are there

No

budgetary

implications for

this revision?

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?

There will not be a financial impact as a result of this revision.

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

Nο

Attach letters of support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

Graduate Base on-campus rate

Are you seeking a change in the tuition rate or differential for this program?

No

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.

There will not be an impact as a result of this revision.

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 revision.

EP Documentation

EP Control EP.25.014

Number

Attach

Rollback/Approval

Notices

This proposal No

requires HLC

inquiry

DMI Documentation

Attach Final U

U Program Review Comments KEY 217 8-13-24.docx

Approval Notices

Banner/Codebook

MS:Educational Psych -UIUC

Name

Program Code:

10KS5865MS

MinorConcDegreeMSMajorCodeCodeCodeCode

5865

Senate Approval

Date

Senate Conference Approval Date

BOT Approval

Date

IBHE Approval

Date

HLC Approval

Date

DOE Approval

NA

Date

Effective Date:

Attached Document Justification for this request

Program Reviewer

Comments

Allison McKinney (agrindly) (09/04/24 2:05 pm): Administratively approved by the Graduate College.

Brooke Newell (bsnewell) (09/05/24 7:43 am): Rollback: Per discussion with Lori Fuller, to address U Program Review comments

Key: 217

Date Submitted: 08/12/24 1:11 pm

Viewing: 10KR6083BS & 10KS6083MFA: JP: Sustainable Design, BS and Art & Design: Design for Responsible Innovation, MFA

Sustainable Design, BS and Art & Design: Design for

Last approved: 03/15/23 10:13 am

Last edit: 09/27/24 8:08 am

Changes proposed by: Nicole Turner

Catalog Pages

Responsible Innovation, MFA

Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1526 Head
- 3. 1644 Head
- 4. KR 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. 08/26/24 4:25 pm Donna Butler (dbutler):
 - Approved for U Program Review
- 2. 08/27/24 2:49 pm Melissa Pokorny (mpokorny):
 - Approved for 1526
- Head 3. 08/27/24 3:00 pm
- Nicole Turner
 - (nicturn):
 - Approved for 1644
 - Head
- 4. 08/28/24 10:31 am
 - Nicole Turner
 - (nicturn):

Approved for KR

- Dean
- 5. 08/28/24 10:58

am
Claire Stewart
(clairest):
Approved for
University

Librarian

6. 09/06/24 11:33 am Allison McKinney

> (agrindly): Approved for

Grad_College

7. 09/06/24 1:23 pm Suzanne Lee (suzannel): Approved for COTE Programs

8. 09/13/24 10:29 am Brooke Newell

(bsnewell):
Approved for
Provost

History

- 1. Feb 4, 2022 by Nicole Turner (nicturn)
- 2. Apr 27, 2022 by Nicole Turner (nicturn)
- 3. Mar 15, 2023 by Nicole Turner (nicturn)

Joint Program (ex. Master of Public Health & PhD. in Community Health)

This proposal is

for a:

Revision

Administration Details

Official Program JP: Sustainable Design, BS and Art & Design: Design

Name for Responsible Innovation, MFA

Diploma Title Bachelor of Science in Sustainable Design; Master of Fine Arts in

Art and Design

Sponsor College Fine & Applied Arts

Sponsor Art and Design

Department

Sponsor Name Molly Briggs, Assistant Professor of Graphic Design and Faculty

Representative of the MFA Concentration in DRI

Sponsor Email mbriggs@illinois.edu

College Contact Dean Asst. Nicole Turner College Contact

Email

nicturn@illinois.edu

College Budget Greg Anderson

Officer

College Budget gnanders@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.

KR Dean

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)

Please describe the oversight/governance for this program, e.g., traditional departmental/college governance. Inclusion of/roles of elected faculty committees? Inclusion of/roles of any advisory committees.

The Sustainable Design faculty committee and Dean of FAA will maintain oversight of the BSSD and the School of Art & Design and Graduate College will maintain oversight of the MFA.

College Fine & Applied Arts

Department Fine and Applied Arts

Is there an additional department involved in governance?

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)

Revise the Joint Program in the Bachelor of Science in Sustainable Design and the Concentration in Design for Responsible Innovation in the Master of Fine Arts in Art & Design in the College of Fine and Applied Arts 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 description of what changes are being made to the program.

(1) Add Gen Ed template; (2) Embed BSSD FA 24 curricular changes; (3) Update special topics courses in Art & Design to include new permanent courses

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

No

Why are these changes necessary?

- 1- Inputting new campus gen ed requirement template per office of the provost initiative.
- 2- The BSSD program has approved changes for FA 24, as of 4/22/24. These changes included the expansion of the drawing and urban scale sustainability course options. Additionally, editorial changes were made to remove Gen Ed category fulfillment notes to maintain accuracy amongst ongoing certification revisions, in summary of credits table, removing hours for gen ed's and free electives, and deleting the stand-alone free electives table. The summary table also lists out BSSD and MFA degree titles.
- 3- ARTS 465 was created as an Advanced Illustration course, so it is removed from ARTD 499 list of special topics options and added as an 'or' option. Because it is a 3 credit hour course, this changes the total hours for this option is 3-4 and reduces the total senior year course options to 10-12 in the summary table (previously 11-12). In the sample sequence, the option will remain as 4 hours for students to plan. Similarly, ARTS 245 Beginning Illustration is removed from ARTD 499 special topics options and added as an 'or' option.

No changes to total major or degree hours.

Note re U ProgramReview feedback: The longest list in the sample sequence is 4 courses, so it is preferred they be listed. All other revisions were made.

40 hour upper division/advanced course requirement

ARTD 326 - 3

ARCH 321 - 3

ARTD 451 - 4

FAA 330 - 5

FAA 430 - 3

FAA 431 - 5

ARTD 333 - 3

ART 310 - 3

ARTD 499 or ARTS 465 - 4

ARTD 420 or ARTD 426 - 3 or 4

ARTD 444 - 4

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.

Bachelor of Science in Sustainable Design:

The Student Learning objectives (SLO) are:

- 1. Students will have a deep level of understanding of the fundamentals of sustainability and their functional links to the built environment
- 2. Students will have a deep level of understanding of the fundamentals of design thinking and practice
- 3. Students will be proficient in applying basic principles of visual and material communication, including sketching, drafting, model-making, 2-d and 3-d design software and geographic information systems.
- 4. Students will be able to combine design theory and practice with sustainability principles to address environmental issues at the product, building, neighborhood, city, landscape and global levels.
- 5. Students will be comfortable working in multidisciplinary teams to solve complex design problems

MFA: Design for Responsible Innovation:

Assessment Activity:

In Step 5 of the assessment plan, your program identified at least three questions it would pursue to better understand student learning at the program level.

1. Which question(s) from your program's assessment plan did the program explore during AY 2018-2019?

Question 1: How do the students locate relevant literature, assess its quality, and use it to inform their own research trajectories?

- Student Learning Outcome: Demonstrate familiarity with the design research literature relevant to their topic
- Sources/Methods for acquiring evidence: End of term review, thesis defense, conference papers and presentations, publications
- Timeline: Accomplished by creating new required course ARTD570 Design Research Methodology—sought and received Provost approval for the new course name and description in AY2019. First offered Spring 2019; currently in its second offering in Fall 2019. Also, developed Graphic Design LibGuide in consultation with research librarians at Ricker Library and a Design Research LibGuide in consultation with library Melody Allison at Funk ACES Library.

Question 2: Can the students adequately distinguish among the different kinds of prototypes – production, research, and provocation – and explain when each is useful?

- Student Learning Outcome: Create prototypes for research purposes
- Sources/Methods for acquiring evidence: End of term review, thesis defense, conference papers and presentations, publications

• Timeline: Accomplished by incorporating the development and implementation of iterative prototypes in the Graduate Graphic Design Studio.

Question 3: Are the students able to think in terms of how knowledge is typically created in different parts of campus, and explain how the modes are used in their own research?

- Student Learning Outcome: Explain the different epistemological modes of knowledge production
- Sources/Methods for acquiring evidence: End of term review
- Timeline: After faculty developed a new mission statement and research tracks in responsible innovation, we developed an interactive pedagogical tool that offers a holistic approach to design research. This tool draws from a wide cross section of research domains and methodologies across campus. Faculty have co-authored a peer-reviewed conference presentation on this tool, are developing proposals for peer-reviewed conference workshops, and are conducting workshops with our MFA students. Also, we have a developed a number of new courses; see item 8c, below. Finally, we have developed a new course advising plan that will be implemented as soon as one remaining course receives Provost approval (anticipated by May 2020).

Question 4: Are students familiar with a variety of research methods and can they provide the rationales for choosing among them?

- Student Learning Outcome: Select research methods appropriate to the thesis topic
- Sources/Methods for acquiring evidence: Thesis defense, conference papers and presentations, publications
- Timeline: Accomplished by advising students to incorporate research methods and processes into project development and analysis in their own work, as well as the work completed in their graduate courses. Graduate students are also required to take a methodologies course (ARTD570 Design Research Methodology) that covers a variety of research methods and the implementation of them.
- 2. Are you doing any preparatory assessment work (e.g., creating rubrics, surveys, exams, etc.)?
- a. Yes
- 3. Did the assessment work involve direct evidence of student learning? Examples of direct evidence include (but are not limited to) written work, performances, or presentations, scored using a rubric; portfolios of student work; and observations of student behavior, such as presentations and group discussions.
- a. Yes
- 4. Did the assessment work involve indirect evidence of student learning? Examples of indirect evidence include (but are not limited to) course grades; placement rates of graduates into appropriate career positions and starting salaries; alumni perceptions of their career responsibilities and satisfaction; student ratings of their knowledge and skills and reflections on what they have learned in the course or program; and student/alumni satisfaction with their learning, collected through surveys, exit interviews, or focus groups.
- a. Yes
- 5. What was the focus of the assessment work?
- a. Skill development
- b. Knowledge acquisition

- c. Professional attributes
- d. Other: (specify) Communicative capacity
- 6. Are results being used to improve student learning?
- a. Yes
- 7. If YES, how are the results of the assessment activities being used to impact student learning?

Revised learning outcomes for all existing courses; developed new learning outcomes for all new courses; developed new rubric (paper form) and process (faculty protocol) for semester-end graduate faculty reviews; revised requirements for the written thesis and thesis exhibition, presented in all-new Grad Handbook prepared by grad co-coordinators; established a research advisor program for all incoming first-years and continuing second-years to complement the academic advising provided by the graphic design faculty and graduate co-coordinators.

- 8. What improvements were made based on assessment work?
- -Added new course(s): ARTD 570 Design Research Methodology: This seminar coordinates readings in design theory and the processes and principles of human-centered design with graduate students' emerging thesis research interests. Students will address the role of design research methodology in establishing design practice and design pedagogy. ARTD 451 EDGE: Ethics of a Designer in a Global Economy (EDGE) studio presents complex problems of ethics within the graphic design practice. Individual sections address social and environmental issues. ARTD 551 Design Research Impact: This seminar helps the MFA design students connect their research with pedagogy and professional development strategies to disseminate their research into publishing, conferences, communities, and other relevant venues.
- -Introduced new technology (Interactive Research Model)
- -Improved advising (New Research Advising Program)
- -Improved outcomes assessment
- -Provided clarity on Pass/Pass with Reservations/Fail in the Graduate Handbook
- 9.Is any additional assessment work needed to address the questions you explored during AY 2018-2019? No
- 11. Have the results of the assessment work been shared with anyone? Yes, with others in the department and with others outside the department. Faculty collaborated during faculty meetings and an all-day faculty retreat to develop the new curriculum. Curriculum development was a direct response to the assessment.

Our new curriculum and courses have been shared with A+D Administration. Courses have gone live to students. The curriculum has not yet been publicized because one course still needs approval.

13. What was learned from doing the assessment work this year? Our program was in need of a comprehensive curriculum redevelopment. We collaborated to accomplish this.

Next Steps:

17. What are your next steps? For example, what assessment work will your program continue into next year? What would the program like to change or do differently? What would the program like to discontinue based on its experiences?

The April 2019 Academic Program Review External Reviewer Report observes that

"Graduate students desire greater and more consistent mentoring in teaching"

- Graduate stadents desire greater and more consistent mentoring in teaching
- "Graduate students...believe...there is not enough oversight of assistantships"
- "Graduate students...believe...there is not enough compensation to faculty for mentoring them"
- "In order to ensure the health of the School's graduate programs, organizational roles may need to be better compensated, even if through course releases"
- Develop a course specifically for faculty guidance in research and writing thesis for an advanced degree in Design.

We believe we should work on pursue these issues/suggestions in AY2020.

Revised Assessment Plan:

- 19. Have you made any changes to the assessment process (e.g., assessment lead, student learning outcomes, curriculum map, assessment planning questions, etc.)? a. Yes
- 20. If YES, what changes were made to the assessment process?
- a. Assessment lead

Our Chair, Eric Benson, organized a faculty retreat to discuss the changes necessary for the graduate program.

b. Student learning outcomes

Outlined course objectives and competencies per course and the projection of those competencies as a scaffold; acquired, reinforced, and finally mastered.

c. Curriculum map

Provide a curriculum map of the courses currently offered and the competencies that correspond with that them.

d. Assessment planning questions

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.

Revised programs BSSD MFA DRI FA 24 side by side.docx BSSD MFA DRI Schedule FA 24.docx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

The B.S.-M.F.A. program combines a B.S. in Sustainable Design with a M.F.A. in Art & Design, concentration in Design for Responsible Innovation (4 + 2 program). Current University of Illinois at Urbana-Champaign undergraduate students enrolled in the Sustainable Design undergraduate major who have completed between 60 and 96 credit hours and maintain superior academic performance are eligible to apply for this program. Students admitted to the program will receive the B.S. degree after four years and, contingent upon successful admittance to the Graduate School, will receive the M.F.A. degree after two additional years.

Students interested in the BSSD/MFA DRI 4 + 2 program will need to plan their schedules well in advance of their Junior year to ensure they have taken the appropriate course work. By judicious selection of general education courses and major electives in their sophomore and junior years, students will be prepared to apply to the 4+2 program in their junior year.

For additional details and requirements refer to the department's Web site and the Graduate College Handbook.

Statement for

Programs of

Graduation Requirements

Study Catalog Minimum hours required for graduation: 160 hours.

Bachelor of Science in Sustainable Design: Design degree requirements 120 hours.

Course List

Code	Title	Hours
General Education Requireme	ents	
Composition I		4
Advanced Composition		3
Humanities & the Arts (fulfille	ed by required courses listed below)	6
Cultural Studies: Western/Co	mparative Culture(s)	3
Cultural Studies: Non-Wester	n Culture(s)	3
Cultural Studies: US Minority	Culture(s) (fulfilled by required course listed below)	3
Natural Sciences and Technol	ogy	6
Social and Behavioral Science	es (1 is fulfilled by required course listed below)	6
Quantitative Reasoning I and	II	6
Language Other Than English	requirements	0-12
Total Hours (with Language re	equirement fulfilled not counting SD/DRI required cour	ses)28

lotal Hours (with Language requirement fulfilled, not counting SD/DRI required courses)28

Course List

	Course List	
Code	Title	Hours
Major Requi	rements	
Students	should plan to complete all requirements prior to senior year, except for FAA 430 and	
FAA 431 ·	which will be taken during senior year.	
FAA 101	Arts at Illinois	1
FAA 201	Black Arts Today (Gen Ed: Humanities & the Arts & U.S. Minority Cultures)	3
LA 101	Introduction to Landscape Arch	2
UP 136	Urban Sustainability (Gen Ed: Social/Behavioral Sci)	3
ARCH 171	Introduction to Design I	3
ARCH 172	Introduction to Design II	3
ARTH 211	Design History Survey (Gen Ed: Humanities & the Arts)	3
ARTD 225	Design Drawing	3
or LA 280	Design Communications I	
FAA 230	Sustainable Design of the Built Environment	3
ARCH 321	Environment, Architecture, and Global Health	3
ARTD 451	Ethics of a Designer in a Global Economy	4
ARTD 326	Sustainability & Manufacturing	3
FAA 330	Making Sustainable Design	5
FAA 430	Capstone Seminar	3
FAA 431	Capstone Studio	5
Total Hours		0
	Course List	
Code	Title	Hours
Free Elective	es	13-14
Colock annua	de company de la 10 10 10 de la company de l	_

Select approximately 13-14 credit hours with approval of advisor to complete degree requirements. Master of Fine Arts in Art & Design, concentration in Design for Responsible Innovation: Innovation concentration degree requirements 40 hours.

University Requirements

Minimum of 40 hours of upper-division coursework, generally at the 300- or 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog.

General Education Requirements

<u>Follows the campus General Education (Gen Ed) requirements.</u> <u>Some Gen Ed requirements may be met by courses required and/or electives in the program.</u>

Course List

Code	Title	Hou	rs
Composition I		<u>4-6</u>	
Advanced Composition		<u>3</u>	
Humanities & the Arts (6 hours)		<u>6</u>	
fulfilled by ARTH 211, FAA 102, FAA 201, and	ART 310		
Natural Sciences & Technology (6 hours)		<u>6</u>	
Social & Behavioral Sciences (6 hours)		<u>6</u>	
Cultural Studies: Non-Western Cultures (1 cours	<u>se)</u>	<u>3</u>	
Cultural Studies: US Minority Cultures (1 course	<u>)</u>	<u>3</u>	
fulfilled by FAA 201			

Code	T:+lo		Нашта
	Title		Hours
	lies: Western/Comparative Cultures (1 course)		<u>3</u>
_	Reasoning (2 courses, at least one course must be Quantitative Reasoning I)	1	<u>6-10</u>
	equirement (Completion of the third semester or equivalent of a language other	<u>er than</u>	<u>0-15</u>
English is red			
Sustainab	<u>le Design Major Requirements</u> Course List		
Code	Title		Hours
	should plan to complete all requirements prior to senior year, except for FAA 4	130 and	riours
	which will be taken during senior year.	roo ana	
Foundation	Which will be taken during semior year		<u>18</u>
FAA 101	Arts at Illinois		
FAA 230	Sustainable Design of the Built Environment		1 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
LA 101	Introduction to Landscape Arch		2
ARCH 171	Introduction to Design I		≟ 3
ARCH 172	Introduction to Design II		<u>≃</u> 3
FAA 201	Black Arts Today		3
ARTH 211	Design History Survey		<u>≥</u>
	Sustainability (select one course)		3
<u>UP 136</u>	Urban Sustainability		<u>3</u>
<u>UP 205</u>	Ecology & Environmental Sustainability		<u>3</u>
ARCH 237	Urban Scale Sustainability		ა <u>ა</u>
	ect one course)		ა <u>⊃</u>
ARTD 225	Design Drawing		3 <u>⊃</u>
			<u>⊇</u>
ARTF 102	Observational Drawing		<u>3</u>
ARTF 103	Design I		<u>3</u>
<u>LA 280</u>	Design Communications I (limited seats solely for BSSD/MLA 4+2 students)	<u>l</u>	
Core	Making Custainable Design		<u>15</u>
FAA 330	Making Sustainable Design		<u>2</u>
ARTD 326	Sustainability & Manufacturing		<u>2</u>
ARCH 321	Environment, Architecture, and Global Health		<u>3</u>
ARTD 451	Ethics of a Designer in a Global Economy		<u>4</u>
Senior Capst			3 3 4 8 3 5
FAA 430	Capstone Seminar		<u>3</u>
<u>FAA 431</u>	Capstone Studio		
<u>Total Hours</u>	Course List		<u>47</u>
Cada	Course List	Harris	
Code	Title	Hours	
Major Electiv			
All 16 nours	of major electives are met with the full completion of the requirements below. Course List		
Code	Title		Hours
Required Art +Design Coursework taken prior to Senior Year			
Students	who follow this program will be eligible for a minor in Art + Design regardless	of their	
	to the 4+2 program		
ARTD 151	Introduction to Graphic Design		3
ARTD 222	Typographic Practice		3
ARTD 270	Design Methods		2
_			

Code		
Code	Title	Hours
ARTD 333	Type & Image	3
FAA 102	Design Beyond Boundaries	3
<u>ARTD 299</u>	Spec Topics in Design Courses (Design Thinking Seminar, Design Thinking Studio, or Creative Coding)	2-3
or ADTC 245	Beginning Illustration	
		3
<u>ART 310</u>	Design Thinking Course List	3
Code	Title	Hours
Senior Year C		
A BSSD st	udent admitted to the 4+2 program is expected to enroll in 400-level MFA DRI	
	te courses in their senior year, although they are not yet admitted to the MFA DRI	
program.	Typically, a 4+2 student will take <u>FAA 430</u> & <u>FAA 431</u> (3 & 5 hours), as required by the	
	gram, plus 3 MFA DRI prerequisite courses:	
ARTD 499	Special Topics in Design (Creative Coding)	3-4
or <u>ARTS 465</u>	Advanced Illustration	
ARTD 420	Disability Design	3-4
or <u>ARTD 426</u>	Product Innovation	
ARTD 444	Typographic Systems	4
Master of Fi	ne Arts in Art & Design, Design for Responsible Innovation concentration degree	<u>ee</u>
<u>requiremen</u>	<u>ts</u>	
	Course List	
Code Titl	e Hours	
ARTD 551Des	sign for Responsible Innovation Research Impact 4	
ARTD 570Des	sign for Responsible Innovation Research Methodology4	
ARTD 595MF	A Design for Responsible Innovation Studio (repeated)16	
ARTD 599The		
Electives	8	
Total Hours	40	
	Course List	
Code	Title Hours	
Other Require		
	O-level Hours Required Overall32	
Minimum GP/		-:
_	f Credits for the Joint Bachelor of Science in Sustainable Design and Master of I	-ine
Program	& Design, concentration in Design for Responsible Innovation BSSD/MFA DRI	
Frogram	Course List	
Code	Title Hours	
	Science in Sustainable Design 120	
General Edu	3	
Major Require		
Major Electiv		
-	-D Course Requirements 19	
•	Graduate Courses 10-12	
Free Elective		
	of 40 credits at the 300 or 400 course level are required	
	ne Arts in Art + Design, Design for Responsible Innovation concentration40	

Program Relationships

Identify the existing programs to be joined:

Corresponding Program(s)

Sustainable Design, BS

Art & Design: Design for Responsible Innovation, MFA

Program Features

Academic Level Undergraduate

Graduate

What is the typical time to completion of this program?

6 years

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

160

What is the 2.75

required GPA?

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

Is this revision a change to the admission status of the program?

No

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.

In October of students' junior year, the BSSD Faculty Administrator, in consultation with the Director of MFA Admissions, MFA DRI Program Director, and other Art & Design faculty reviews each candidate's undergraduate record and extends offers of invitation for 4+2 participation to those who qualify.

Invited students then provide a statement of purpose (SOP) and portfolio of 10 representative works to the Director of MFA Admissions by December 15. The SOP (1,500 words maximum) should convey information about the student's background, personal experience, and motivation for pursuing a MFA degree at the University of Illinois. The best statements communicate an applicant's research interests and career aspirations, not simply his or her technical qualifications. The portfolio should demonstrate applicant's capacity for design and/or design research. A 20-page writing sample may be substituted for 5 of the 10 works (i.e. portfolio would include writing sample + 5 representative works.)

Students will be notified by the Director of MFA Admissions by January of their junior year if they have been accepted into the 4+2 program. The decision to grant entrance to the program is based on the undergraduate record, the statement of purpose, and evaluations by faculty who have taught or worked with the student. Admission to the 4+2 program does not guarantee admission to the MFA program, although students are initially invited to participate in the 4+2 program based on the high likelihood that they would be admitted to the MFA program.

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.

No impact.

Estimated Annual Number of Degrees Awarded

Year One Estimate 0 5th Year Estimate (or when

fully implemented)

3

Budget

Are there No

budgetary

implications for

this revision?

Will the program or revision require staffing (faculty, advisors, etc.)

beyond what is currently available?

No

Additional Budget

Information

Financial Resources

How does the unit intend to financially support this proposal?

This proposal is building on programs that already exist within the department, so no additional costs are expected. Upon formal acceptance into the graduate program, students will be assessed graduate student tuition for year 5 and year 6.

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

No

Attach letters of support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

<u>FAA Undergrad Differential for 4 undergrad years; FAA Grad</u> Differential for 2 grad years

Are you seeking a change in the tuition rate or differential for this program?

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.

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 revision of the BSSD/MLA 4+2.

EP Documentation

EP Control

EP.25.014

Number

Attach

Rollback/Approval

Notices

This proposal

No

requires HLC

inquiry

DMI Documentation

Attach Final

U Program Review Comments KEY 1057 8-26-2024.docx

Approval Notices

Banner/Codebook

BS:BS SD/MFA A&D - UIUC & MFA:BS SD/MFA A&D - UIUC

Name

Program Code: 10KR6083BS & 10KS6083MFA

Minor Conc 6083 Degree Major Code Code Code 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

Mary Lowry (lowry) (07/26/24 4:09 pm): Rollback: See email sent to Nicole

Turner on 7-26-24

NA

Mary Lowry (lowry) (08/26/24 3:19 pm): U Program Review comments attached

in DMI Documentation section

Key: 1057

Date Submitted: 08/12/24 1:37 pm

Viewing: 10KR6168BS & 10KS6168MLA

: JP: Sustainable Design, BS and Landscape Architecture, MLA

Last approved: 02/01/24 1:09 pm

Last edit: 09/27/24 8:07 am Changes proposed by: Nicole Turner

Sustainable Design, BS and Landscape Architecture, MLA

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1569 Committee Chair
- 3. 1569 Head
- 4. 1644 Head
- 5. KR Dean
- 6. University
 Librarian
- 7. Grad_College
- **8. COTE Programs**
- 9. Provost

10. Senate EPC

- 11. Senate
- 12. U Senate Conf
- 13. Board of Trustees
- 14. IBHE
- 15. HLC
- 16. DOE
- 17. DMI

Approval Path

- 1. 08/26/24 3:13 pm Donna Butler (dbutler): Approved for U
- Program Review 2. 08/26/24 3:15 pm
 - Approved for 1569 Committee Chair

Lori Davis (drlori):

- Committee Chair 3. 08/26/24 9:20 pm
- 5. 06/26/24 9.20 μ David Hays (dlhays):
- Approved for 1569 Head
- 4. 08/27/24 9:18 am Nicole Turner (nicturn): Approved for 1644
- 5. 08/27/24 9:19 am

Head

Nicole Turner (nicturn):

Approved for KR Dean

6. 08/27/24 12:54 pm

Claire Stewart (clairest): Approved for University Librarian

7. 09/06/24 11:33 am

Allison McKinney

(agrindly):
Approved for
Grad_College

8. 09/06/24 1:24 pm Suzanne Lee (suzannel): Approved for

COTE Programs

9. 09/13/24 10:29 am Brooke Newell

> (bsnewell): Approved for

Provost

History

1. Feb 1, 2024 by Nicole Turner (nicturn)

Joint Program (ex. Master of Public Health & PhD. in Community Health)

This proposal is

for a:

Revision

Administration Details

Official Program JP: Sustainable Design, BS and Landscape

Name Architecture, MLA

Diploma Title Bachelor of Science in Sustainable Design and Master of

Landscape Architecture in Landscape Architecture

Sponsor College Fine & Applied Arts

Sponsor Landscape Architecture

Department

Sponsor Name <u>Beth Scott</u> Mary Pat McGuire

Sponsor Email <u>scottea@illinois.edu</u> <u>mpm1@illinois.edu</u>

College Contact Nicole Turner College Contact

Email

nicturn@illinois.edu

College Budget Greg Anderson

Officer

College Budget gnanders@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.

KR Dean

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)

Please describe the oversight/governance for this program, e.g., traditional departmental/college governance. Inclusion of/roles of elected faculty committees? Inclusion of/roles of any advisory committees.

The Sustainable Design faculty committee and Dean of FAA will maintain oversight of the BSSD and the Department of Landscape Architecture and Graduate College will maintain oversight of the MLA.

College Fine & Applied Arts

Department Fine and Applied Arts

Is there an additional department involved in governance?

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)

Revise the Joint Program in the Bachelor of Science in Sustainable Design and the Master of Landscape Architecture in Landscape Architecture in the College of Fine and Applied Arts 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 description of what changes are being made to the program.

(1) Add Gen Ed template; (2) Embed BSSD FA 24 curricular changes

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

No

Why are these changes necessary?

- 1- Inputting new campus gen ed requirement template per office of the provost initiative.
- 2- The BSSD program has approved changes for FA 24, as of 4/22/24. These changes included the expansion of the drawing and urban scale sustainability course options. Additionally, editorial changes were made to remove Gen Ed category fulfillment notes to maintain accuracy amongst ongoing certification revisions, in summary of credits table, removing hours for gen ed's and free electives and also removing extra free electives table above summary table. Additionally, BSSD and MLA were written out in the summary table.

No changes to total major or degree hours.

40 hour upper division/advanced course requirement

ARTD 326 - 3

ARCH 321 - 3

ARTD 451 - 4

FAA 330 - 5

FAA 430 - 3

FAA 431 – 5

LA 314 - 4

LA any 300 or 300 level - 2

LA 352 - 4

LA 433 - 5

LA 434 - 5

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.

BSSD Student Learning Outcomes:

- 1. Students will have a deep level of understanding of the fundamentals of sustainability and their functional links to the built environment.
- 2. Students will have a deep level of understanding of the fundamentals of design thinking and practice.
- 3. Students will be proficient in applying basic principles of visual and material communication, including sketching, drafting, model-making, 2-d and 3-d design software and geographic information systems.
- 4. Students will be able to combine design theory and practice with sustainability principles to address environmental issues at the product, building, neighborhood, city, landscape, and global levels.
- 5. Students will be comfortable working in multidisciplinary teams to solve complex design problems.

Master of Landscape Architecture students will:

Master of Landscape Architecture learning outcomes include:

- Knowledge and skills in process, principles, and theories of design in landscape architecture
- Knowledge of histories and theories of the art and science of landscape architecture
- Knowledge of plants, ecosystems, and climate science
- Knowledge of resilience and landscape performance
- Knowledge of the legal context of the landscape architecture profession
- Knowledge of professional practice
- Skills in the application of assessment and analysis of site context and suitability of program, data, and other criteria in site design and planning
- Skills in developing design concepts, material detailing, and construction, including accessibility
- Skills in design communication with diverse audiences, including verbal, visual, and written forms
- Knowledge of construction materials and methods, including the use of specifications, construction techniques, material selections, and preparation of relevant documents
- Knowledge and skills of landform, engineering, and green infrastructure to facilitate ecological design, safety, and accessibility
- Knowledge of landscape performance, including the quantifiable assessment of benefits of landscape design
- Skills in collaboration, including interdisciplinary teams, and application of knowledge from different disciplines into design
- Knowledge and skills in research theories and methods, research ethics, and the understanding of research as it affects the current and future practice of the profession

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

Describe here:

The following assessment data will be used to aid the evaluation of the program:

- Admission numbers disaggregated by race, gender, geography, and academic year
- Student performance data
- Student participation in study abroad programs
- Undergraduate research and design opportunities
- Retention rates and average time to complete the degree
- Student and alumni feedback
- Senior exit survey
- Student awards and recognition
- Job placements
- Acceptance rate into the 4+2 program
- Ability to complete the 4+2 on the suggested timeframe
- Alumni Surveys

Learning outcomes are assessed by faculty for individual students through coursework assignments, most notably through the design studio sequence. Studio production reflects a synthetic process of incorporating the knowledge and skills learned through adjacent coursework and a sound measure of integrated learning which significantly reflects the potential for future practice in the profession.

Students' design studio work is also periodically assessed by external reviewers from practice and academia, which offers an opportunity for faculty and program leadership to gain further insight into the learning outcomes of individual students and courses and to make recommendations to the Academic Programs and Student Advising staff on the satisfactory completion of learning and/or suggestions for remedial instruction.

The MLA Program Committee regularly assesses curriculum and student learning, and makes periodic recommendations for coursework development to increase student learning outcomes.

Learning outcomes for students in the MLA program are also assessed every 6 years through the accreditation visits of the Landscape Architecture Accreditation Board (LAAB). The visiting team reviews all course materials supplemented by an exhibition of student work samples from all courses in the MLA program. LAAB teams also meet with students to assess their academic experience and learning outcomes.

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.

Student learning outcomes for each degree will be evaluated by each respective program.

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

The BSSD Coordinator, LA Academic Programs and Student Affairs Coordinator, and the MLA program faculty chair will meet three times a year. In the fall, applicants to the 4+2 program will be reviewed and in the spring highly qualified students for the next cycle will be identified. In addition to these logistics, assessment data will be utilized in each of these meetings to determine if the 4+2 is meeting the individual program learning outcomes and if any assessment data reflects necessary changes in the program to support students' success.

Program
Description and
Requirements
Attach Documents

Is the career/profession for graduates of this program regulated by the State of Illinois?

Yes

If yes, please describe.

Yes, Landscape Architecture is a regulated profession in the United States, with U.S. jurisdictions requiring specific education, experience (in professional practice), and examination requirements to qualify for state-based licensure. Continuing education documentation is also required to maintain licensure over the years.

The State of Illinois regulates the practice of landscape architecture through its Title Act statute under the Illinois Department of Financial and Professional Regulation. The MLA program at the University of Illinois is an LAAB-accredited program through the Landscape Architecture Accreditation Board (LAAB) which satisfies the education requirement under the licensure standard in the State of Illinois.

The Council of Landscape Architecture Registration Boards (CLARB) and the American Society of Landscape Architects (ASLA) Licensure & Government Affairs Committee provide oversight and resources for states, including the State of Illinois, to uphold these licensure standards in keeping with the stated objective/responsibility of the profession to protect life, safety, and welfare of the public and natural resources and systems.

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.

Revised programs

SD MLA 4+2 sample schedule.docx MLA and MLA BSSD side by side FA

24.xlsx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

The six-year joint BSSD/MLA 4 + 2 program combines a B.S. in Sustainable Design with a MLA in Landscape Architecture. Current University of Illinois at Urbana-Champaign undergraduate students enrolled in the Sustainable Design undergraduate major who have completed between 30 and 96 credit hours and maintain superior academic performance are eligible to apply for this program. Students admitted to the program will receive the B.S. degree after four years and the M.LA. degree after two additional years.

Students interested in the BSSD/MLA 4 + 2 program will need to plan their schedules well in advance of their Junior year to ensure they have taken the appropriate course work. By judicious selection of general education courses and major electives, students will be prepared to apply to the 4+2 program in their sophomore year, and to the Graduate College in their senior year.

For additional details and requirements refer to the MLA department's Web site and the Graduate College Handbook.

Statement for

Programs of Gr

Graduation Requirements

Study Catalog

Minimum hours required for graduation: 168 hours.

Bachelor of Science in Sustainable Design: Design degree requirements 120 hours.

Master of Landscape Architecture in Landscape Architecture: 48 hours.

University Requirements

Minimum hours for graduation is 120 for the BS in Sustainable Design, to include a minimum of 40 hours of upper-division coursework, coursework generally at the 300- or 400-level. and 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement. degree.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog.

General Education Requirements

<u>Follows the campus General Education (Gen Ed) requirements.</u> <u>Some Gen Ed requirements may be met by courses required and/or electives in the program.</u>

Course List		
Code	Title	Hours
Composition I		<u>4-6</u>
Advanced Composition		<u>3</u>
fulfilled by LA 314		
Humanities & the Arts (6 hours)		<u>6</u>
fulfilled by ARTH 211, FAA 201, LA 222, and	LA 314	
Natural Sciences & Technology (6 hours)		<u>6</u>
fulfilled by GEOL 100 or GGIS 103; and LA 25	<u>50</u>	
Social & Behavioral Sciences (6 hours)		<u>6</u>
Cultural Studies: Non-Western Cultures (1 cours	<u>se)</u>	<u>3</u>
fulfilled by LA 222		
Cultural Studies: US Minority Cultures (1 course	<u>:)</u>	<u>3</u>
fulfilled by FAA 201		

Code	Title	Hours	
Cultural Studies: Western/Comparative Cultures (1 course)			
<u>fulfilled by</u>		6-10	
			
	quirement (Completion of the third semester or equivalent of a language other than	<u>0-15</u>	
English is req			
_Sustainabl	<u>e Design Major Requirements</u>		
	Course List		
Code	Title	Hours	
	should plan to complete all requirements prior to senior year, except for FAA 430 and		
	<u>rhich will be taken during senior year.</u>	4.0	
Foundation		<u>18</u>	
<u>FAA 101</u>	Arts at Illinois	1	
<u>FAA 230</u>	Sustainable Design of the Built Environment	<u>3</u>	
<u>LA 101</u>	Introduction to Landscape Arch	<u>2</u>	
<u>ARCH 171</u>	Introduction to Design I	<u>3</u>	
<u>ARCH 172</u>	Introduction to Design II	<u>3</u>	
<u>FAA 201</u>	Black Arts Today	<u>3</u>	
<u>ARTH 211</u>	<u>Design History Survey</u>	<u>3</u>	
<u>Urban Scale S</u>	Sustainability (select one course)	<u>3</u>	
<u>UP 136</u>	<u>Urban Sustainability</u>	<u>3</u>	
<u>UP 205</u>	Ecology & Environmental Sustainability	<u>3</u>	
ARCH 237	<u>Urban Scale Sustainability</u>	<u>3</u>	
Drawing (sele	ect one course)	<u>1</u> 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
ARTD 225	Design Drawing	<u>3</u>	
ARTF 102	Observational Drawing	<u>3</u>	
ARTF 103	Design I	<u>3</u>	
LA 280	Design Communications I (limited seats solely for BSSD/MLA 4+2 students)	<u>3</u>	
Core		<u>15</u>	
FAA 330	Making Sustainable Design		
ARTD 326	Sustainability & Manufacturing	<u>3</u>	
ARCH 321	Environment, Architecture, and Global Health	3	
ARTD 451	Ethics of a Designer in a Global Economy	4	
Senior Capsto		5 3 3 4 8 3 5	
FAA 430	Capstone Seminar	3	
FAA 431	Capstone Studio	5	
Total Hours		<u>=</u> <u>47</u>	
	Course List		
Code	Title Hours		
Major Elective			
-	of major electives are met with the full completion of the requirements below.		
7 III 10 Hours (Course List		
Code	Title	Hours	
	Coursework taken prior to Senior Year	ilouis	
Students who follow this program will be eligible for a minor in Landscape Studies regardless of their			
	the 4+2 program.	11	
•	Planet Earth	3	
		5	
or <u>GGIS 103</u> Earth's Physical Systems			

Code	Title		Hours
	LA 222 Islamic Gardens & Architecture		
	LA 281 Design Communications II		
LA 314	History of World Landscapes (Completing this requirement in undergraduate w	vaives the	4
	requirement of <u>LA 513</u> in MLA)		
LA any 300	LA any 300 or 400-level course		
Total Hours			15
	Course List		
Code	Title		Hours
Major Requi	rements		
Students sho	ould plan to complete all requirements prior to senior year, including FAA 430 a	nd	
FAA 431.			
FAA 101	Arts at Illinois		1
FAA 201	Black Arts Today (Gen Ed: Humanities & the Arts & U.S. Minority Cultures)		3
LA 101	Introduction to Landscape Arch		2
UP 136	Urban Sustainability (Gen Ed: Social & Behav Sci)		3
ARCH 171	Introduction to Design I		3
ARCH 172	Introduction to Design II		3
FAA 230	Sustainable Design of the Built Environment		3
LA 280	Design Communications I (LA 280 required for MLA students)		3
or ARTD 225			
ARTH 211	Design History Survey (Gen Ed: Humanities & the Arts)		3
ARTD 326	Sustainability & Manufacturing		3
ARCH 321 Environment, Architecture, and Global Health			3
ARTD 451 Ethics of a Designer in a Global Economy			4
			5
FAA 430	Capstone Seminar		3
FAA 431	Capstone Studio		5
Total Hours			47
	Course List		
Code	Title	Hours	
General Edu	cation Requirements		
Composition	-I	4	
Advanced Co	omposition (fulfilled by required course listed below)	3	
Humanities 1	& the Arts (fulfilled by required courses listed below)	6	
Cultural Stud	dies: Western/Comparative Culture(s) (fulfilled by required course listed below)	3	
Cultural Stu	dies: Non-Western Culture(s) (fulfilled by required course listed below)	3	
Cultural Stud	dies: US Minority Culture(s) (fulfilled by required course listed below)	3	
Natural Scie	Natural Sciences and Technology (fulfilled by required course listed below) 3		
Natural Sciences and Technology 3			
Social and Behavioral Sciences (fulfilled by required course listed below) 3			
Social and Behavioral Sciences 3			
Quantitative Reasoning I and II 6			
Language Other Than English requirements 0–12			
Total Hours	(with Language requirement fulfilled, not counting LA/SD required courses)	16	
C !	Course List	.,	
Code	Title	Hours	S

Code		Title Hou	Irs
Free Elective	5	22	
Select approx	kimately 22 credit hours with app	roval of advisor to complete degree requirements.	
	Course List		
Code Title		Hours	
Senior Year (Courses		
LA 241Landfo	orm Design & Construction	3	
LA 250Enviro	nmental Site Analysis	3	
LA 352Woody	Landscape Plants (OR any UG F	ree Elective)4	
·	ate Foundation Studio	5	
LA 434Gradu	ate Site Design Studio	5	
	cape Arch Theory & Prac	4	
Total Hours	,	20	
Master of La	andscape Architecture in Land	scape Architecture Pre-Professional degree prog	ıram
	ed Studio Option		,
	•	Course List	
Code	Title		Hours
The following	coursework is required of MLA st	tudents in the Pre-Professional degree program. These	a
courses do n	ot count toward the graduate deg	ree. Therefore, 4+2 students may elect to take these	
	idergraduate portion of the $4+2$.	•	
LA 342	Site Engineering		4
LA 343	Landscape Construction		4
LA 346	Professional Practice		2
LA 352	Woody Landscape Plants		4
MLA Requirer	· ·		
Studio			
LA 533	Planning & Design Studio I		5
LA 534	Design Workshop G-I		5
LA 537	Planning & Design Studio II		5
LA 539	Design Workshop G-II		5
	minars/Coursework		
LA 452	Planting Design		3
LA 482	Advanced Communication in La	ndscape Architecture	4
LA 597	Research Design & Methods	•	3
	quired Electives chosen in consul	tation with MLA Advisor	
	al Factors in Design		
Ecology	J		
Methods			
Total Minimu	n Hours		48
Gr	ad Other Degree Requirements		
Requirement		escription	
Minimum Hours Required Within the Unit: 24			
Minimum 500-level Hours Required Overall:18			
Minimum GP	·		
		<u>r of Science in Sustainable Design and Master of</u>	
Landscape Architecture in Landscape Architecture BSSD/MLA Program			
	Course List		
Code	Title	Hours	

Code	Title	Hours		
Bachelor of Science in Sustainable	e Design	120		
General Education				
Major Requirements		47		
Major Electives		0		
Additional LA Course Requirements	S	15		
Senior Year Courses		20		
Free Electives				
A minimum of 40 credits at the 300 or 400 course level are required				
Master of Landscape Architecture	in Landscape Architecture	48		

Program Relationships

Identify the existing programs to be joined:

Corresponding Program(s)

Sustainable Design, BS

Landscape Architecture, MLA

Program Features

Academic Level Undergraduate

Graduate

What is the typical time to completion of this program?

6 years

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

168

What is the 3.0

required GPA?

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

Is this revision a change to the admission status of the program?

No

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.

In October of students' sophomore year, the BSSD Faculty Program Coordinator, in consultation with the MLA Program Chair, and other landscape architecture faculty reviews each candidate's undergraduate record and extends offers of invitation for 4+2 participation to those who qualify.

Invited students then provide a personal statement to the MLA Program Chair by December 15. The personal statement (800 - 1,400 words) should articulate interest in graduate study in landscape architecture. A portfolio of creative work is also encouraged which may include drawings, travel sketches, photographs, website design, craftwork, furniture, garden design, or other creative/design projects. Include brief texts as necessary to explain contexts in which work was produced. When representing group work, please clearly identify your specific contribution to that work. There is no file size limit for uploaded portfolios. If you prefer, you may include a website url in your personal statement directing the admissions committee to your portfolio online.

Students will be notified by the MLA Program Chair by January of their sophomore year if they have been accepted into the 4+2 program. The decision to grant entrance to the program is based on the undergraduate record, the personal statement, portfolio if submitted, and evaluations by faculty in the department who have taught or worked with the student. Admission to the 4+2 program does not guarantee admission to the MLA program, although students are initially invited to participate in the 4+2 program based on the high likelihood that they would be admitted to the MLA program.

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.

No impact.

Estimated Annual Number of Degrees Awarded

Year One Estimate 0 5th Year Estimate (or when 5-8

fully implemented)

Budget

Are there No budgetary implications for this revision?

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?

This proposal is building on programs that already exist within the department, so no additional costs are expected. Upon formal acceptance into the graduate program, students will be assessed graduate student tuition for year 5 and year 6. Graduate students are eligible for tuition waivers.

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

No

Attach letters of support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

Undergraduate Base plus FAA Differential for 4 years/Graduate Base plus FAA differential for 2 years

Are you seeking a change in the tuition rate or differential for this program?

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.

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 revision of the BSSD/MLA 4+2.

EP Documentation

EP Control

EP.25.014

Number

Attach

Rollback/Approval

Notices

This proposal

requires HLC

inquiry

No

DMI Documentation

Attach Final <u>U Program Review Comments KEY 1166 8-24-2024.docx</u>

Approval Notices

Banner/Codebook

Name

BS:BS SD/MLA LA - UIUC & MLA:BS SD/MLA LA - UIUC

Program Code: 10KR6168BS & 10KS6168MLA

n/a

Minor Conc 6168 Degree Major Code Code Code 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

Mary Lowry (lowry) (07/26/24 4:08 pm): Rollback: See email sent 7-26-24 to Nicole Turner.

Mary Lowry (lowry) (08/23/24 4:57 pm): U Program Review comments attached

in DMI Documentation section.

Date Submitted: 04/12/24 5:43 pm

Viewing: 1PKS6936MS: Integrative

Biology, MS

Last approved: 11/02/22 3:05 pm

Last edit: 09/27/24 8:06 am Changes proposed by: Allison O'Dwyer

Integrative Biology, MS

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1383 Head
- 3. SIB Head
- 4. KV 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. 04/26/24 8:57 am Emily Stuby (eastuby):
 - Approved for U Program Review
- 2. 04/26/24 8:58 am Allison O'Dwyer (aodwyer):
 - Approved for 1383 Head
- 3. 04/30/24 10:18 am
 - Brian Allan
 - (ballan): Approved
 - for SIB Head
- 4. 05/01/24 2:14 pm Stephen Downie
 - (sdownie):
 - Approved for KV
 - Dean
- 5. 05/02/24 12:39
 - pm

Claire Stewart (clairest): Approved for University Librarian

- 6. 09/11/24 3:07 pm Allison McKinney (agrindly): Approved for Grad_College
- 7. 09/11/24 3:47 pm
 Suzanne Lee
 (suzannel):
 Approved for
 COTE Programs
- 8. 09/13/24 10:29 am Brooke Newell (bsnewell): Approved for Provost

History

- 1. Jul 22, 2021 by Kelly Ritter (ritterk)
- 2. Apr 21, 2022 by Beth McKown (bmckown1)
- 3. May 3, 2022 by Mary Lowry (lowry)
- 4. Oct 17, 2022 by Mary Lowry (lowry)
- 5. Oct 21, 2022 by Mary Lowry (lowry)
- 6. Nov 2, 2022 by Mary Lowry (lowry)

Major (ex. Special Education)

This proposal is for a:

Revision

Administration Details

Official Program

Integrative Biology, MS

Name

Diploma Title

Sponsor College

Liberal Arts & Sciences

Sponsor

Integrative Biology

Department

Sponsor Name

Allison O'Dwyer, Director of Graduate Studies, Integrative

Biology, MS Programs

Sponsor Email

aodwyer@illinois.edu

College Contact

Stephen R Downie, Associate Dean for

Curr & Academic Policy, LAS

College Contact Email

sdownie@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.

Allison O'Dwyer, Director of Graduate Studies for MS in IB program,

aodwyer@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)

Revise the Master of Science in Integrative Biology in the College of Liberal Arts and Sciences 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)."

Yes this Integrative Biology, MS (key 966) is related to the following revisions: Integrative Biology, BSLAS + MS (key 1159)

Integrative Biology, BSLAS revision (key 723)

Honors Integrative Biology, BSLAS revision (key 724)

Program Justification

Provide a brief description of what changes are being made to the program.

- 1. Nine recently deactivated courses across core courses and electives are removed from the program of study table. Six recently approved core courses are added, in addition to two new elective courses. The total hours have not changed.
- 2. Two courses are moved from the elective category to the area category of IB core curriculum.
- 3. Blocked course lists are now listed line-by-line.
- 4. Other Requirements and Conditions section of the POS is revised.
- 5. Reorganization and edits to the POS table.
- 6. Catalog page text is edited.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

No

Why are these changes necessary?

- 1. The following IB courses were deactivated and removed from the POS:
- IB 427 Insect Physiology
- IB 443 Evolutionary Ecology
- IB 447 Field Ecology
- IB 472 Plant Molecular Biology (in workflow)
- IB 473 Plant Genomics (in workflow)
- IB 483 Insect Pathology
- IB 485 Environ Toxicology & Health
- IB 486 Pesticide Toxicology
- IB 487 Math Modeling in Life Sciences

The following IB courses were recently approved and added to the POS:

- IB 407 Plant Diversity and Evolution
- IB 433 Insect Physiology
- IB 435 Critical Eval of Herbal Remedies
- IB 438 How Organisms Move
- IB 460 Evolution of Intelligent Systems
- IB 465 Molecular Genetics and Genomics (in workflow and expected Spring 2025)
- **IB 497 Science Communication**
- IB 517 Analysis of Biological Data in R
- 2. IB 411 and IB 468 were electives ("additional advanced courses") but are now listed as area courses as these are taught by IB faculty, are IB-controlled courses, and their student learning outcomes are inclusive of the prescribed IB area curriculum.
- 3. Per request from LAS as blocked course lists do not appear for red box error reporting.
- 4. Under "Other Requirements and Conditions" the requirement of "Minimum hours required in the unit as 8 hours" is removed as this is not accurate. A reflection of the required hours as listed in the program of study is instead added as "Minimum Hours at the 500-level Within the Unit as 12". This brings the POS into agreement with the Grad College Handbook.
- 5. The POS was reorganized/edited as follows:
- a. IB 592 is now only listed once in the POS for clarity.
- b. To decrease long course lists, the core curriculum category title was updated to "Select from the following three Areas. At least one course must be a lab and the courses must be in at least two different Areas." The category titled "Elective hours required 6-8 hrs" was changed to "Additional electives chosen from the following list to meet the 32-hour minimum". Additionally we revised to state "Courses from the any of the Areas above that did not fulfill another requirement may also count toward elective credit." These edits are for clarity and conciseness.
- c. The POS category "Minimum 500-level Hours Required" is removed as the 500-level courses in this category are moved for clarity to the elective section.
- d. The range of hours of core curriculum is corrected from 12-24 to instead be a 12 hour minimum. This more accurately reflects degree requirements.

- 6. Updates to the catalog page text were included for clarity and to bring the catalog into agreement with departmental language, but do not affect program requirements. These updates reflect current practices and include:
- -updated program description
- -removal of links and extraneous language

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.

Learning Outcomes for the MS in IB Program:

- 1. Synthesize and apply core knowledge in interdisciplinary biological fields including anatomy, biochemistry, development, ecology, evolution, genetics, molecular biology, physiology, and/or systematics.
- 2. Apply predictive models to biological phenomena and engage with the process of scientific inquiry.
- 3. Critically evaluate and communicate complex, dynamic scientific information.
- 4. Employ curiosity, inquiry, quantitative reasoning, and critical thinking in problem solving.
- 5. Show leadership in using interdisciplinary strategies to solve global and local biological challenges.
- 6. Develop professional skills including ethics, proficiency in scientific writing and speaking, collaboration, and effective communication. To assess and improve student learning, we will continue to provide learning outcomes in each course syllabus, and have instructors refer to them throughout the semester so students are aware of what they will be learning and why. Instructors will also provide an anonymous, midsemester, student evaluation of each course. SIB courses also include a variety of formative and summative assessments in each course, with the latter including final exams, end-of-class projects, and written reports. We will employ ICES Online to provide an end-of-semester course/instructor evaluation. To better support students as they move through the program, we will meet individually with each student to review their progression through the program, any issues they might be experiencing with their courses, and to discuss whether they are achieving their learning and career goals. We also will provide an exit survey to all students graduating from the program to inquire about post-graduate destinations, whether the program prepared them adequately for these destinations, and their perception of the success of the program.Lastly, we will follow-up with alums of the program at 2 and 5-year intervals after graduation to determine placement rates into other academic programs or careers, their reflections on the knowledge and skills they have learned in the program, and how the program's learning outcomes prepared them for where they are now. The Director of Graduate Studies of the MS in IB program will lead all program assessment work. An annual summary report will include a report of all assessment activities undertaken, as well as review enrollment information, course progression, and time to degree completion. Assessment information will be shared with the SIB Associate Director of Academic Affairs, other members of the School's Executive Committee, the faculty instructors, the Alumni Mentoring Coordinator, and with the broader SIB faculty during the unit's annual meeting. Based on results of the assessment work, course curricula may be revised, learning outcomes modified, and student advising improved. Depending upon the course, a variety of formative and summative assessments will take place, with grades, self, peer or faculty evaluations with feedback, and mid-semester and end-of-course anonymous evaluations all used to signify students have achieved the stated learning objectives. A minimum cumulative GPA of 3.0 (B average) in all courses taken is required to stay in the program. Methods of evaluation used to improve the curriculum, instruction, and overall quality of the MS in IB program include many of those already being used to evaluate our existing undergraduate and departmental graduate programs. These methods include the results

of the program's student learning assessment work (as outlined above); current

student, employer, alumni, and other satisfaction survey results; numbers of students entering and graduating from the program; time-to-degree completion rates; and job placement, graduate school acceptance rates, and admission to professional schools. Any revisions to courses are approved by the units Courses and Curricula committee. The scheduling of courses, particularly those that are offered every other year, will be considered carefully so that their availability will not hamper time to graduation. The program's evaluation will be carried out internally by the director of the program and in consult with the School's Associate Director of Academic Affairs.

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?

Nσ

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.

Revised programs MS in IB Side by Side.xlsx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

Overviewtab: The Master of Science in Integrative Biology (MS in IB) provides students with a non-thesis, course-based advanced degree program opportunity focused on interdisciplinary training for 21st-century scientific roles. opportunity. Students explore how scales of life interact, from molecules through global cycles, to solve grand challenges such as addressing global change, improving human health, mitigating biodiversity loss, and contributing to ecosystem restoration and sustainable food and biofuel production. Students in the MS program have the ability to enhance their skill sets within IB upper-level courses through our world-class educational experiences, without having to invest in a required and timely research component for the degree. Students will thus be able to graduate in one year with a advanced degree making them more competitive for employment and future research opportunities.

This program <u>primarily</u> mainly serves students who are in a gap year between undergraduate programs and either employment or future graduate-level programs. With the ability to hone skills in critical thinking, communication, laboratory practices, and scientific knowledge this program affords students the ability to make effective use out of such a year. The MS in IB program offers advanced coursework in fields such as organismal biology, behavioral ecology, anatomy and physiology, environmental science, bioinformatics, pathology, genomics, and mathematical <u>modeling</u>. <u>modeling</u> to <u>name just a few</u>. <u>These multi-disciplinary courses are grounded in active learning and highly transferable, higher-order processing skills such as application, interpretation, and evaluation. <u>Students build laboratory skills spanning from tall grass prairie</u> restoration to modern genome-editing techniques. <u>Graduates are well-equipped for a broad range of careers in fields including healthcare, biotechnology, genetic counseling, wildlife management, and environmental sciences.</u></u>

With a world-class advanced degree from the University of Illinois, our students are better prepared to enter the workforce and thus have higher earningpotential.Catalog PageText:The MS in IB program degree requires a minimum of two full-timesemesters.Students may take up to two years to complete theirdegree.See approved course listat:http://sib.illinois.edu/graduate/programs.For additional details and requirements refer to the MS in IB program page SIB Program Handbook and the Graduate College Handbook. Handbook https://grad.illinois.edu/handbooks-policies.

Statement for Programs of Study Catalog

Course List

Course List	
Code Title	Hours
Core Curriculum Hours Required	12-24
Required Course List	
IB 592 Career and Skill Development in Integrative Biology	2
Core Curriculum	12
Courses to be chosen from the MS in IB approved list of courses below.	
IB 501, IB 502, IB 504, IB 505, IB 506, IB 512, IB 513, IB 516, IB 524, IB 52	6,
IB 531, IB 532, IB 533, IB 534, IB 535, IB 536, IB 542, IB 546, IB 590, IB 5 9	2
Select from the following three Areas. At least one course must be a lab and the	
courses must be in at least two different Areas.	

```
Code
                Title
                                                                                   Hours
   Area I: Organismal and Evolutionary Biology
                Introduction to Entomology (lab)
  IB 401
                Plant Diversity and Evolution (lab)
  IB 407
                Ornithology (lab)
  <u>IB 461</u>
                Mammalogy (lab)
  IB 462
  IB 463
                Ichthyology (lab)
  IB 464
                Herpetology (lab)
                Insect Classification and Evol (lab)
  IB 468
                Fungal Diversity and Ecology (lab)
  IB 471
  Area II: Behavior, Ecology and the Environment
  IB 405
                Evolution of Traits and Genomes
  IB 431
                Behavioral Ecology
  IB 432
                Genes and Behavior
  IB 439
                Biogeography
  <u>IB 440</u>
                Plants and Global Change
  IB 444
                Insect Ecology (lab)
                Conservation Biology (lab)
  IB 451
  IB 452
                Ecosystem Ecology
  IB 453
                Community Ecology
                Vector-borne Diseases (lab)
  <u>IB 481</u>
  IB 482
                Insect Pest Management (lab)
                Theoretical Biology + Models (lab)
  IB 494
  Area III: Integrative anatomy, Physiology and Molecular Biology
  IB 411
                Bioinspiration
  IB 420
                Plant Physiology
                Photosynthesis
  <u>IB 421</u>
                Env and Evol Physl of Animals
  IB 426
  IB 433
                Insect Physiology
                Critical Evaluation of Herbal Remedies
  IB 435
                How Organisms Move (lab)
  IB 438
  IB 460
                Evol of Intelligent Systems (lab)
  IB 465
                Methods in Molecular Genetics and Genomics
Additional electives selected from the following list to meet the 32-hour minimum.
   Courses from the any of the Areas above that did not fulfill another
   requirement may also count toward elective credit.
  Area 2: Behavior, Ecology and the Environment
  IB 405, IB 431, IB 432, IB 439, IB 440, IB 443, IB 444, IB 451, IB 452, IB 453,
  IB 481, IB 482, IB 485, IB 486, IB 494
  Area 3: Integrative anatomy, Physiology and Molecular Biology
  IB 420, IB 421, IB 426, IB 427, IB 472, IB 473
Elective Hours Required
                                                                                   6-8
  MS in IB approved list of courses below, or courses from the any of the Areas
  above that did not fulfill another requirement, or upon approval from the
  program director.
  IB 411, IB 416, IB 436, IB 442, IB 447, IB 450, IB 467, IB 468, IB 476, IB 478,
  IB 479, IB 480, IB 483, IB 484, IB 487, IB 491, IB 496, IB 499
  IB 416
                Population Genetics
```

Code	Title	Hours	
<u>IB 436</u>	Evolutionary Neuroscience		
IB 442	Evolution of Infectious Disease		
IB 450	Stream Ecology		
IB 467	Principles of Systematics		
<u>IB 476</u>	Environmental Remote Sensing		
<u>IB 478</u>	Advanced Plant Genetics		
IB 479	Plant Growth and Development		
IB 480	Bioinspired Design		
IB 484	Paleoclimatology		
<u>IB 491</u>	Biological Modeling		
IB 496	Special Courses		
<u>IB 497</u>	Science Communication		
IB 499	Discussions in Integrative Biology		
IB 501	Programming for Genomics		
IB 502	Biological Networks		
<u>IB 504</u>	Genomic Analysis of Insects		
<u>IB 505</u>	Bioinformatics & Systems Biol		
<u>IB 506</u>	Applied Bioinformatics		
<u>IB 512</u>	Plant Metabolomics		
<u>IB 513</u>	Disc in Plant Physiology		
<u>IB 516</u>	Ecosystem Biogeochemistry		
<u>IB 517</u>	Analysis of Biological Data in R		
<u>IB 524</u>	Plant Biochemistry		
<u>IB 526</u>	Seminar in Entomology		
<u>IB 531</u>	Emerging Infectious Diseases		
<u>IB 532</u>	Sustainability & Global Change		
<u>IB 533</u>	Human Genome & Bioinformatics		
<u>IB 534</u>	Evolution and Medicine		
<u>IB 535</u>	Biology and Tech Innovation		
<u>IB 536</u>	Evolutionary Biology		
<u>IB 542</u>	Environmental Plant Physiology		
<u>IB 546</u>	Topics in Ecology & Evolution		
<u>IB 590</u>	IB 590 Individual Topics		
Total Hours Required 32			
Other Requir			
	Grad Other Degree Requirements		
Requirement	·		
	Minimum Hours Required Within the Unit 8		
	Minimum GPA 3.0		
	s of <u>IB 590</u> allowed to count toward the MS in IB degree		
Minimum hours	s at the 500-level within the unit	<u>12</u>	

Corresponding MS Master of Science

Degree

Program Features

Academic Level Graduate

Does this major

No

have transcripted concentrations?

What is the typical time to completion of this program?

1 year

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

32

What is the 3.0

required GPA?

CIP Code 260101 - Biology/Biological Sciences,

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

Is this revision a change to the admission status of the program?

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.

Students entering the MS in IB program will be expected to have a completed Bachelor's degree from an accredited 4-year college or university with undergraduate coursework in biology, chemistry, physics, calculus and English composition. Applicants must have completed the last 60 hours of coursework with grades of B (3.0 on a scale of 1 to 4) or better. Deficiencies in these areas will require additional coursework, as necessary, for successful completion of the degree. Applications are reviewed holistically reviewing GPA and performance in courses, experiential opportunities (work, volunteer experiences, internships), personal statements that seek non-cognitive attributes such as work ethic, leadership and service, as well as recommendation letters. No GRE is required.

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.

No impact is expected.

Estimated Annual Number of Degrees Awarded

Year One Estimate 5 5th Year Estimate (or when 25

fully implemented)

What is the Fall matriculation term for this program?

Budget

Are there No

budgetary

implications for

this revision?

Will the program or revision require staffing (faculty, advisors, etc.)

beyond what is currently available?

No

Additional Budget

Information

The revision will not require any changes to staffing. All advising (such as course-selection mapping and career readiness counseling) will be performed by the MS in IB director and the originally planned instructors for IB 492 are ready to instruct IB 592.

Attach File(s)

Financial Resources

How does the unit intend to financially support this proposal?

As we have capacity in all our upper-level courses, we do not expect the need to add seats to any course to serve students in thisprogram. Additionally, we propose to cap this program at 30 students enrolled at any onetime. These 30 students would then be spread across over 50 upper-level courses across multiplesemesters. Thus, we do not see a need to increase the numbers of faculty or TAs as essentially these seats are already being paid for in the current costs of thecourses.

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

No

Attach letters of support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

Chem Life Differential

Are you seeking a change in the tuition rate or differential for this program?

No

Is this program requesting self-supporting status?

Yes

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 is expected.

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 program.

EP Documentation

EP Control

EP.25.014

Number

Attach

Rollback/Approval

Notices

This proposal

No

requires HLC

inquiry

DMI Documentation

Attach Final

Approval Notices

Banner/Codebook

MS:Integrative Biology-UIUC

Name

Program Code: 1PKS6936MS

MinorConcDegreeMSMajorCodeCodeCodeCode

6936

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 Mary Lowry (lowry) (04/11/24 11:17 am): Rollback: Revisions per phone call

Comments

Key: 966

Date Submitted: 04/24/24 1:48 pm

Viewing: 10KV6160BSLA &

1PKS6160MS: JP: Integrative Biology BSLAS & MS

Last approved: 08/16/23 1:41 pm

Last edit: 09/27/24 8:06 am Changes proposed by: Allison O'Dwyer

Integrative Biology, BSLAS-MS

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1383 Head
- 3. SIB Head
- 4. KV 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. 04/26/24 8:58 am Emily Stuby (eastuby): Approved for U
 - Approved for U Program Review
- 2. 04/26/24 9:00 am Allison O'Dwyer
 - (aodwyer):
 - Approved for 1383 Head
- 3. 04/30/24 10:18
 - am
 - Brian Allan
 - (ballan): Approved
 - for SIB Head
- 4. 05/03/24 10:26
 - am
 - Stephen Downie
 - (sdownie):
 - Approved for KV
 - Dean
- 5. 05/09/24 11:15

am
Claire Stewart
(clairest):
Approved for
University

Librarian

- 6. 09/11/24 3:07 pm Allison McKinney (agrindly): Approved for Grad_College
- 7. 09/11/24 3:47 pm Suzanne Lee (suzannel): Approved for COTE Programs
- 8. 09/13/24 10:29 am Brooke Newell (bsnewell): Approved for Provost

History

- 1. Aug 8, 2023 by Allison O'Dwyer (aodwyer)
- 2. Aug 16, 2023 by Kathy Martensen (kmartens)

Joint Program (ex. Master of Public Health & PhD. in Community Health)

This proposal is

for a:

Revision

Administration Details

Official Program

JP: Integrative Biology BSLAS & MS

Name

Diploma Title Bachelor of Science in Liberal Arts and Sciences and Master of

Science in Integrative Biology

Sponsor College Liberal Arts & Sciences

Sponsor Integrative Biology

Department

Sponsor Name Brian Allan, Associate Director for Academic Affairs, School of

Integrative Biology

Sponsor Email ballan@illinois.edu

College Contact Stephen R. Downie, Associate Dean for College Contact

Curricula and Academic Policy, College of Email

Liberal Arts and Sciences sdownie@illinois.edu

College Budget Michael Wellens, Assistant Dean of Finance and Resource

Officer Planning

College Budget wellens@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.

Allison O'Dwyer, Assistant Director for Academic Affairs, School of Integrative Biology

and Director of Graduate Studies for MS in IB program, aodwyer@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)

Revise the Joint Program in the Bachelor of Science in Liberal Arts and Sciences in Integrative Biology and the Master of Science in Integrative Biology in the College of Liberal Arts and Sciences 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)."

Yes this Integrative Biology, BSLAS & MS (key 1159) is related to the following revisions:

Integrative Biology, MS (key 966)

Integrative Biology, BSLAS revision (key 723)

Honors Integrative Biology, BSLAS revision (key 724)

Program Justification

Provide a brief

1. Six recently deactivated core or elective courses are removed from the program of

description of what changes are being made to the program. study tables. Six recently approved core courses are added, in addition to three new elective courses. The total hours have not changed.

- 2. Two courses are moved from the elective category to the area category of IB core curriculum.
- 3. Student learning outcomes are updated.
- 4. The formatting of the POS and additional text (e.g., graduation requirements, university requirements, and general education requirements) has been modified to adhere to the campus General Education Template. Additionally, some area headers are revised and a statement on the Honors concentration is added.
- 5. Reorganization and edits to the POS table.
- 6. Other Requirements and Conditions section of the graduate POS table is revised.
- 7. Blocked course lists are now listed line-by-line.
- 8. Catalog page text is edited.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

Why are these changes necessary?

- 1. The following IB courses were deactivated and removed from the POS. These were deactivated due to changes in faculty or were replaced by revised courses. The courses were listed in the IB Additional Advanced courses.
- **IB 335 Plant Systematics**
- IB 427 Insect Physiology
- IB 434 Physical Principles in Biology
- IB 472 Plant Molecular Biology (in workflow)
- IB 473 Plant Genomics (in workflow)
- IB 487 Math Modeling in Life Sciences

The following courses taught by IB faculty and IB-controlled were recently approved and added to the POS in the IB Additional Advanced courses list:

- IB 392 Translating Your IB Degree Into Career Success
- IB 407 Plant Diversity and Evolution
- IB 433 Insect Physiology
- IB 435 Critical Eval of Herbal Remedies (recently approved for Graduate credit)
- IB 438 How Organisms Move
- IB 460 Evolution of Intelligent Systems
- IB 465 Methods in Molecular Genetics & Genomics (in workflow for SP25)
- **IB 497 Science Communication**
- IB 517 Analysis of Biological Data in R
- 2. IB 411 and IB 468 were electives ("additional advanced courses") but are now listed as area courses as these are taught by IB faculty, are IB-controlled courses, and their student learning outcomes are inclusive of the prescribed IB area curriculum.
- 3. Edits to learning outcomes include updated language, style, and alignment with current courses and Bloom's Taxonomy. Revisions were crafted with input from a School-wide teaching retreat, IB majors, SIB Academic Support Team, SIB Courses and Curricula Committee, SIB Executive Committee, and the campus assessment team.
- 4. Per Office of the Provost General Education initiative for transparency and accessibility. Area headers/comments are slightly edited for clarity as the former list of lab courses is now included with the advanced area course lists by listing "lab" as a comment for each lab course. This reduces the redundancy in courses listed.
- 5. Per request of the Provost's Office we are reorganizing the POS and adding a note for clarity about the distinctive requirements of the Honors Concentration.

The graduate POS was reorganized/edited as follows:

- a. IB 592 is now only listed once in the POS for clarity.
- b. To decrease long course lists, the core curriculum category title was updated to "Select from the following three Areas. At least one course must be a lab and the courses must be in at least two different Areas." The category titled "Elective hours required 6-8 hrs" was changed to "Additional electives chosen from the following list to meet the 32-hour minimum". Additionally we revised to state "Courses from the any of the Areas above that did not fulfill another requirement may also count toward elective credit." These edits are for clarity and conciseness.

- c. The POS category "Minimum 500-level Hours Required" is removed as the 500-level courses in this category are moved for clarity to the elective section.
- d. The range of hours of core curriculum is corrected from 12-24 to instead be a 12 hour minimum. This more accurately reflects degree requirements.
- e. We remove the mention that only 400-level courses may double-count as 500-level approved courses may as well. This follows departmental practice.
- 6. Under "Other Requirements and Conditions" the requirement of "Minimum hours required in the unit as 8 hours" is removed as this is not accurate. A better reflection of the required hours is instead added as "Minimum Hours at the 500-level Within the Unit as 12". This brings the POS into agreement with the Grad College Handbook.
- 7. Per request from LAS as blocked course lists do not appear for red box error reporting.
- 8. Updates to the catalog page text were included for clarity and to bring the catalog into agreement with departmental language, but do not affect program requirements. These updates reflect current practices and include:
- -updated program description
- -simplified and updated admissions process information
- -removal of links and extraneous language
- -revised language on Distinction requirements

40-hours advanced credit requirement met as follows:

4 credit-hours: IB 202 (prereq IB 150, MCB 150) 4 credit-hours: IB 203 (prereq IB 150, MCB 150) 4 credit-hours: IB 204 (prereq IB 150, MCB 150)

4 credit-hours: IB 302

6 credit-hours: CHEM 232/233 (pre-req CHEM 104/105)

15 credit-hours: Adv IB courses 3 credit-hours: Adv Campus Elective

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?

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.

The Student Learning Outcomes (SLOs) for the BSLAS+MS <u>in IB</u> joint degree program <u>are combine existing SLOs for both the BSLAS and MS in IB programs</u> as <u>follows:</u> <u>listed below.</u>

- 1. Synthesize and apply core knowledge in <u>Integrative Biology</u>, <u>interdisciplinary</u> <u>biological fields</u> including anatomy, <u>biochemistry</u>, development, ecology, evolution, genetics, molecular biology, physiology, <u>statistical interference</u>, and/or systematics.
- 2. <u>Apply predictive models</u> (statistical/mathematical) to biological phenomena and engage with the process of scientific inquiry.

Understand that biology is integrative and multidisciplinary. 3. Critically evaluate and communicate complex, dynamic scientific information.

Apply predictive models (statistical/mathematical) to biological phenomena and engage with the process of scientificinquiry.4. Employ curiosity, scientific inquiry, collaboration, quantitative reasoning, computation, and critical thinking in problem solving.

Critically evaluate and communicate complex, dynamic scientific information and understand how paradigms of biology relate to society and policy as well as their ownlives.5. Create solutions for global and local biological challenges using interdisciplinary strategies.

Demonstrate curiosity and caring about biology, and an awareness of and appreciation for the diversity oflife.6. Employ curiosity, scientific inquiry, collaboration, quantitative reasoning, computation, and critical thinking in problemsolving.7. Show leadership in using interdisciplinary strategies to solve global and local biologicalchallenges.8. Develop professional skills including ethics, proficiency in oral and written scientific communication, data analysis and interpretation, writing and speaking, collaboration, and the ability to critically evaluate science-related news and information. and effective communication.

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

Describe here:

To assess and improve student learning, we will continue to provide learning outcomes in each course syllabus, and have instructors refer to them throughout the semester so students are aware of what they will be learning and why. Instructors will also provide an anonymous, mid-semester, student evaluation of each course.SIB courses also include a variety of formative and summative assessments in each course, with the latter including final exams, end-of-class projects, and written reports. We will employ ICES Online to provide an end-of-semester course/instructor evaluation. To better support students as they move through the program, we will meet individually with each student to review their progression through the program, any issues they might be experiencing with their courses, and to discuss whether they are achieving their learning and career goals. We also will provide an exit survey to all students graduating from the program to inquire about post-graduate destinations, whether the program prepared them adequately for these destinations, and their perception of the success of the program. Lastly, we will follow up with alums of the program at 2 and 5 year intervals after graduation to determine placement rates into other academic programs or careers, their reflections on the knowledge and skills they have learned in the program, and how the program's learning outcomes prepared them for where they are now.

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.

Depending upon the course, a variety of formative and summative assessments will take place, with grades, self, peer or faculty evaluations with feedback, and midsemester and end-of-course anonymous evaluations all used to signify that students have achieved the stated learning objectives. A minimum cumulative GPA of 3.0 is required to stay in the program.

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

The Director of Graduate Studies of the MS in IB program leads all program assessment work and will also lead this work for the proposed BSLAS+MS degree program. An annual summary report will include a report of all assessment activities undertaken, as well as review enrollment information, course progression, and time to degree completion. Assessment information will be shared with the SIB Associate Director of Academic Affairs, other members of the School's Executive Committee, the faculty instructors, the Alumni Mentoring Coordinator, and with the broader SIB faculty during the unit's annual meeting. Based on results of the assessment work, course curricula may be revised, learning outcomes modified, and student advising improved. Methods of evaluation used to improve the curriculum, instruction, and overall quality of the BSLAS + MS in IB program include many of those already being used to evaluate our existing undergraduate and departmental graduate programs. These methods include the results of the program's student learning assessment work (as outlined above); current student, employer, alumni, and other satisfaction survey results; numbers of students entering and graduating from the program; time-to-degree completion rates; and job placement, graduate school acceptance rates, and admission to professional schools. Any revisions to courses are approved by the School's Courses and Curriculum Committee. The scheduling of courses, particularly those that are offered every other year, will be considered carefully so that their availability will not hamper time to graduation. The program's evaluation will be carried out internally by the director of the program and in consultation with the School's Associate Director of Academic Affairs.

Program
Description and
Requirements
Attach Documents

Is the career/profession for graduates of this program regulated by the State of Illinois?

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.

Revised programs <u>BSLAS and MS in IB Side by Side-3.xlsx</u>

BSLAS+MS in IB Sample

Sequence-4.docx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

In the School of Integrative Biology (SIB), students receive interdisciplinary training to prepare them for 21st-century scientific roles. We occupy a unique position on campus. Our majors explore how scales of life interact, from molecules through global cycles, to solve grand challenges such as addressing global change, improving human health, mitigating biodiversity loss, and contributing to ecosystem restoration and sustainable food and biofuel production. The SIB community collaborates extensively on both research and teaching, leading to multi-disciplinary courses grounded in active learning and highly transferable higher-order processing skills such as application, interpretation, and evaluation. Students build laboratory skills spanning from tall grass prairie restoration to modern genome-editing techniques. The IB curriculum includes BSLAS + MS in Integrative Biology joint degree program provides students with a solid preparation in genomics and evolution; comparative genetics, evolution, anatomy, physiology, and development; ecology and behavior; phylogenetic systematics and ecology, and molecular biology; and mathematical modeling and informatics. biology. Graduates are well-equipped for a broad range of careers in fields including healthcare, biotechnology, genetic counseling, wildlife management, and environmental sciences.

After completion of the foundational 100- and core 200-300-level courses in IB, students complete the required advancedcoursework. Additionally, the MS in IB program provides students with a non-thesis, course-based advanced degree program opportunity. Traditional master's degree programs typically require at least two-years and the completion of a thesis component, which this degree program does notrequire. This joint degree program offers advanced coursework in fields such as organismal biology, behavioral ecology, anatomy and physiology, environmental science, bioinformatics, pathology, genomics, and mathematical modeling to name just afew. Students in the BSLAS+ MS in IB program can enhance their skill sets within IB upper-level courses through our world-class educational experiences, without having to invest in a required thesis component for the degree. Students interested in research are still able to participate in course-based research opportunities such as IB 390, 490, and 590. 590, particularly those students desiring to be considered for graduation with distinction. Typical time to degree completion is 5-years (ten full-time semesters) with both an undergraduate and advanced degree.

This accelerated, combined degree program thus makes BSLAS + MS in IB students more competitive for employment and future research opportunities, also with higher earningpotential. Integrative Biology, • IB Honors students are eligible for the BSLAS and + MS in Integrative Biology, BSLAS Honors concentration students are eligible to apply. Biology program. See the IB Honors degree requirements.

-Students This accelerated, combined degree program thus makes BSLAS + MS in IB students more competitive for employment and future research opportunities, also with junior standing (90 credit hours, including those in progress) or higher apply internally to the School of Biology BSLAS + MS in IB program. earning potential.

• To be eligible, students must have completed their junior year of the BSLAS in IBprogram. -Students • Students must have 3.0 or higher GPA from their junior year

onward of undergraduate study to receive admission to the Graduate College. This means that the average GPA of their junior year and/or (depending on when the

The GRE is notrequired. Students apply internally to the School of Biology BSLAS + MS in IB program at two different times—the summer before they begin their senior year or at the end of the fall term of their senioryear. Application dates vary slightly year to year tied to semester startdates.* Once students are admitted to the program, they begin completing the joint program requirements within their senioryear. After the completion of the undergraduate requirements, students will then apply to the master's portion of the program through the Graduate College in the spring semester of their senior year or the summer semester directlyfollowing. Applications Applications are reviewed holistically, looking at GPA and performance in courses, experiential opportunities (work, volunteer experiences, internships), personal statements that seek non-cognitive attributes such as work-ethic, leadership and service, as well as recommendation letters.

-The • The GRE is not required.

- <u>-Upon</u> <u>Upon</u> acceptance, students <u>are</u> <u>will be</u> admitted to the joint program and meet with their <u>BSLAS</u> + <u>BSLAS</u> + MS in IB Director of Graduate Studies to determine which courses will be taken in their senior year that will apply to both degrees. <u>(During their After the completion of the undergraduate degree, requirements, students also continue will then apply to meet with their undergraduate advisor.)

 -After the completion of the undergraduate requirements (including those the master's portion of the program through the Graduate College in progress), students apply to the master's portion of the program through the Graduate College and are assessed graduate tuition as the MS portion is self-supporting. <u>spring semester of their senior year or the summer semester directly following.</u></u>
- <u>-Students</u> (During their undergraduate degree, the joint degree students also continue to meet with their undergraduate advisor.) Students admitted to the graduate program must maintain an overall 3.0 GPA to remain in good standing.
- <u>-Credits</u> <u>Credits</u> from the <u>IB</u>, BSLAS in <u>IB</u> program cannot be retroactively applied. <u>-12-hours</u> • <u>In the BSLAS + MS joint degree</u>, <u>12-hours</u> will double-count toward both the BSLAS degree requirements and the MS requirements, for a total of 140-hours required in total. These 12-hours <u>may can</u> be selected from any <u>400-level IB</u> course listed on the MS in IB Approved Courses List.
- -Students may withdraw from the program at any time by petition Students apply internally to have graduate hours earned converted to undergraduate hours and applied toward the School of Biology BSLAS + MS in IB program at two different timesthe summer before they begin their IB, BSLAS undergraduate degree. senior year or at the end of the fall term of their senior year. See approved course listat:https://sib.illinois.edu/graduate/msib/ All undergraduates in this field are required to have a strong background in the biological and physicalsciences. Students reverting to pursuing a BSLAS degree program must complete 120 hours and satisfy all in Integrative Biology will be allowed to earn a second degree requirements

Distinction for Excellence in Research

Students are eligible for graduation at in the following levels: Specialized Curriculum in Biochemistry. Distinction, High Distinction, or Highest Distinction. Distinction will be determined by the SIB Distinction Committee based on the poster presentation and the level of Distinction will be based on the information below. Advisor's evaluation. Students pursuing a degree in Integrative Biology will not be allowed to double major

in Molecular and CellularBiology. Distinction for Excellence inResearch: To be eligible for graduation with Distinction for Excellence excellence in Research a student must:

- -Be enrolled as an Integrative Biology or Integrative Biology Honors Major
- <u>-Have a completed distinction evaluation form submitted by their Faculty Research</u> Advisor
- -Maintain a minimum 3.25 GPA within the major at the end of the penultimate semester
- <u>-To be eligible for Distinction, students must give a poster presentation at the SIB Distinction Symposium or other approved venue</u>
- -To be eligible for High or Highest Distinction, students must submit a written thesis and give an oral presentation at the SIB Distinction Symposium or other approved venue
- -Finally, all students regardless of Distinction level must either:
- Be enrolled as an Integrative Biology Major Either: 1. Complete two or more semesters of IB 390/IB 490 for 2-credit hours or more each semester. The student should enroll in IB 490 the semester they intend the student intends to graduate, which counts towards the two required semesters.

OR

2. Complete at least 180 hours of mentored research. The research experience must last a minimum of 20 weeks (the weeks need not be consecutive and summer research counts toward this total) and students should enroll in one semester of IB 490 for a minimum of 1-credit hour prior to or during the semester they intend to graduate. Example: a student could be eligible if they complete a 10-week summer research experience combined with enrolling in IB 490 the following spring semester, the same term semester they intend to graduate. • Maintain a minimum 3.25 GPA within the major at the end of the penultimate semester. Give a poster presentation at the Undergraduate Research Symposium or other approved venue. • Have a completed distinction evaluation form submitted by their Faculty Research Advisor. Distinction will be determined by the SIB Distinction Committee based on the poster presentation and the Advisor's evaluation. Substitutions or other changes to these requirements may be made only via petition to and approval of the Chair of the SIB Distinction Committee and the SIB Associate Director for Academic Affairs. High or Highest Distinction for Excellence in Research: To be eligible for graduation with High or Highest Distinction for Excellence in Research a student must: • Be enrolled as an Integrative Biology Major • Either: 1. Complete two or more semesters of IB 390/IB 490 for 2 credit hours or more each semester. The student should enroll in IB 490 the semester the student intends to graduate, which counts towards the two required semesters.OR 2.Complete at least 180 hours of mentored research. The research experience must last a minimum of 20 weeks (the weeks need not be consecutive and summer research counts toward this total) and students should enroll in one semester of IB 490 for a minimum of 1-credit hour prior to or during the semester they intend to graduate. Example: a student could be eligible if they complete a 10 week summer research experience combined with enrolling in IB 490 the semester they intend to graduate. • Maintain a minimum 3.25 GPA within the major at the end of the penultimate semester. Submit a written thesis and give an oral presentation at the Undergraduate Research Symposium or other

and give an oral presentation at the ondergraduate research symposium or other

approved venue. Have a completed distinction evaluation form submitted by their Faculty Research Advisor. The level of Distinction will be determined by the SIB Distinction Committee based on the written thesis, the oral presentation, and the Advisor's evaluation. Substitutions or other changes to these requirements may be made only via petition to and approval of the Chair of the SIB Distinction Committee and the SIB Associate Director for Academic Affairs.

Statement for

Programs of

Graduation Requirements

Minimum hours required for graduation: 120 BSLAS in IB Requirements Minimum hours for the BSLAS portion; 140 graduation is 120, to include a minimum total of 40 hours required for of upper-division coursework generally at the BSLAS 300- and the MS degrees combined. 400-level.

Minimum required major and supporting course work: Normally equates to to 66-75 hours.

University Requirements

<u>Minimum of 40 hours of upper-division coursework, generally at the 300- or 400-level.</u> These hours can be drawn from all elements of the degree. <u>Students should consult their academic advisor for additional</u> guidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog.

General Education Requirements

Generaleducation: Follows - Students must complete the campus Campus General Education (Gen Ed) requirements. requirements including the campus general education language requirement. Some Gen Ed requirements may be met by courses required and/or electives in the program.

Course List Code Title Hours Composition I <u>4-6</u> **Advanced Composition** fulfilled by IB 203 Humanities & the Arts (6 hours) <u>6</u> Natural Sciences & Technology (6 hours) <u>6</u> fulfilled by CHEM 102 and CHEM 104, or CHEM 202 and CHEM 204; PHYS 101 and PHYS 102, or PHYS 211 and PHYS 212; IB 150, MCB 150 Social & Behavioral Sciences (6 hours) <u>6</u> Cultural Studies: Non-Western Cultures (1 course) <u>3</u> Cultural Studies: US Minority Cultures (1 course) <u>3</u> Cultural Studies: Western/Comparative Cultures (1 course) <u>3</u> Quantitative Reasoning (2 courses, at least one course must be Quantitative Reasoning I) 6-10 fulfilled by MATH 220 or MATH 221; STAT 212; PHYS 101 and PHYS 102, or PHYS 211 and **PHYS 212** Language Requirement (Completion of the fourth semester or equivalent of a language other than 0-20 English is required)

Course List

Code Title Hours
Orientation and Professional Development

LAS 101 Design Your First Year Experience 1

OR

LAS 100 Success in LAS for International Students3

& LAS 101 and Design Your First Year Experience

Code	Title Hours	
OR		
LAS 102	Transfer Advantage 1	
Total Hours	1 or 3	
	Course List	
Code	Title	Hours
	Requirements and Electives	
<u>IB 150</u>	Organismal & Evolutionary Biol	<u>4</u>
MCB 150	Molec & Cellular Basis of Life	<u>4</u>
<u>MATH 220</u>	<u>Calculus (sections that start with 'X' are strongly recommended)</u>	<u>4-5</u>
or MATH 221		
Select one g	roup of courses:	<u>8-10</u>
<u>CHEM 102</u>	<u>General Chemistry I</u>	
CHEM 103	<u>General Chemistry Lab I</u>	
CHEM 10	<u>General Chemistry II</u>	
CHEM 10	General Chemistry Lab II	
<u>or</u>		
CHEM 202	Accelerated Chemistry I	
CHEM 203	Accelerated Chemistry Lab I	
CHEM 204	Accelerated Chemistry II	
CHEM 20!	Accelerated Chemistry Lab II	
Select one g	roup of courses:	<u>5-6</u>
<u>CHEM 232</u>	Elementary Organic Chemistry I	
<u>& CHE</u>	M 233 and Elementary Organic Chem Lab I	
<u>CHEM 236</u>	<u>Fundamental Organic Chem I</u>	
<u>& CHE</u>	M 237 and Structure and Synthesis	
Select one g	roup of courses:	<u>8-10</u>
PHYS 101	College Physics: Mech & Heat	
<u>& PHYS</u>	5 102 and College Physics: E&M & Modern	
PHYS 211	<u>University Physics: Mechanics</u>	
<u>& PHYS</u>	5 212 and University Physics: Elec & Mag	
Note: An op	tional IB Honors concentration may be elected, please talk to an advisor. Students who	
do not elect	an optional concentration are required to take the IB major coursework below.	
STAT 212	<u>Biostatistics</u>	<u>3</u>
<u>IB 202</u>	Physiology (IB 202 requires animal dissection and no equivalent alternative is	<u>4</u>
	available. IB majors are required to enroll in the 4-hour version of this course.)	
<u>IB 203</u>	<u>Ecology</u>	<u>4</u>
<u>IB 204</u>	Genetics (IB majors are required to enroll in the 4-hour version of IB 204.)	
<u>IB 302</u>	<u>Evolution</u>	<u>4</u> <u>4</u> <u>3</u>
Advanced Free Elective (300- or 400-level course from IB or any other unit on campus) 3		
<u>Integrative Biology Advanced Area Courses</u> <u>15-20</u>		
At least to	wo courses from the following areas. At least one course must be a lab and the courses	
<u>must be i</u>	n different areas.	
Area I: O	rganismal and Evolutionary Biology	
<u>IB 360</u>	Evolution and Human Health	
<u>IB 362</u>	Marine Biology	
<u>IB 368</u>	Vertebrate Natural History (lab)	
<u>IB 401</u>	Introduction to Entomology (lab)	

Code	Title Hours		
<u>IB 407</u>	Plant Diversity and Evolution (lab)		
<u>IB 461</u>	Ornithology (lab)		
<u>IB 462</u>	Mammalogy (lab)		
<u>IB 463</u>	Ichthyology (lab)		
<u>IB 464</u>	Herpetology (lab)		
<u>IB 468</u>	Insect Classification and Evol (lab)		
<u>IB 471</u>	Fungal Diversity and Ecology (lab)		
Area II: Behavi	or, Ecology, and the Environment		
<u>IB 329</u>	Animal Behavior		
<u>IB 361</u>	Ecology and Human Health		
<u>IB 405</u>	Evolution of Traits and Genomes		
<u>IB 430</u>	Animal Behavior Lab (lab)		
<u>IB 431</u>	Behavioral Ecology		
<u>IB 432</u>	Genes and Behavior		
<u>IB 439</u>	<u>Biogeography</u>		
<u>IB 440</u>	<u>Plants and Global Change</u>		
<u>IB 444</u>	Insect Ecology (lab)		
<u>IB 451</u>	Conservation Biology (lab)		
<u>IB 452</u>	Ecosystem Ecology		
<u>IB 453</u>	Community Ecology		
<u>IB 481</u>	<u>Vector-borne Diseases (lab)</u>		
<u>IB 482</u>	<u>Insect Pest Management (lab)</u>		
<u>IB 494</u>	Theoretical Biology + Models (lab)		
	rative Anatomy, Physiology, and Molecular Biology		
<u>IB 303</u>	Anatomy (lab)		
<u>IB 364</u>	Genomics and Human Health		
<u>IB 411</u>	Bioinspiration		
<u>IB 420</u>	Plant Physiology		
<u>IB 421</u>	Photosynthesis The state of th		
<u>IB 426</u>	Env and Evol Physl of Animals		
<u>IB 433</u>	Insect Physiology		
<u>IB 435</u>	Critical Evaluation of Herbal Remedies		
<u>IB 438</u>	How Organisms Move (lab)		
<u>IB 460</u>	Evol of Intelligent Systems (lab)		
	IB 465 Methods in Molecular Genetics and Genomics		
	rses to total 15 hours minimum may be selected from any of the Area courses listed		
	the following list:		
<u>IB 348</u>	Fish and Wildlife Ecology Translating Your IR Degree Into Career Success		
<u>IB 392</u>			
<u>IB 416</u>	Population Genetics Final Internation Control		
<u>IB 436</u>	Evolutionary Neuroscience Evolution of Infortious Disease		
<u>IB 442</u>	Evolution of Infectious Disease Stream Feelegy		
<u>IB 450</u>	Stream Ecology Principles of Systematics		
<u>IB 467</u> IB 476	Principles of Systematics Environmental Pomoto Sonsing		
<u>IB 476</u> IB 478	Environmental Remote Sensing Advanced Plant Genetics		
<u>IB 478</u>			
<u>IB 479</u>	<u>Plant Growth and Development</u>		

Code	Title	Hours	
<u>IB 480</u>	Bioinspired Design		
IB 484	<u>Paleoclimatology</u>		
<u>IB 491</u>	Biological Modeling		
<u>IB 496</u>	Special Courses		
<u>IB 497</u>	Science Communication		
<u>IB 499</u>	<u>Discussions in Integrative Biology</u>		
MCB 300	Microbiology		
MCB 314	Introduction to Neurobiology		
MCB 450	Introductory Biochemistry		
<u>Total Hours</u>		<u>120</u>	
=			
Carla	Course List		
Code	Title	Hours	
MS in IB Require			
	uble-count toward both the BSLAS degree requirements above and the MS		
	ow. These 12-hours can be selected from courses listed on any requirements for the	2	
MS in IB program			
Required Course			
<u>IB 592</u>	Career and Skill Development in Integrative Biology	<u>2</u>	
Core Curriculum		<u>12</u>	
	e following three Areas. At least one course must be a lab and the courses must be		
	different Areas.		
	ismal and Evolutionary Biology		
<u>IB 401</u>	Introduction to Entomology (lab)		
<u>IB 407</u>	Plant Diversity and Evolution (lab)		
<u>IB 461</u>	Ornithology (lab)		
<u>IB 462</u>	Mammalogy (lab)		
<u>IB 463</u>	<u>Ichthyology (lab)</u>		
<u>IB 464</u>	Herpetology (lab)		
<u>IB 468</u>	Insect Classification and Evol (lab)		
<u>IB 471</u>	Fungal Diversity and Ecology (lab)		
	vior, Ecology and the Environment		
<u>IB 405</u>	Evolution of Traits and Genomes		
<u>IB 431</u>	Behavioral Ecology		
<u>IB 432</u>	Genes and Behavior		
<u>IB 439</u>	Biogeography		
	IB 440 Plants and Global Change		
	IB 444 Insect Ecology (lab)		
<u>IB 451</u>	Conservation Biology (lab)		
<u>IB 452</u>	Ecosystem Ecology		
<u>IB 453</u>	Community Ecology		
<u>IB 481</u>	<u>Vector-borne Diseases (lab)</u>		
<u>IB 482</u>	Insect Pest Management (lab)		
<u>IB 494</u>			
	grative anatomy, Physiology and Molecular Biology		
<u>IB 411</u>			
<u>IB 420</u>	<u>Plant Physiology</u>		

Code	Title	Hours
<u>IB 421</u>	<u>Photosynthesis</u>	
IB 426	Env and Evol Physl of Animals	
IB 433	Insect Physiology	
IB 435	Critical Evaluation of Herbal Remedies	
IB 438	How Organisms Move (lab)	
IB 460	Evol of Intelligent Systems (lab)	
IB 465	Methods in Molecular Genetics and Genomics	
	es selected from the following list to meet the 32-hour minimum.	
Courses from t	he any of the Areas above that did not fulfill another requirement may also count	
toward elective	e credit.	
<u>IB 416</u>	Population Genetics	
IB 436	Evolutionary Neuroscience	
<u>IB 442</u>	Evolution of Infectious Disease	
<u>IB 450</u>	Stream Ecology	
<u>IB 467</u>	Principles of Systematics	
<u>IB 476</u>	Environmental Remote Sensing	
<u>IB 478</u>	Advanced Plant Genetics	
<u>IB 479</u>	Plant Growth and Development	
<u>IB 480</u>	Bioinspired Design	
<u>IB 484</u>	<u>Paleoclimatology</u>	
<u>IB 491</u>	Biological Modeling	
<u>IB 496</u>	Special Courses	
<u>IB 497</u>	Science Communication	
<u>IB 499</u>	<u>Discussions in Integrative Biology</u>	
<u>IB 501</u>	Programming for Genomics	
<u>IB 502</u>	Biological Networks	
<u>IB 504</u>	Genomic Analysis of Insects	
<u>IB 505</u>	Bioinformatics & Systems Biol	
<u>IB 506</u>	Applied Bioinformatics	
<u>IB 512</u>	<u>Plant Metabolomics</u>	
<u>IB 513</u>	<u>Disc in Plant Physiology</u>	
<u>IB 516</u>	Ecosystem Biogeochemistry	
<u>IB 517</u>	Analysis of Biological Data in R	
<u>IB 524</u>	Plant Biochemistry	
<u>IB 526</u>	Seminar in Entomology	
<u>IB 531</u>	Emerging Infectious Diseases	
<u>IB 532</u>	Sustainability & Global Change	
<u>IB 533</u>	Human Genome & Bioinformatics	
<u>IB 534</u>	Evolution and Medicine	
<u>IB 535</u>	Biology and Tech Innovation	
<u>IB 536</u>	Evolutionary Biology	
<u>IB 542</u>	Environmental Plant Physiology	
<u>IB 546</u>	Topics in Ecology & Evolution	
<u>IB 590</u>	<u>Individual Topics</u>	
Total Hours Requi	<u>red</u>	<u>32</u>
Other requiremen	<u>ts:</u>	
Minimum GPA		<u>3.0</u>

Maximum hours of It 590 allowed to count toward the MS in IB degree 6 Minimum hours at the 500-level within the unit 12 Minimum required major and supporting course work: Normally equates to 66-75 hours. 7 Course List Code Title Hours MaTH-220 Calculus 45 or MATH-221 Calculus 1 3 Select one group- of courses: 8-10 CHEM-102 General Chemistry 1 4-10 CHEM-103 General Chemistry 1-1 4-10 CHEM-104 General Chemistry 1-1 4-10 CHEM-105 General Chemistry 1-1 4-10 CHEM-104 General Chemistry 1-1 4-10 CHEM-105 General Chemistry 1-1 4-10 CHEM-201 Accelerated Chemistry 1-1 4-10 CHEM-202 Accelerated Chemistry 1-1 4-10 CHEM-203 Accelerated Chemistry 1-1 5-6 CHEM-204 Accelerated Chemistry 1-1 5-6 CHEM-205 Accelerated Chemistry 1-1 5-6 CHEM-207 Fundamental Organ	Code	Title	Hours
Course List Course	Maximum hours	of IB 590 allowed to count toward the MS in IB degree	<u>6</u>
Course List Hours Major Core Requirements and Electives MATH -220 Calculus 1 STAT -212 Biostaticities 3 Select one group of courses: Central Chemistry I CHEM 102 General Chemistry Lab I CHEM 103 General Chemistry Lab II CHEM 104 General Chemistry Lab II CHEM 202 Accelerated Chemistry Lab II CHEM 203 Accelerated Chemistry Lab II CHEM 204 Accelerated Chemistry Lab II CHEM 205 Accelerated Chemistry Lab II CHEM 204 Accelerated Chemistry Lab II CHEM 205 Accelerated Chemistry Lab II CHEM 204 Accelerated Chemistry Lab II CHEM 205 Accelerated Chemistry Lab II Select one group of courses: Fundamental Organic Chem Lab I CHEM 232 Indemental Organic Chem Lab I CHEM 233 and Elementary Organic Chem Lab I CHEM 235 Fundamental Organic Chem I & CHEM 237 and Seructure and Synthesis Select one group of courses: Phys College Physics: Hab & Heat <td>Minimum hours</td> <td>at the 500-level within the unit</td> <td><u>12</u></td>	Minimum hours	at the 500-level within the unit	<u>12</u>
Gode Title Major Gore Recurrements and Electives MATH 220 Calculus 4.5 or MATH 221 Calculus 1 3 STAT 212 Biostatisties 3 Select one group of courses: 8-10 CHEM 102 General Chemistry I 4-10 CHEM 103 General Chemistry Lab I 4-10 CHEM 104 General Chemistry Lab II 4-10 FINAL 205 Accelerated Chemistry Lab II 4-10 CHEM 202 Accelerated Chemistry Lab II 4-10 CHEM 203 Accelerated Chemistry Lab II 4-10 CHEM 204 Accelerated Chemistry Lab II 4-10 CHEM 205 Accelerated Chemistry Lab II 4-10 CHEM 205 Accelerated Chemistry Lab II 5-6 Select one group of courses: 5-6 CHEM 233 and Elementary Organic Chem Lab I 4-10 CHEM 234 and Structure and Synthesis 8-10 PHYS 101 College Physics: Mech & Heat 8-10 & PHYS 212 und University Physics: Hee & Mea 4-10 <tr< td=""><td>Minimum requir</td><td>ed major and supporting course work: Normally equates to 66-75 hours.</td><td></td></tr<>	Minimum requir	ed major and supporting course work: Normally equates to 66-75 hours.	
MaTH 220 Colculus 1 6 mATH 221 Calculus 1 STAT 212 Biostatistics 3 Select one group of courses: 8-10 CHEM 102 General Chemistry I Element 103 CHEM 103 General Chemistry Lab I CHEM 104 CHEM 105 General Chemistry Lab I From 105 OFT CHEM 202 Accelerated Chemistry Lab II CHEM 203 Accelerated Chemistry Lab II From 105 CHEM 204 Accelerated Chemistry Lab II From 105 CHEM 205 Accelerated Chemistry Lab II From 105 CHEM 204 Accelerated Chemistry Lab II From 105 CHEM 205 Pub Accelerated Chemistry Lab II From 105 CHEM 205 Accelerated Chemistry Lab II From 105 CHEM 207 Proposition Lab II From 105 CHEM 208 Proposition Lab II From 10		Course List	
MATH 220 Calculus 1 or MATH 221 Calculus 1 STAT 212 Bloatslaties 3 Select one group of courses: 6eneral Chemistry 1 6eneral Chemistry 1 CHEM 102 General Chemistry Lab 1 6eneral Chemistry Lab 1 CHEM 105 General Chemistry Lab 11 6eneral Chemistry Lab 11 OF CHEM 202 Accelerated Chemistry Lab 1 CHEM 203 Accelerated Chemistry Lab 11 56 CHEM 204 Accelerated Chemistry Lab 11 56 CHEM 205 Accelerated Chemistry Lab 11 56 CHEM 206 Accelerated Chemistry Lab 11 56 CHEM 207 Accelerated Chemistry Lab 11 56 CHEM 208 Accelerated Chemistry Lab 11 56 CHEM 209 Accelerated Chemistry Lab 11 56 CHEM 201 Accelerated Chemistry Lab 11 56 CHEM 202 Accelerated Chemistry Lab 11 56 CHEM 203 Act Elementary Organic Chem Lab 1 66 CHEM 232 Act Elementary Organic Chem Lab 1 66 CHEM 232 And Elementary Org	Code	Title	Hours
or MATH 221 Galculus I STAT 212 Biostatistics 3 Select one group of courses: 6-10 CHEM 102 General Chemistry I	Major Core Req	uirements and Electives	
STAT 212 Biostatisties 8 - 10 Select one group of courses: 8-10 CHEM 102 General Chemistry I CHEM 103 General Chemistry Lab I CHEM 104 General Chemistry II CHEM 105 General Chemistry Lab II OF CHEM 202 CHEM 203 Accelerated Chemistry Lab I CHEM 204 Accelerated Chemistry II CHEM 205 Accelerated Chemistry II CHEM 206 Accelerated Chemistry II CHEM 207 Accelerated Chemistry II CHEM 208 Accelerated Chemistry II CHEM 209 Accelerated Chemistry II CHEM 205 Accelerated Chemistry II CHEM 206 Accelerated Chemistry II CHEM 207 Accelerated Chemistry II CHEM 208 Fundamental Organic Chem Lab II CHEM 208 Fundamental Organic Chem Lab I CHEM 233 and Elementary Organic Chem Lab I	MATH 220	Calculus	4-5
Select one group of courses: CHEM-102 General Chemistry I CHEM-103 General Chemistry Lab I CHEM-104 General Chemistry II CHEM-105 General Chemistry II CHEM-105 General Chemistry II CHEM-202 Accelerated Chemistry II CHEM-203 Accelerated Chemistry II CHEM-204 Accelerated Chemistry II CHEM-205 Accelerated Chemistry II CHEM-205 Accelerated Chemistry Lab II Select one group of courses: CHEM-206 CHEM-207 Accelerated Chemistry Lab II Select one group of courses: CHEM-208 Elementary Organic Chemistry I & CHEM-237 and Elementary Organic Chem I & CHEM-238 Fundamental Organic Chem I & CHEM-237 and Structure and Synthesis Select one group of courses: PHYS-101 College Physics: Mech & Heat & PHYS-101 College Physics: Elem & Modern PHYS-211 University Physics: Elem & Modern PHYS-211 University Physics: Elem & Mag IB-150 Organismal & Evolutionary Biol MCB-150 Molec & Cellular Basis of Life IB-202 Physiology (IB-202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB-204 Genetics (IB majors are required to enroll in the 4-hour version of His-course.) IB-205 Ecology IB-206 Evolution Advanced Free Elective (300 – or 400 -level-course from IB or any unit on campus) At least 15 hours of coursework from the Approved List of Advanced Courses below: At least -one course from two of the following three areas: Area-1: Organismal - and Evolutionary Biology (IB-335, IB-360, IB-362, IB-368, IB-401, IB-461, IB-462, IB-463, IB-464, IB-471) Area-2: Behavier, Ecology, and the Environment (IB-329, IB-361, IB-405, IB-430, IB-431, IB-432, IB-443, IB-4435, IB-452, IB-453, IB-451, IB-452, IB-453, IB-451, IB-452, IB-453, IB-451, IB-452, IB-453, IB-454, IB-451, IB-452, IB-453, IB-454, IB-451, IB-452, IB-453, IB-454, IB-451, IB-452, IB-453, IB-454, IB-453, IB-454, IB-453, IB-454, IB-454, IB-454, IB-454, IB-454, IB-454, IB-452, IB-453, IB-454, IB-454, IB-453, IB-454, IB-454	or MATH 221	Calculus I	
CHEM-102 General Chemistry Lab I CHEM-103 General Chemistry Lab I CHEM-104 General Chemistry II CHEM-105 General Chemistry II CHEM-105 General Chemistry II OF CHEM-202 Accelerated Chemistry I CHEM-203 Accelerated Chemistry II CHEM-204 Accelerated Chemistry II CHEM-205 Accelerated Chemistry Lab II CHEM-205 Accelerated Chemistry Lab II Select one group of courses: 5-6 CHEM-232 Elementary Organic Chemistry I & CHEM-233 and Elementary Organic Chem-Lab-I CHEM-236 Fundamental Organic Chem-I & CHEM-237 and Structure and Synthesis Select one group of courses: 8-10 PHYS-101 College Physics: Mech-& Heat & PHYS-102 and College Physics: E&M & Modern PHYS-211 University Physics: Mechanics & PHYS-212 and University Physics: Elec & Mag IB-150 Organismal & Evolutionary Biol 4 MCB-150 Molec & Cellular Basis of Life IB-202 Physiology (IB-202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB-203 Ecology IB-204 Genetics (IB majors are required to enroll in the 4-hour version of IB-204.) IB-205 Evolution Advanced Free Elective (300 or 400 level course from IB or any unit on campus) At least-15-hours of coursework from the Approved List of Advanced Courses-below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB-305, IB-362, IB-368, IB-401, IB-461, IB-463, IB-463, IB-461, IB-471) Area 2: Behavior, Ecology, and the Environment (IB-329, IB-361, IB-405, IB-430, IB-431, IB-432, IB-439, IB-440, IB-441, IB-451, IB-452, IB-453, IB-461, IB-472, IB-473)	STAT 212	Biostatistics	3
CHEM 103 General Chemistry Lab I CHEM 104 General Chemistry II General Chemistry II General Chemistry Lab II General Chemistry Lab II General Chemistry Lab II General Chemistry Lab II GENER 202 Accelerated Chemistry Lab II CHEM 203 Accelerated Chemistry Lab II CHEM 204 Accelerated Chemistry Lab II CHEM 205 Accelerated Chemistry Lab II Select one group of courses: 5-6 CHEM 232 Elementary Organic Chemistry II & CHEM 233 and Elementary Organic Chem Lab II CHEM 234 Fundamental Organic Chem II & CHEM 235 Fundamental Organic Chem II & CHEM 237 and Structure and Synthesis Select one group of courses: PHYS 101 College Physics: Mech & Heat & PHYS 101 and College Physics: Elec & Mag University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol ACR 150 Molec & Cellular Basis of Life II 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology 4 IB 204 Genetics (IB majors are required to enroll in the 4-hour version of this course.) IB 205 Ecology 4 IB 206 Ecology 4 IB 207 Advanced Free Elective (300 or 400 level course from IB or any unit on campus) 3 At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 481, IB 482, IB 484, IB 444, IB 451, IB 452, IB 453, IB 481, IB 481, IB 482, IB 484, IB 444, IB 444, IB 451, IB 452, IB 453, IB 481, IB 481, IB 482, IB 484, IB 444, IB 445, IB 445, IB 447, IB 445, I	Select one grou	p of courses:	8-10
CHEM-104 General-Chemistry-II CHEM-205 Accelerated Chemistry-Lab II OF CHEM-203 Accelerated Chemistry-I CHEM-204 Accelerated Chemistry-Lab II CHEM-204 Accelerated Chemistry-II CHEM-205 Accelerated Chemistry-II CHEM-205 Accelerated Chemistry-II CHEM-206 Accelerated Chemistry-II CHEM-230 Accelerated Chemistry-II CHEM-231 CHEM-232 Elementary-Organic Chem-Lab I CHEM-232 Elementary-Organic Chem-Lab I CHEM-233 and Elementary-Organic Chem-Lab I CHEM-236 Fundamental-Organic Chem-I 8 CHEM-237 and Structure and Synthesis Select-one-group-of-courses: PHYS-101 College Physics: Mech-8-Heat 8 PHYS-102 and College Physics: E&M-8-Modern PHYS-211 University-Physics: Hechanics 8 PHYS-212 and University-Physics: Elec & Mag IB-150 Organismal & Evolutionary-Biol MCB-150 Molec & Cellular-Basis of Life B-202 Physiology-(IB-202 requires animal dissection and no equivalent alternative is available. IB-majors are required to enroll in the 4-hour version of this course.) IB-203 Ecology B-204 Genetics (IB-majors are required to enroll in the 4-hour version of IB-204.) Advanced Free Elective (300 or 400 level course from IB or any unit on campus) At least 15-hours of coursework from the Approved List of Advanced Courses below: At least one-course from two of the following three areas: Area 1: Organismal and Evolutionary-Biology (IB-335, IB-360, IB-362, IB-368, IB-401, IB-461, IB-462, IB-463, IB-464, IB-471) Area 2: Behavior, Ecology, and the Environment (IB-329, IB-361, IB-405, IB-431, IB-431, IB-432, IB-434, IB-447, IB-451, IB-452, IB-453, IB-481, IB-4482, IB-494, IB-441, IB-451, IB-452, IB-453, IB-481, IB-482, IB-494, IB-441, IB-441, IB-451, IB-452, IB-453, IB-481, IB-482, IB-494, IB-441, IB-441, IB-445, IB-447,	CHEM 102	General Chemistry I	
er CHEM-202 Accelerated Chemistry I CHEM-203 Accelerated Chemistry I CHEM-204 Accelerated Chemistry I CHEM-204 Accelerated Chemistry I CHEM-205 Elementary Organic Chemistry I CHEM-230 And Elementary Organic Chem Lab I CHEM-230 And Elementary Organic Chem Lab I CHEM-231 And Structure and Synthesis Select one group of courses: Select one	CHEM 103	General Chemistry Lab I	
ef CHEM 202 Accelerated Chemistry I CHEM 203 Accelerated Chemistry Lab I CHEM 204 Accelerated Chemistry IB CHEM 205 Accelerated Chemistry IB CHEM 207 Accelerated Chemistry IB CHEM 208 Elementary Organic Chemistry I & CHEM 232 Elementary Organic Chem Lab I CHEM 233 and Elementary Organic Chem Lab I CHEM 236 Fundamental Organic Chem I & CHEM 237 and Structure and Synthesis Select one group of courses: PHYS 101 College Physics: Mech & Heat & PHYS 102 and College Physics: Mech & Heat & PHYS 211 University Physics: Mechanics & PHYS 211 University Physics: Mechanics & PHYS 212 and University Physics: Elec & Mag B 150 Organismal & Evolutionary Biol MCB 150 Molec & Cellular Basis of Life B 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) B 203 Ecology 4 B 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) B 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 482, IB 494) Area 2: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	CHEM 104	General Chemistry II	
CHEM 202 Accelerated Chemistry I CHEM 203 Accelerated Chemistry Lab I CHEM 204 Accelerated Chemistry II CHEM 205 Accelerated Chemistry Lab II Select-one group of courses: CHEM 232 Elementary Organic Chemistry I & CHEM 233 and Elementary Organic Chem Lab I CHEM 233 and Elementary Organic Chem Lab I CHEM 233 and Structure and Synthesis Select one group of courses: Select one group of courses: PHYS 101 College Physics: Mech & Heat & PHYS 102 and College Physics: E&M & Modern PHYS 211 University Physics: Mechanics & PHYS 212 and University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol MCB 150 Molec & Cellular Basis of Life IB 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) 4 B 302 Evolution Advanced Free Elective (300 or 400 level course from IB or any unit on campus) At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	CHEM 105	General Chemistry Lab II	
CHEM 203 Accelerated Chemistry Lab I CHEM 204 Accelerated Chemistry II CHEM 205 Accelerated Chemistry Lab II Select one group of courses: CHEM 232 Elementary Organic Chemistry I & CHEM 233 and Elementary Organic Chem Lab I CHEM 236 Fundamental Organic Chem I & CHEM 237 and Structure and Synthesis Select one group of courses: Select one group of courses: Select one group of courses: Mechanics Achiem 237 and College Physics: Mech & Heat & PHYS 101 College Physics: Mech & Heat & PHYS 211 University Physics: Mechanics & PHYS 212 and University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol MCB 150 Molec & Cellular Basis of Life IB 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. 1B majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology IB 302 Evolution Advanced Free Elective (300 or 400 level course from IB or any unit on campus) At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 444, IB 445, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 425, IB 472, IB 473, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473, IB 472, IB 473, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 420, IB 427, IB 434, IB 435, IB 472, IB 473, IB 472, IB 473, IB 484, IB 420, IB 42	Or		
CHEM 204 Accelerated Chemistry II CHEM 205 Accelerated Chemistry Lab II Select one group of courses: CHEM 232 Elementary Organic Chemistry I & CHEM 233 and Elementary Organic Chem Lab I CHEM 236 Fundamental Organic Chem I & CHEM 237 and Structure and Synthesis Select one group of courses: PHYS 101 College Physics: Mech & Heat & PHYS 102 and College Physics: E&M & Modern PHYS 211 University Physics: Mechanics & PHYS 211 University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol MCB 150 Molec & Cellular Basis of Life IB 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology Advanced Free Elective (300 or 400 level course from IB or any unit on campus) At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 361, IB 405, IB 430, IB 441, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 2: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 435, IB 472, IB 473).	CHEM 202	Accelerated Chemistry I	
CHEM 205 Accelerated Chemistry Lab II Select one group of courses: 5-6 CHEM 232 Elementary Organic Chemistry I & CHEM 233 and Elementary Organic Chem Lab I CHEM 236 Fundamental Organic Chem I & CHEM 237 and Structure and Synthesis Select one group of courses: 8-10 PHYS 101 College Physics: Mech & Heat & PHYS 102 and College Physics: E&M & Modern PHYS 211 University Physics: Hechanics & PHYS 212 and University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol MCB 150 Molec & Cellular Basis of Life 1B 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology 4 1B 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) 4 B302 Evolution Advanced Free Elective (300 or 400-level course from IB or any unit on campus) At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 444, IB 445, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 424, IB 434, IB 435, IB 472, IB 473)	CHEM 203	Accelerated Chemistry Lab I	
Select one group of courses: CHEM 232 Elementary Organic Chemistry I & CHEM 233 and Elementary Organic Chem Lab I CHEM 236 Fundamental Organic Chem I & CHEM 237 and Structure and Synthesis Select one group of courses: Select one group of courses: PHYS 101 College Physics: Mech & Heat & PHYS 102 and College Physics: E&M & Modern PHYS 211 University Physics: Mechanics & PHYS 212 and University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol MCB 150 Molec & Cellular Basis of Life IB 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology IB 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) Advanced Free Elective (300 or 400 level course from IB or any unit on campus) At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 424, IB 434, IB 435, IB 472, IB 473)	CHEM 204	Accelerated Chemistry II	
CHEM 232 Elementary Organic Chemistry I & CHEM 233 and Elementary Organic Chem Lab I CHEM 236 Fundamental Organic Chem I & CHEM 237 and Structure and Synthesis Select one group of courses: PHYS 101 College Physics: Mech & Heat & PHYS 102 and College Physics: E&M & Modern PHYS 211 University Physics: Mechanics & PHYS 212 and University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol MCB 150 Molec & Cellular Basis of Life IB 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology B 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) IB 302 Evolution 4 Advanced Free Elective (300- or 400-level course from IB or any unit on campus) At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 444, IB 441, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	CHEM 205	Accelerated Chemistry Lab II	
& CHEM 233 and Elementary Organic Chem Lab I CHEM 236 Fundamental Organic Chem I & CHEM 237 and Structure and Synthesis Select one group of courses: Select one group of courses: Nether Store College Physics: Mech & Heat & PHYS 101 College Physics: Mech & Modern PHYS 211 University Physics: Mechanics & PHYS 212 and University Physics: Elec & Mag IB-150 Organismal & Evolutionary Biol MCB-150 Molec & Cellular Basis of Life IB-202 Physiology (IB-202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB-203 Ecology IB-204 Genetics (IB majors are required to enroll in the 4-hour version of IB-204.) Advanced Free Elective (300- or 400-level course from IB or any unit on campus) At least 15-hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB-335, IB-360, IB-362, IB-368, IB-401, IB-461, IB-462, IB-463, IB-464, IB-471) Area 2: Behavior, Ecology, and the Environment (IB-329, IB-361, IB-405, IB-430, IB-431, IB-432, IB-439, IB-444, IB-451, IB-452, IB-453, IB-481, IB-482, IB-494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB-303, IB-364, IB-420, IB-421, IB-426, IB-427, IB-434, IB-435, IB-472, IB-473)	Select one grou	p of courses:	5-6
CHEM 236 Fundamental Organic Chem I & CHEM 237 and Structure and Synthesis Select one group of courses: PHYS 101 College Physics: Mech & Heat & PHYS 102 and College Physics: E&M & Modern PHYS 211 University Physics: Hechanics & PHYS 212 and University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol McB 150 Molec & Cellular Basis of Life 4 IB 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology B 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) Advanced Free Elective (300 or 400 level course from IB or any unit on campus) At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 461, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	CHEM 232	Elementary Organic Chemistry I	
Select one group of courses: Select one group of courses: Select one group of courses: PHYS 101 College Physics: Mech & Heat	& CHEM 2	33 and Elementary Organic Chem Lab I	
Select one group of courses: PHYS 101 College Physics: Mech & Heat & PHYS 102 and College Physics: E&M & Modern PHYS 211 University Physics: Mechanics & PHYS 212 and University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol 4 MCB 150 Molec & Cellular Basis of Life 4 IB 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology 4 IB 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) 4 IB 302 Evolution 4 Advanced Free Elective (300 or 400 level course from IB or any unit on campus) 3 At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	CHEM 236	Fundamental Organic Chem I	
PHYS 101 College Physics: Mech & Heat & PHYS 102 and College Physics: E&M & Modern PHYS 211 University Physics: Mechanics & PHYS 212 and University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol MCB 150 Molec & Cellular Basis of Life IB 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology 4 IB 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) Advanced Free Elective (300- or 400-level course from IB or any unit on campus) At least 15-hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	& CHEM 2	37 and Structure and Synthesis	
& PHYS 102 and College Physics: E&M & Modern PHYS 211 University Physics: Mechanics & PHYS 212 and University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol 4 MCB 150 Molec & Cellular Basis of Life 4 IB 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology 4 IB 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) 4 IB 302 Evolution 4 Advanced Free Elective (300- or 400-level course from IB or any unit on campus) 3 At least 15 hours of coursework from the Approved List of Advanced Courses below: 15-20 At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	Select one grou	p of courses:	8-10
PHYS 211 University Physics: Mechanics & PHYS 212 and University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol 4 MCB 150 Molec & Cellular Basis of Life 4 IB 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology 4 IB 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) 4 IB 302 Evolution 4 Advanced Free Elective (300- or 400-level course from IB or any unit on campus) 3 At least 15-hours of coursework from the Approved List of Advanced Courses below: 15-20 At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	PHYS 101	College Physics: Mech & Heat	
8 PHYS 212 and University Physics: Elec & Mag IB 150 Organismal & Evolutionary Biol 4 MCB 150 Molec & Cellular Basis of Life 4 IB 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology 4 IB 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) 4 IB 302 Evolution 4 Advanced Free Elective (300- or 400-level course from IB or any unit on campus) 3 At least 15 hours of coursework from the Approved List of Advanced Courses below: 15 20 At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	& PHYS 10	02 and College Physics: E&M & Modern	
B 150 Organismal & Evolutionary Biol 4 MCB 150 Molec & Cellular Basis of Life 4 B 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) B 203 Ecology 4 B 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) 4 B 302 Evolution 4 Advanced Free Elective (300- or 400-level course from IB or any unit on campus) 3 At least 15 hours of coursework from the Approved List of Advanced Courses below: 45-20 At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	PHYS 211	University Physics: Mechanics	
MCB 150 Molec & Cellular Basis of Life IB 202 Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology 4 IB 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) Advanced Free Elective (300- or 400-level course from IB or any unit on campus) At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	& PHYS 21	1-2 and University Physics: Elec & Mag	
Physiology (IB 202 requires animal dissection and no equivalent alternative is available. IB majors are required to enroll in the 4-hour version of this course.) Ecology Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) B 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) B 302 Evolution Advanced Free Elective (300- or 400-level course from IB or any unit on campus) At least 15-hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	IB 150	Organismal & Evolutionary Biol	4
available. IB majors are required to enroll in the 4-hour version of this course.) IB 203 Ecology 4 IB 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) 4 IB 302 Evolution 4 Advanced Free Elective (300- or 400-level course from IB or any unit on campus) 3 At least 15 hours of coursework from the Approved List of Advanced Courses below: 15-20 At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	MCB 150	Molec & Cellular Basis of Life	4
IB 203 Ecology Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) 4 IB 302 Evolution Advanced Free Elective (300- or 400-level course from IB or any unit on campus) At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	IB 202	Physiology (IB 202 requires animal dissection and no equivalent alternative is	4
IB 204 Genetics (IB majors are required to enroll in the 4-hour version of IB 204.) 4 Advanced Free Elective (300- or 400-level course from IB or any unit on campus) 3 At least 15 hours of coursework from the Approved List of Advanced Courses below: 4 At least one course from two of the following three areas: 4 Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) 4 Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) 4 Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)		available. IB majors are required to enroll in the 4-hour version of this course.)	
IB 302 Evolution 4 Advanced Free Elective (300- or 400-level course from IB or any unit on campus) 3 At least 15 hours of coursework from the Approved List of Advanced Courses below: 15-20 At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	IB 203	Ecology	4
Advanced Free Elective (300- or 400-level course from IB or any unit on campus) At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	IB 204	Genetics (IB majors are required to enroll in the 4-hour version of IB 204.)	4
At least 15 hours of coursework from the Approved List of Advanced Courses below: At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	IB 302	Evolution	4
At least one course from two of the following three areas: Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	Advanced Free	Elective (300- or 400-level course from IB or any unit on campus)	3
Area 1: Organismal and Evolutionary Biology (IB 335, IB 360, IB 362, IB 368, IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	At least 15 hour	s of coursework from the Approved List of Advanced Courses below:	15-20
IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	At least one	course from two of the following three areas:	
Area 2: Behavior, Ecology, and the Environment (IB 329, IB 361, IB 405, IB 430, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	_		
IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	· · · · · · · · · · · · · · · · · · ·		
Area 3: Integrative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421, IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)			
IB 426, IB 427, IB 434, IB 435, IB 472, IB 473)	•		
·	Area 3: Integ	grative Anatomy, Physiology, and Molecular Biology (IB 303, IB 364, IB 420, IB 421,	
One advanced course with a laboratory and/or field component.	•		
	One advance	d course with a laboratory and/or field component.	

Code **Title Hours** IB 303, IB 335, IB 368, IB 401, IB 427, IB 430, IB 434, IB 444, IB 451, IB 461, IB 462, IB 463, IB 464, IB 467, IB 468, IB 471, IB 481, IB 482, IB 494 Remaining hours can be taken from any of the courses listed above or from the following list: IB 348, IB 411, IB 416, IB 436, IB 442, IB 450, IB 467, IB 468, IB 476, IB 478, IB 479, IB 480, IB 484, IB 487, IB 491, IB 496, IB 499, MCB 300, MCB 314, MCB 450 **Total Hours Required** 120 MS in IB Requirements In the Integrative Biology, BSLAS + MS joint degree, 12-hours will double-count toward both the BSLAS degree requirements above and the MS requirements below, for a total of 140hours required in total. These 12-hours can be selected from any 400-level IB course listed on the MS in IB approved courses List. For additional details and requirements refer to the MS in IB website. Course List Code **Title** Hours 12-hours will double-count toward both the BSLAS degree requirements above and the MS requirements below. These 12 hours can be selected from any 400 level IB course listed on any requirements for the MS in IB program. Core Curriculum Hours Required 14-16 IB 592 Career and Skill Development in Integrative Biology 2 At least one course from two of the following three IB disciplinary areas and one additional course with a laboratory and/or field component. Area 1: Organismal and Evolutionary Biology (IB 401, IB 461, IB 462, IB 463, IB 464, IB 471) Area 2: Behavior, Ecology, and the Environment (IB 405, IB 431, IB 432, IB 439, IB 440, IB 444, IB 451, IB 452, IB 453, IB 481, IB 482, IB 494) Area 3: Integrative anatomy, Physiology, and Molecular Biology (IB 420, IB 421, IB 426, IB 427, IB 434, IB 472, IB 473) Lab/Field component (IB 401, IB 427, IB 434, IB 444, IB 451, IB 461, IB 462, IB 463, IB 464, IB 467, IB 468, IB 471, IB 481, IB 482, IB 494) **Elective Hours Required** 6-8 Select from any Area/Lab courses above that did not already fulfill another requirement, or select from the list of approved courses below, or upon approval from the program director. IB 411, IB 416, IB 436, IB 442, IB 450, IB 467, IB 468, IB 476, IB 478, IB 479, IB 480, IB 484, IB 487, IB 491, IB 496, IB 499 Minimum 500-level Hours Required 12 IB 501, IB 502, IB 504, IB 505, IB 506, IB 512, IB 513, IB 516, IB 524, IB 526, IB 531, IB 532, IB 533, IB 534, IB 535, IB 536, IB 542, IB 546, IB 590, IB 592 Total Hours Required 32 Other requirements Minimum hours within the unit 8 **Minimum GPA** 3.0 Maximum hours of IB 590 allowed to count toward the MS in IB degree 6

Program Relationships

Identify the existing programs to be joined:

Corresponding Program(s)

Corresponding Program(s)	
Integrative Biology, BSLAS	
Integrative Biology, MS	

Program Features

Academic Level Undergraduate

Graduate

What is the typical time to completion of this program?

5 years

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

140

What is the 3.0

required GPA?

Is This a Teacher Certification Program?

Yes

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

Is this revision a change to the admission status of the program?

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.

We request an exception that the Graduate College admit these students on full status, even though they do not yet have an earned bachelor's degree. Typical time to degree completion is 5-years (ten full-time semesters) with both an undergraduate and advanced degree. Students must be enrolled in the MS program within the Graduate College at least one semester. Students will be classified as graduate students once admitted fully into the Graduate College and thus graduate tuition will be assessed. The MS in IB portion of the degree is self-supporting and thus students in the MS in IB program are not eligible to receive tuition and fee waivers except statutory waivers. To be eligible, students must have completed their junior year of the BSLAS in IB degree. Students must have 3.0 or higher GPA from their junior year onward of undergraduate study to receive admission to the Graduate College. This means that the average GPA of their junior year and/or (depending on when the student applies) first semester of their senior year coursework must be 3.0 or higher. The GRE is not required. Students apply internally to the School of Biology BSLAS + MS in IB program at two different times the summer before they begin their senior year or at the end of the fall term of their senior year. Application dates vary slightly year to year tied to semester start dates. • Once students are admitted to the program, they begin completing the joint program requirements within their senior year. After the completion of the undergraduate requirements, students will then apply to the master's portion of the program through the Graduate College in the spring semester of their senior year or the summer semester directly following. Applications for admission will be reviewed by the admissions committee, comprised of faculty and staff from the School of Integrative Biology who instruct and advise BSLAS + MS in IB students. • Applications are reviewed holistically, reviewing GPA and performance in courses, experiential opportunities (work, volunteer experiences, internships), personal statements that support non-cognitive attributes such as work-ethic, leadership and service, as well as recommendation letters. • Upon acceptance, students will be admitted to the joint degree program and meet with their BSLAS+ MS in IB Director of Graduate Studies to determine which courses will be taken in their senior year that will apply to both degrees.(During their undergraduate degree, the joint degree students also continue to meet with their undergraduate advisor.) • Students admitted to the graduate program must maintain an overall 3.0 GPA to remain in good standing. • Credits from the BSLAS in IB program cannot be retroactively applied.

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.

No impact is expected.

Estimated Annual Number of Degrees Awarded

Year One Estimate

0

5th Year Estimate (or when fully implemented)

15

Are there No

budgetary

implications for

this revision?

Will the program or revision require staffing (faculty, advisors, etc.)

beyond what is currently available?

No

Additional Budget

Information

No additional staffing will be required for this degree program.BSLAS + MS in IB students will be taking courses already offered by faculty, and all advising (such as course-selection mapping and career-readiness counseling) will be performed by the MS in IB director.

Attach File(s)

Financial Resources

How does the unit intend to financially support this proposal?

As we have sufficient capacity in our upper-level courses, including ample 500-level courses with seats available, we do not expect the need to add seats to any course to serve students in thisprogram. We recently revised the required course for the program, IB 592 into a 5—level course in order to assist students with having even more options for 5—levelcourses. We have instructors scheduled to teach these advanced courses aswell. Additionally, we propose to cap this program at 30 students enrolled at any onetime. These 30 students would then be spread across over 50 upper-level courses offered across multiplesemesters. Thus, we do not see a need to increase the numbers of faculty or TAs as essentially these seats are already being provided by the current costs of the courses.

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

No

Attach letters of support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

Chem Life Differential This program will use existing Chemical and Life Sciences undergraduate (years 1-4) and graduate (in year 5) tuition rates, with the MS portion being self-supporting. For the MS portion, the School of Integrative Biology will be responsible for all costs and will receive 64% of the gross tuition with 11% of the gross income going to the College of LAS and 25% to campus for the IVCB tax. This program is expected to add few students to begin but should still be revenue positive within the first five years because, as outlined, our program costs are very low.

Are you seeking a change in the tuition rate or differential for this

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 is expected.

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 program.

EP Documentation

EP Control EP.25.014

No

Number

Attach Rollback/ Approval Notices

This proposal

requires HLC

inquiry

DMI Documentation

Attach Final

Approval Notices

Banner/Codebook

BSLAS: BSLAS/MS IB - UIUC & MS: BSLAS/MS IB - UIUC

Name

Program Code: 10KV6160BSLA & 1PKS6160MS

Minor Conc 6160 Degree Major Code Code Code Code

Senate Approval

Date

Senate

Conference

Approval Date

BOT Approval

Date

IBHE Approval Date

HLC Approval

Date

DOE Approval

Date

NA

Effective Date:

Attached
Document
Justification for
this request

Comments

Program Reviewer

Mary Lowry (lowry) (04/11/24 11:16 am): Rollback: Revisions per phone call Mary Lowry (lowry) (04/22/24 4:44 pm): Rollback: Please see email dated 4-22-24

Brooke Newell (bsnewell) (04/24/24 9:50 am): Rollback: per discussion with Allison

Key: 1159

Date Submitted: 05/10/24 2:44 pm

Viewing: 10KS0252MFA: Art & and

Design, MFA

Last approved: 07/05/22 1:54 pm

Last edit: 09/27/24 8:07 am

Changes proposed by: Nicole Turner

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1526 Head
- 3. KR Dean
- 4. University Librarian
- 5. Grad_College
- **6. COTE Programs**
- 7. Provost

8. Senate EPC

- 9. Senate
- 10. U Senate Conf
- 11. Board of Trustees
- 12. IBHE
- 13. HLC
- 14. DOE
- 15. DMI

Approval Path

- 1. 05/13/24 3:09 pm Donna Butler (dbutler): Approved for U Program Review
- 2. 05/14/24 7:10 am Melissa Pokorny (mpokorny): Approved for 1526 Head
- 3. 05/14/24 7:29 am Nicole Turner (nicturn):
 - Approved for KR
 Dean
- 4. 05/17/24 9:36 am
 Claire Stewart
 (clairest):
 Approved for
 University
 Librarian
- 5. 09/11/24 3:06 pm Allison McKinney

(agrindly):
Approved for
Grad_College

- 6. 09/11/24 3:44 pm Suzanne Lee (suzannel): Approved for COTE Programs
- 7. 09/13/24 10:30 am Brooke Newell (bsnewell): Approved for Provost

History

1. Jul 5, 2022 by Mary Lowry (lowry)

Major (ex. Special Education)

This proposal is

for a: Revision

Administration Details

Official Program

Art & and Design, MFA

Name

Diploma Title

Sponsor College Fine & Applied Arts

Sponsor

Art and Design

Department

Sponsor Name <u>Melissa Pokorny</u>

Sponsor Email <u>mpokorny@illinois.edu</u>

College Contact <u>Nicole Turner</u>

College Contact

Email

nicturn@illinois.edu

College Budget

Greg Anderson

Officer

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.

KR Dean

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)

Revise the Master of Fine Arts in Art & Design in the College of Fine and Applied Arts 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)."

This MFA in Art & design (key 31) proposal is related to the MFA Photography concentration proposal (key 922), MFA in Art & design (key 31), MFA Painting concentration proposal (key 921), and MFA Printmaking concentration (key 923), MFA Sculpture concentration (key 924).

Program Justification

Provide a brief description of what changes are being made to the program.

(1) POS table is being updated to remove the New Media specialization and remove the line about the requirements for programs other than Industrial Design. (2) Revising the format of the Concentration names in the tables as requested by campus as part of the Concentration Project (3) Updating the Program Features information, (which isn't a change in practice). (4) Update the official program name; (5) Remove the 'Seminar, 8 hours min requirement' from the major and replace it with 'Studio, 6 hours min requirement.' (6) We added "Thesis hours" to the Research/Project hours row.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

Why are these changes necessary?

- (1) The statement about a concentration being required except for New Media specialization students is removed due to not aligning with practice where at times students are pursuing a MFA in Art & Design without a concentration, but also not focusing on new media. Additionally, the line stating the requirements for all programs except ID is removed and the POS is clarified to cover requirements for all of the MFA in Art and Design.
- (2) This a transparency/clarification clean-up project that collectively the offices of the Registrar, Provost, Graduate College, and DMI are working on, and there are no changes to the program.
- (3) The Program Features section is now filled out and reflects the current practice. This program has transcripted concentrations. A concentration is not required for graduation. Some students with the non-transcriptable specialization in New Media or interdisciplinary areas of studio art are earning the MFA without a concentration. All concentrations are major dependent and attached (within the program code). Students are admitted directly into concentrations.
- (4) Request from the Grad College: "update the Official Program Name to change "Art and Design" to "Art & Design?" All the other records associated with this program have the & and so for consistency and to conform to data standards, this will be helpful. This is only changing the name on the CIM-P record. Nothing else will change anywhere else."
- (5) Over time the concentrations have evolved and moved away from required seminars. And a required studio was never included in the major requirements, but is a common component of all Art and Design programs. So we are replacing the Seminar requirement with a Studio requirement which is common to all the current and proposed concentrations.
- (6) "Thesis hours" is added to make it more clear that this major can be earned with or without a thesis.

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?

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.

MFA in Art & Design, concentration in Industrial Design

- 1. <u>Inquiry and insight:</u> <u>Select and use appropriate research and experimental methods, to access existing data or to generate new data, to analyze and draw insights, with a particular emphasis on user needs.</u>
- <u>2. Ideation: Produce creative proposals to identified design opportunities, using design thinking, modelling, and prototyping strategies, with an appropriate integration of functional, technical, ergonomic and visual factors.</u>
- 3. <u>Implementation: Select and use appropriate making and manufacturing processes</u> with an understanding of the potential of new technologies, and the demands of <u>sustainability.</u>
- <u>4. Informing: Use visual and verbal communication, to explain and persuade, as appropriate for different audiences.</u>
- <u>5. Self development: Carry out independent learning and reflexive evaluation of your work, as well as to plan and implement action, individually or in teams, effectively managing self and others.</u>
- <u>6. Contextualisation: Locate your own activity within the multiple contexts of design practice, including the theoretical, professional, cultural, environmental and technological contexts.</u>

MFA in Art & Design, concentration in Design for Responsible Innovation

- 1.Demonstrate familiarity with the design research literature relevant to their topic.
- 2.Create prototypes for research purposes.
- 3.Explain the different epistemological modes of knowledge production.
- 4. Select research methods appropriate to the thesis topic.

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

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.

Art Design MFA side by side FA 24.docx Revised programs

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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

Study Catalog

Course List

Code Title Hours

Research/Project/Thesis Hours (min/max applied toward degree) (2 min):2

Electives 62

6 min

12

Studio, enrollment varies by concentration

Students may choose one of the concentrations available for this major:

Design for Responsible Innovation

Industrial Design

Electives taken in consultation with an advisor to reach 64 total hours

Total Hours 64

Other Requirements

Course List

Code Title Hours

A concentration is not required

Other requirements may overlap

Minimum 500-level Hours Required Overall12

Minimum GPA 2.75

All Programs except Industrial Design Other Requirements Master of Fine Arts in Art and Design, concentration in Industrial Design

Grad Other Degree Requirements

Requirement Description

Other requirements may overlap

A concentration is not required in the case of students in the New Media specialization.

Seminar, enrollment varies by program 8 min

Minimum 500-level Hours Required Overall Minimum GPA 2.75

Corresponding MFA Master of Fine Arts

Program Features

Academic Level Graduate

Does this major

Yes No

<u>Yes</u>

have transcripted concentrations?

Will you admit to

the concentration

directly?

Is a concentration No

required for graduation?

What is the typical time to completion of this program?

3 years

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

64

What is the 2.75

required GPA?

CIP Code 500702 - Fine/Studio Arts, General.

Is This a Teacher Certification Program?

Νo

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 Fall 2024

Admissions Term

Is this revision a change to the admission status of the program?

<u>No</u>

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.

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.

Students currently enrolled in one of the 4 concentrations being deactivated can continue and graduate within that concentration or complete the MFA in Art & Design with no concentration.

Estimated Annual Number of Degrees Awarded

Year One Estimate 5th Year Estimate (or when

fully implemented)

What is the

Fall

matriculation term for this program?

Budget

Are there No

budgetary

implications for

this revision?

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?

There are no budgetary implications for this revision.

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

No

Attach letters of

support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

FAA Graduate Differential

Are you seeking a change in the tuition rate or differential for this program?

No

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.

There are no expected impacts to faculty resources, as the number of students, number of faculty, course loads, and class size will not change.

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 not expected to be impacted by this concentration MFA revision.

EP Documentation

EP Control EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal No requires HLC

inquiry

DMI Documentation

Attach Final

Approval Notices

Banner/Codebook MFA:Art and Design -UIUC

Name

Program Code: 10KS0252MFA

Minor Conc Degree MFA Major Code Code Code Code

0252

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 Mary Lowry (lowry) (04/19/23 2:19 pm): Rollback: Please see my email Mary Lowry (lowry) (03/08/24 9:10 am): Rollback: Please see email dated 3-8-24 Mary Lowry (lowry) (03/22/24 10:17 am): Rollback: per phone conversation Mary Lowry (lowry) (04/17/24 1:44 pm): Rollback: Rollback to keep this proposal with the new, related proposal. Please see email dated 4-17-24.

Mary Lowry (lowry) (04/29/24 1:10 pm): Rollback: Just 3 things in email dated 4-29-24

Mary Lowry (lowry) (05/10/24 2:37 pm): Rollback: Please see email dated 5-10-24

Date Submitted: 05/08/24 9:46 am

Viewing: 10KP6131BS: Neural

Engineering, BS

Last approved: 03/01/23 7:27 am

Last edit: 09/27/24 8:09 am Changes proposed by: Maddie Darling

Neural Engineering, BS

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. COTE Programs**
- 7. Provost
- 8. Senate EPC
- 9. Senate
- 10. U Senate Conf
- 11. Board of Trustees
- 12. IBHE
- 13. HLC
- 14. DMI

Approval Path

- 1. 05/09/24 1:48 pm Donna Butler (dbutler): Approved for U
 - Program Review
- 2. 05/10/24 11:24 am

Rebecca Reck

(rreck): Approved for 1343 Head

3. 09/04/24 3:33 pm

Katherine

Freeman

(katefree):

Approved for KP

Committee Chair

4. 09/04/24 3:37 pm Cindy Pruitt

(cpruitt):

Approved for KP

Dean

5. 09/05/24 10:27

am

Claire Stewart (clairest): Approved for University Librarian

6. 09/05/24 1:12 pm Suzanne Lee (suzannel): Approved for COTE Programs

7. 09/13/24 10:29 am

> Brooke Newell (bsnewell): Approved for Provost

History

- 1. Jul 21, 2022 by Maddie Darling (darling4)
- 2. Mar 1, 2023 by Maddie Darling (darling4)

Major (ex. Special Education)

This proposal is

for a: Revision

Administration Details

Official Program

Name

Neural Engineering, BS

Diploma Title Bachelor of Science in Neural Engineering

Sponsor College Grainger College of Engineering

Sponsor Bioengineering

Department

Sponsor Name Mark A. Anastasio, Donald Biggar Willett Professor in

Engineering, Head of Department of Bioengineering

Sponsor Email maa@illinois.edu

College Contact Jonathan Makela, Associate Dean for

Undergraduate Programs, Grainger

College of Engineering

College Contact

Email

jmakela@illinois.edu

College Budget

Officer

Tessa Hile

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, darling4@illinois.edu (BIOE); <u>Kate Freeman (katefree@illinois.edu)</u> Keri Carter Pipkins, kcp@illinois.edu (GCOE).

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)

Revise the Bachelor of Science in Neural Engineering in the Grainger College of Engineering

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 description of what changes are being made to the program.

- 1. The formatting of the POS and additional text (e.g., graduation requirements, university requirements, and general education requirements) has been modified to adhere to the campus General Education Template.
- 2. Remove the note on PSYC 100 stating the course does not apply toward social and behavioral sciences general education requirements.
- 3. Include 4 additional free elective hours.
- 4. Replace 3 BIOE special topics courses in the Bioengineering Technical Electives list with their permanent numbers.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

Why are these changes necessary?

- 1. Per Office of the Provost General Education initiative for transparency and accessibility.
- 2. PSYC 100 satisfies 4 hours of general education credit in social and behavioral sciences. Moving forward, the department won't mandate an additional 6 distinct hours of general education credit in this area alongside PSYC 100, so this note is no longer necessary.
- 3. PSYC 100 will now fulfill 4 of the 6 required hours of general education credit in social and behavioral sciences. The degree previously encompassed 10 hours of general education credit in social and behavioral sciences (PSYC 100 + 6 hours). We are reallocating the prior 4 additional hours required into free electives to allow students more flexibility to pursue their academic interests within the degree.
- 4. Administrative change to accurately reflect new permanent course numbers associated with previously offered special topics courses.

The 40 hours of upper-division classes for IBHE requirement are met by:

- 29 hours of 300 & 400 level classes individually specified in the Neural Engineering Technical Core
- o BIOE 310 (3 credit hours)
- o NE 330 (3 credit hours)
- o NE 402 (4 credit hours)
- o NE 412 (3 credit hours)
- o NE 422 (3 credit hours)
- o NE 430 (3 credit hours)
- o NE 431 (4 credit hours)
- o ECE/NE 410 (3 credit hours)
- o ECE 421/NE 420 (3 credit hours)
- 11 hours of 200 level coursework with 2 or more prerequisites in Foundational Mathematics and Science
- o MATH 241 (4 credit hours) prerequisites of MATH 231 and MATH 220 or 221
- o MATH 285 (3 credit hours) prerequisites of MATH 241, MATH 231 and MATH 220 or 221
- o PHYS 211 (4 credit hours) prerequisites of MATH 231 and MATH 220 or 221

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?

Nο

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.

The Neural Engineering (NE) Program Committee will be responsible for making NE curricular decisions. The NE Program Committee will consist of tenured and tenure-track faculty members in the Department of Bioengineering and will be tasked with mapping the NE program-level educational objectives (PEOs) to student outcomes through individual course session learning objectives (LOs) and linking them to specific course performance indicators for success. The program specific performance indicators comprise a combination of both direct (exam results) and indirect (survey data) measures.

Most performance indicators will measure two levels of student achievement: attainment of skills and mastery of skills, representing distinct levels in the curriculum. Student work will be analyzed against a rubric to determine the fraction of students achieving each level of performance, with the target goal of 70% of junior/senior students achieving a high performance level. We will use lower-level course attainment scores as formative feedback on how students are progressing in the desired skill. Data analysis and action items resulting from the review of outcomes will be presented in a self-study report. A detailed breakdown for each outcome will be made available for faculty review.

The NE Program Committee will be responsible for creating, continuous oversight, and evaluation of the NE degree curriculum. Annually, learning outcomes and LOs will be reviewed and revised to ensure that they are clearly written, student-centered, measurable, concise, meaningful, achievable, and outcome-based. Resources from the Center for Innovation in Teaching and Learning (CITL) will be used for guidance. Teaching and Learning will be assessed through both informal and formal methods administered throughout and at the end of each term. Informal early feedback during each semester will be gathered, analyzed, and utilized to act on student feedback while the class is in progress. Instructor and Course Evaluation System (ICES) will be used as the end-of-course evaluation tool of instructor and course effectiveness for both faculty and teaching assistants. Overall course performance will be used to guide subsequent instruction. Monitoring of changes and action items will be reviewed annually by the NE Program Committee.

Assessment instruments and performance indicators used to evaluate each course will be critiqued. Course directors will draft an assessment blueprint in which the content of the course will be divided into categories corresponding to (1) mastery of the fundamental principles of neuroscience, (2) integrated skill development in electrical and imaging systems, molecular and cellular engineering, biological interfacing, and computational data sciences, and (3) the application of design principles to solve modern problems in basic and translational neuroscience. Percentage weights will be assigned to each category (e.g. 10%, 40%). The blueprint will then be referenced when creating exams.

The NE Program Committee will review courses taught for the first time and annually review all course descriptions. After offering all courses at least once, the NE Program Committee will reexamine all the embedded indicators and ensure that they map to the student outcomes and fully demonstrate the designated outcome. Areas in need of improvement will be identified and recommendations for improvement will be specified that can be implemented in future years. The systematic assessment of student

outcomes will be used to track progress and improvement goals.

To continuously improve the NE program and student learning, data will be collected and evaluated every 3 years, allowing for the NE program to make and assess changes in program curriculum, advising processes, and the assessment process itself.

The Program Director will serve as the chair of the NE Program Committee and will be responsible for allocating advising duties, providing oversight of advising activities, and developing best practices for advising

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.

Revised programs <u>NE AY 24-25 sample sequence .xlsx</u>
Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

Bachelor of Science, Neural Engineering

The Bachelor of Science in Neural Engineering provides training at the intersection of neuroscience and engineering fundamentals. The program focuses on skill development in electrical and imaging systems, molecular and cellular engineering, biological interfacing, and computational data sciences. The first two years of the program provide foundational knowledge in applied formal sciences, physical sciences, and life sciences. Years three and four provide focused training in neural engineering fundamentals and applications through core courses, neuroscience courses, and neural engineering electives. Students will be prepared for employment as engineers in growing healthcare industry sectors related to neurological devices, brain-computer interfaces, neurological disease treatments, and brain imaging technologies. Graduates will also be positioned to pursue professional degrees in medicine and graduate studies in clinical, life, and behavioral sciences.

Minimum Hours for Graduation: 128

Graduation

To graduate, students must satisfy all University requirements as to residency, scholarship, and fees and must complete the University's general education requirements.

Highest honors/departmental distinction: Students completing a Bachelor's thesis with a minimum GPA of 3.8 will be eligible for highest honors.

Statement for

Programs of Study Catalog

Graduation Requirements

Minimum 2.0Minimum hours required for graduation: 128 hours. Graduation

Requirements

Minimum Overall GPA: <u>2.0</u> <u>University Requirements</u>

Advanced Composition

Minimum of 40 hours of upper-division coursework, generally at the 300- or 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional quidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog. Students must complete the Campus

2.0 M inimum hours required forgraduation:128 hours Generaleducation: General Education Requirements

<u>Follows the</u> <u>requirements including thecampus</u> <u>General Education (Gen Ed) requirements.</u> <u>general education language requirement.</u> <u>Some Gen Ed requirements may be met by courses required and/or electives in the program.</u>

Course List

CodeTitleHoursComposition I4-6

3

Code Title	ŀ	Hours
Humanities & the Arts (6 hours)	(<u>6</u>
Natural Sciences & Technology (6 hours)		<u>6</u>
fulfilled by CHEM 102, CHEM 104, MCB 150, PHYS 211, PHYS 212		
Social & Behavioral Sciences (6 hours)	<u>(</u>	<u>6</u>
fulfilled by PSYC 100 and other any other course approved as Social & Behavioral Sci	ences	
Cultural Studies: Non-Western Cultures (1 course)	- -	<u>3</u>
Cultural Studies: US Minority Cultures (1 course)	≅	3
Cultural Studies: Western/Comparative Cultures (1 course)		3
Quantitative Reasoning (2 courses, at least one course must be Quantitative Reasoning	<u>I)</u>	6-10
fulfilled by MATH 220 or MATH 221; and MATH 231, MATH 241, MATH 285, PHYS 211	<u>, PHYS 212;</u>	
and CS 101 or CS 124		
Language Requirement (Completion of the third semester or equivalent of a language of	ther than (0-15
English is required)		
<u>Major Requirements</u>		
Orientation and Professional Development		
Course List		
Code Title	Hours	
ENG 100 Grainger Engineering Orientation Seminar (External transfer students take ENC	<u>3 300</u> .)1	
Total Hours	1	
Foundational Mathematics and Science		
Course List		
Code Title		Hours
CHEM 102 General Chemistry I		3
CHEM 103 General Chemistry Lab I		1
CHEM 104 General Chemistry II		3
CHEM 105 General Chemistry Lab II	•	1
CHEM 232 Elementary Organic Chemistry I (May be taken for 3 or 4 credit hours; the ex	tra hour may 4	4
be used to help meet free elective requirements.)		
MATH 221 Calculus I (MATH 220 may be substituted, with four of the five credit hours a		4
the degree. MATH 220 is appropriate for students with no background in calculations.	•	
MATH 231 Calculus II		3
MATH 241 Calculus III		4
MATH 285 Intro Differential Equations		3
PHYS 211 University Physics: Mechanics		4
PHYS 212 University Physics: Elec & Mag		4
Total Hours	_	34
Neural Engineering Technical Core		
Code Title	Цанта	
Code Title	Hours	
BIOE 205 Signals & Systems in Bioengrg	3	
BIOE 210 Linear Algebra for Biomedical Data Science BIOE 310 Computational Tools for Biological Data	3 3	
BIOE 310 Computational Tools for Biological Data		
NE 100 Introduction to Neural Engineering	2	
NE 330 Neuroscience for Engineers	3	
NE 402 Neural Engineering Senior Design	4	
NE 412 Neural Data Analysis NE 422 Introduction to Neuroimaging	3	
NE 422 Introduction to Neuroimaging	3	

Code	Title	Hours
NE 430	Neural Cell and Tissue Engineering	3
NE 431	Neural Cell & Tissue Engineering Lab	4
ECE/NE 410		3
	ONeural Interface Engineering	3
CS 101	Intro Computing: Engrg & Sci (<u>CS 124</u> may be taken instead of <u>CS 101</u>	
MCB 150	Molec & Cellular Basis of Life	4
MCB 250	Molecular Genetics	3
MCB 252	Cells, Tissues & Development	3
PSYC 100	Intro Psych	4
Total Hours	The or Sych	54
Technical Elec	ctives	3.
	proved Neural Engineering Electives)	
(2.50 01 1.0 7.66	Course List	
Code Tit		Hours
	! hours from the following:	12
Bioengineering		
	ro Bio Control Systems	
	ro Synthetic Biology	
	munoengineering	
	roduction to Quantitative Pharmacology	
	ne Editing Lab	
	sue Engineering	
	omedical Computed Imaging Systems	
	atistical Analysis of Biomedical Images	
	mputational Mathematics for Machine Learning and Imaging	
	plied Deep Learning for Biomedical Imaging	
·	em Cell Bioengineering	
	plied High-Performance Computing for Imaging Science	
·	gulations, Ethics and Logistics in Biomedical Applications of Machine Lear	ning
	ecial Topics (Quantitative Pharmacology)	3
·	ecial Topics (Introduction to Synthetic Biology)	
·	ecial Topics (Soft Robotics)	
·	ecial Topics (Immunoengineering)	
·	Computer Engineering	
ECE 416 Bio	psensors	
	icon Photonics	
ECE 459 Co	mmunications Systems	
ECE 460 Op	tical Imaging	
ECE 461 Dig	gital Communications	
ECE 467 Bio	photonics	
ECE 470 Int	roduction to Robotics	
ECE 480 Ma	gnetic Resonance Imaging	
Mechanical Eng	ineering	
ME 483 Me	chanobiology	
Psychology		
PSYC 210Be	havioral Neuroscience	
PSYC 404Co	gnitive Neuroscience	

Code Title Hours

Physics

PHYS 475 Introduction to Biophysics

Free Electives

Course List

Code Title Hours

Additional coursework, subject to the Grainger College of Engineering restrictions to Free Electives, 12

so that there are at least 128 credit hours earned toward the degree.

Total Hours of Curriculum to Graduate 128

Corresponding

BS Bachelor of Science

Degree

Program Features

Academic Level Undergraduate

Does this major No

have transcripted concentrations?

What is the typical time to completion of this program?

4 years

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

128

CIP Code 140501 - Bioengineering and Biomedical

Engineering.

Is This a Teacher Certification Program?

No

Will specialized accreditation be sought for this program?

Yes

Describe the plans for seeking specialized accreditation:

ABET accreditation will ultimately be sought for this program following the graduation of the first cohort of students. When mapped to the bioengineering/biomedical engineering B.S. ABET criteria, the proposed curriculum satisfies criteria including engineering course hours.

Delivery Method

This program is

available:

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

Admission Requirements

status of the program?

No

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.

Application processing at the freshman level will be administered by the Office of Undergraduate Admissions, with requirements commensurate with standards of Grainger Engineering.

Admission Requirements for Freshmen:

- The general admission requirements of the University apply
- Application fee
- Self-reported academic record (SRAR)
- Official test scores Standardized test scores are required for admission review: either ACT (code 1154) or SAT I (code 1836) scores are accepted
- English proficiency
- o International students must score at least 100 on the iBT version of the English as a Foreign Language test (TOEFL); or 7 on each section of the IELTS.

For more detailed information regarding application requirements and the application process, please visit the University of Illinois Admissions website at: www.admissions.illinois.edu.

Admission Requirements for Inter-College/Department Transfer Students and Pre-Engineering Students (ICT/IDT/PREP)

- Students originating outside of the Grainger College of Engineering who entered the University of Illinois Urbana-Champaign as first time freshmen will be required to participate in the Pre-Engineering Program to be reviewed for transfer into Neural Engineering
- Pre-Engineering and current University students should demonstrate interest in the major by:
- Earning grades of "B" or better in introductory courses such as CHEM 102, 103; MATH 221, 231; PHYS 211; and MCB 150.
- Maintain a cumulative minimum GPA of 3.00 or higher
- Successfully complete the ICT or IDT transfer application

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.

This revision will not have an impact on enrollment and degrees awarded.

Estimated Annual Number of Degrees Awarded

What is the matriculation term for this program?

Fall

Budget

Are there

No

budgetary

implications for this revision?

Will the program or revision require staffing (faculty, advisors, etc.)

beyond what is currently available?

No Yes

Additional Budget

Information

Attach File(s)

Financial Resources

How does the unit intend to financially support this proposal?

As described in the budget section, the unit will support the new degree through strategic hiring of faculty as supported by existing commitments from Grainger Engineering and initially leveraging existing administrative resources, including BIOE program staff serving other degree programs in the department. Only one new introductory course needs to be offered during the first two years of the program. With the third cohort of students, we will hire a staff position to support operational procedures of the program.

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

No

Attach letters of support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

Engineering Differential

Are you seeking a change in the tuition rate or differential for this program?

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 revision will not impact faculty resources, numbers of faculty, class size, teaching loads, or student-faculty ratios.

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 program.

EP Documentation

EP Control

EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal

No

requires HLC

inquiry

DMI Documentation

Attach Final

Approval Notices

Banner/Codebook

BS:Neural Engineering - UIUC

Name

Program Code: 10KP6131BS

Minor Conc Degree BS Major Code Code Code Code

6131

Senate Approval

Date

Senate

Conference

Approval Date

BOT Approval

Date

IBHE Approval

Date

HLC Approval

Date

DOE Approval

Date

NA

Effective Date:

Attached
Document
Justification for
this request

Comments

Program Reviewer

Brooke Newell (bsnewell) (04/22/24 2:22 pm): Rollback: Email sent to Maddie

and per discussion with Melissa Newell.

Brooke Newell (bsnewell) (04/26/24 7:37 am): Rollback: Email sent to Maddie

Key: 1044

Date Submitted: 07/12/24 10:17 am

Viewing: 10KR1481BMUS: Musicology,

BMUS

Last approved: 02/08/22 4:00 pm

Last edit: 09/27/24 8:08 am

Changes proposed by: Nicole Turner

Musicology, BMUS

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program **Review**
- **2. 1495 Committee** Chair
- 3. 1495 Head
- 4. KR Dean
- 5. University Librarian
- **6. COTE Programs**
- 7. Provost
- 8. Senate EPC
- 9. Senate
- 10. U Senate Conf
- 11. Board of Trustees
- 12. IBHE
- 13. HLC
- 14. DMI

Approval Path

1. 07/25/24 12:45 pm Donna Butler

(dbutler):

Approved for U Program Review

2. 07/25/24 1:05 pm

Gayle Magee

(gsmagee):

Approved for 1495 Committee Chair

3. 08/07/24 4:22 pm

Linda Moorhouse

(moorhouz): Approved for 1495

Head

4. 09/06/24 8:44 am

Nicole Turner

(nicturn):

Approved for KR

Dean

5. 09/06/24 12:09 pm

Claire Stewart (clairest): Approved for University Librarian

- 6. 09/06/24 1:23 pm Suzanne Lee (suzannel): Approved for COTE Programs
- 7. 09/13/24 10:30 am Brooke Newell (bsnewell): Approved for Provost

History

- 1. Mar 21, 2019 by Deb Forgacs (dforgacs)
- 2. Jan 25, 2022 by Linda Moorhouse (moorhouz)
- 3. Feb 8, 2022 by Deb Forgacs (dforgacs)

Major (ex. Special Education)

This proposal is

for a: Revision

Administration Details

Official Program

Musicology, BMUS

Name

Diploma Title

Sponsor College Fine & Applied Arts

Sponsor

Music

Department

Sponsor Name <u>Megan Eagen-Jones</u> <u>Dr.Linda Moorhouse</u>

Sponsor Email <u>eagen@illinois.edu</u> <u>moorhouz@illinois.edu</u>

College Contact Dr. Nicole Turner College Contact

Email nicturn@illinois.edu

College Budget

Greg Anderson

Officer

College Budget

gnanders@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.

KR Dean Sponsor will edit proposal if rolled back.

Does this program have inter-departmental administration?

No

Proposal Title

Effective Catalog

Spring 2025

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)

Revise the Bachelor of Music in Musicology in the College of Fine and Applied Arts

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 description of what changes are being made to the program.

- (1) Add Gen Ed template and moved coursework that didn't already appear in the major into a newly added subcategory in the major
- (2) Removing footnotes and embedding into degree tables
- (3) Adding standard music requirements in college/unit designated space under graduation requirements above degree tables
- (4) Created lists for applied music lesson and ensemble course options, now listed in POS

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

No

Why are these changes necessary?

- (1) Update per Office of the Provost General Education initiative for transparency and accessibility;
- (2) Removed footnotes to allow for accessible reading of all requirements within the degree tables.
- (3) Added notes regarding auditions, applied music lesson and ensemble elective credit, music residency requirement, while keeping thesis information previously included.
- (4) Previously, students were instructed to complete lessons or ensembles either in the Undergrad Music Handbook or informed after consultation with advisor. This update of listing specific courses provides the requirements more clearly in the academic catalog or degree audit for transparency with students.

No change to total degree hours.

40 advanced hours are met by:

MUS 201 [MUS 102 and MUS 108] (2)

MUS 202 [MUS 201 and MUS 207] (2)

MUS 207 [MUS 108 and MUS 107] (2)

MUS 208 [MUS 207, MUS 108, MUS 107] (2)

MUS 313 (3)

MUS 314 (3)

MUS 419 (3)

Adv Musicology (12)

Adv Music Theory (6)

Ensemble-MUSC 400-level (8)

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.

Bachelor of Music graduates will:

<u>Understand</u>, apply, and integrate foundational concepts of musical study in theory, aural skills, history, composition, improvisation, and keyboard competency, and do so independently and cooperatively.

Demonstrate the ability to learn independently, make inquiries, think critically, discover solutions, and integrate knowledge across both similar and varied areas of musical study.

<u>Develop and demonstrate effective performance skills (technical and expressive) using critical thinking to inform historical and stylistic performance practices and artistic expression.</u>

<u>Develop and demonstrate effective communication skills, including artistic self-expression, with diverse audiences through multiple media.</u>

Acquire a basic understanding of diverse musical systems and traditions across the world, and develop a sensitivity to and awareness of cultural and societal differences, and their contribution to an interdependent global consciousness.

<u>Acquire an understanding of professional</u> <u>These revisions will not impact the learning outcomes</u> and <u>ethical responsibility as musicians and citizens, and demonstrate the ability to work professionally and effectively as leaders and collaborators.</u> <u>assessment of these outcomes.</u>

Acquire a basic understanding of technology and professional skills, along with knowledge of specific technological developments within area of specialization.

Appreciate how music interacts with communities to enhance and engage social and cultural identities and enrich lifelong learning.

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.

Revised programs <u>Musicology, BMUS Sample Sequence SP</u>

<u>25.docx</u>

Musicology BMUS side by side SP 25.docx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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

Graduation Requirements

Study Catalog

Minimum hours required for graduation: 120 hours.

Students who wish to study voice or an instrument for credit are required to satisfy the instrumental or vocal qualifying audition designed for students outside the School of Music.

<u>Credits earned in applied music lessons are generally considered elective.</u>

Minimum required major and supporting course work: A minimum The fourth-year student, working with an adviser, must complete a satisfactory thesis as part of twelve hours the requirements for the Bachelor of 400-level courses in Music must be taken on the Urbana-Champaign campus. in Musicology.

The fourth-year student, working with an adviser, must complete a satisfactory thesis as part of the requirements for the Bachelor of Music in Musicology.

University Requirements

Minimum of 40 hours of upper-division coursework, generally at the 300- or 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog.

General Education Requirements

Follows the campus General Education (Gen Ed) requirements. Some Gen Ed requirements may be met by courses required and/or electives in the program.

Course List

Code	Title	Hours
Composition I		<u>4-6</u>
Advanced Composition		<u>3</u>
Humanities & the Arts (6 hours)		<u>6</u>
fulfilled by MUS 313 and MUS 314		
Natural Sciences & Technology (6 hours)		<u>6</u>
Social & Behavioral Sciences (6 hours)		<u>6</u>
<u>Cultural Studies: Non-Western Cultures (1 course)</u>		<u>3</u>
Cultural Studies: US Minority Cultures (1 course)		<u>3</u>
Cultural Studies: Western/Comparative Cultures (1 co	<u>ourse)</u>	<u>3</u>
Quantitative Reasoning (2 courses, at least one cours	se must be Quantitative Reasoning I)	<u>6-10</u>

Code	Title	Hours
Language Requirement (Completion of the fourth semester or equivalent of a language other than	<u>0-20</u>
English is required)		
Orientation Requireme	<u>ents</u>	
Cour	se List	
Code Title	Hours	
FAA 101 Arts at Illinois	<u>1</u>	
MUS 100First-year Semi	nar for Music Majors0	
Total Hours	1	
Music Core		
	Course List	
Code	Title	Hours
Music Theory and Musici	<u>anship</u>	
MUS 101	Music Theory and Practice I	<u>2</u>
MUS 102	Music Theory and Practice II	<u>2</u>
MUS 201	Music Theory and Practice III	<u>2</u>
MUS 202	Music Theory and Practice IV	<u>2</u>
MUS 107	<u>Musicianship I</u>	<u>2</u>
MUS 108	Musicianship II	2 2 2 2 2 2 2 2
MUS 207	Musicianship III	<u>2</u>
MUS 208	<u>Musicianship IV</u>	<u>2</u>
Musicology		
MUS 110	Introd Art Mus: Intl Perspect	<u>3</u>
MUS 313	The History of Music I	3 3 3
MUS 314	The History of Music II	<u>3</u>
Keyboard Proficiency		
All students, except k	eyboard students, must demonstrate keyboard competency when they	
audition, by proficience	cy examination when they matriculate, or by enrolling in MUS 172 and/or	
MUS 173.		
MUS 172	Grp Instr Pno for Mus Major I	<u>2</u>
MUS 173	Grp Instr Pno for Mus Maj II	<u>2</u> <u>2</u>
Musicology Studies		
	Course List	
Code	Title	Hours
Applied Music Lessons (N	MUSC 100-level courses) 5	8
Applied Music Lessons (N	MUSC 400-level courses)	8
Ensemble (MUSC 400-le	vel courses) 6	8
<u>Music Lessons</u>		<u>16</u>
Students enroll in applie	d music on the same instrument or in voice each semester. It is strongly	
recommended that stude	ents in this major acquire a thorough practical knowledge of the piano	
beyond basic keyboard o	competency as part of the applied music study.	
Applied Music Lessons	s (years 1 & 2, 8 hours). Students choose from:	
MUSC 101, MUSC 102, MUSC 103, MUSC 110, MUSC 111, MUSC 112, MUSC 113, MUSC 114,		
MUSC 115, MUSC 116, MUSC 117, MUSC 120, MUSC 121, MUSC 122, MUSC 123, MUSC 124,		
MUSC 125, MUSC 126, MUSC 127, MUSC 128, MUSC 129, MUSC 130, MUSC 131, MUSC 132,		
MUSC 133, MUSC 134, MUSC 135, MUSC 136, MUSC 137, MUSC 138, MUSC 139, MUSC 140,		
MUSC 141, MUSC 142		
Applied Music Lessons (years 3 & 4, 8 hours). Students choose from:		

Code Title		Hours
MUSC 401, MUSC 402, MUSC 403, MUSC 410, MUSC 411	. MUSC 412. MUSC 413. MUSC 414.	riours
MUSC 415, MUSC 416, MUSC 417, MUSC 420, MUSC 421		
MUSC 425, MUSC 426, MUSC 427, MUSC 428, MUSC 429		
MUSC 433, MUSC 434, MUSC 435, MUSC 436, MUSC 437		
MUSC 441, MUSC 442	<u>, , , , , , , , , , , , , , , , , , , </u>	
Ensemble		<u>8</u>
Students choose from:		≚
MUSC 449, MUSC 460, MUSC 461, MUSC 462, MUSC 463	R MUSC 464 MUSC 465 MUSC 467	
MUSC 469, MUSC 473, MUSC 475, MUSC 476, MUSC 480		
MUS 242 Elements of Conducting	7, 1103C 401, 1103C 402, 1103C 403	2
MUS 299 Thesis/Adv UG Honors in Music		1 or
Thesis/Auv od Honors in Plusic		2
MUS 419 Sr Seminar in Musicology		3
Advanced Musicology (MUS 400-level courses)		12
,		6
Advanced Music Theory (MUS 400-level courses)		0-4
Foreign Language		0-4 12-16
Four courses in relevant discipline outside of Music 8	stor college level foreign language cours	
Students must complete the equivalent of a fourth-seme		₹
or demonstrate fourth-semester proficiency for graduation	<u>on.</u>	12.16
Four courses in relevant discipline outside of Music.	The second second second by	<u>12-16</u>
Chosen in consultation with the BMUS Musicology advisor	r. These courses may not be used to	
satisfy General Education requirements.		
Electives as needed to total 120 hours		120
Total Hours		<u>120</u>
This degree requires a minimum of 120 hours. General Educ	ation and College Orientation	
Code Title	Harris	
Code Title	Hours	
Orientation to Fine & Applied Arts and Music		
FAA 101 Arts at Illinois	1	
MUS 100 First year Seminar for Music Majors	0	
General Education and Graduation Requirements		
Composition I	4	
Advanced Composition	3	
Humanities and the Arts – fulfilled by MUS 313 and MUS 314		
Cultural Studies: Western/Comparative Culture(s)	3	
Cultural Studies: Non-Western Culture(s)	3	
Cultural Studies: US Minority Culture(s)	3	
Social and Behavioral Sciences	6	
Quantitative Reasoning I and II	6	
Natural Sciences and Technology	6	
Foreign Language 2	0-12	
1		
Six hours of General Education requirements in the Humani	ties and the Arts are met by courses requ	uired in
the BMUS degree (MUS 313 and MUS 314).		

The Language Requirement may be satisfied by successfully completing a third-semester college-level course in a language other than English; successful completion, in high school, of the third year of a language other than English; or demonstrating proficiency at the third-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.

- Music Core

Course List

Code	Title	Hours
Music Th	neory and Musicianship	
MUS 10	1Music Theory and Practice I	2
MUS 102	2Music Theory and Practice II	2
MUS 20	1Music Theory and Practice III	2
MUS 202	2Music Theory and Practice IV	2
MUS 107	7Musicianship I	2
MUS 108	8Musicianship II	2
MUS 207	7Musicianship III	2
MUS 208	8Musicianship IV	2
Musicolo	ogy	
MUS 110	OIntrod Art Mus: Intl Perspect	3
MUS 313	3The History of Music I 3	3
MUS 314	4The History of Music II	3
Keyboar	d	
MUS 172	2Grp Instr Pno for Mus Major I -	42
MUS 173	3Grp Instr Pno for Mus Maj II	2

3

Completion of both MUS 313%7C and MUS 314%7C meets the general education Humanities and the Arts requirement.

4

All students must demonstrate keyboard competency when they audition, by proficiency examination when they matriculate, or by enrolling in MUS 172 and/or MUS 173.

Musicology Studies

5

Students enroll in applied music on the same instrument or in voice each semester. It is strongly recommended that students in this major acquire a thorough practical knowledge of the piano beyond basic keyboard competency as part of the applied music study.

6

Musicology majors may satisfy their ensemble credit with MUSC 449. For a list of other approved ensembles, refer to the Undergraduate Music Handbook. A maximum of 10 hours of ensemble may be applied to the BMUS Musicology degree.

7

Students must complete the equivalent of a fourth-semester college-level foreign language course or demonstrate fourth-semester proficiency for graduation.

8

Chosen in consultation with the BMUS Musicology advisor. These courses may not be used to satisfy General Education requirements.

Program Features

Academic Level Undergraduate

Does this major

No

have transcripted concentrations?

What is the typical time to completion of this program?

4 years

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

120

CIP Code 500905 - Musicology and

Ethnomusicology.

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

Spring 2025

Admissions Term

Is this revision a change to the admission status of the program?

<u>No</u>

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.

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.

No impact.

Estimated Annual Number of Degrees Awarded

Year One Estimate

5th Year Estimate (or when

fully implemented)

What is the

Fall

matriculation term for this program?

Budget

Are there

Nο

budgetary

implications for this revision?

Will the program or revision require staffing (faculty, advisors, etc.)

beyond what is currently available?

No

Additional Budget

Information

N/A

Attach File(s)

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

Attach letters of

support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

FAA Differential N/A

Are you seeking a change in the tuition rate or differential for this program?

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.

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 major program revision.

EP Documentation

EP Control

EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal

requires HLC

inquiry

No

DMI Documentation

Attach Final

Approval Notices

Banner/Codebook

BMUS: Musicology - UIUC

Name

Program Code: 10KR1481BMUS

Minor Conc Degree BMUS Major Code Code Code Code

1481

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 Brooke Newell (bsnewell) (05/13/24 3:06 pm): Rollback: Email sent to Nicole

Key: 469

Date Submitted: 08/20/24 2:49 pm

Viewing: 10KR5720BFA: Art & Art

History, BFA

Last approved: 05/08/24 12:43 pm

Last edit: 09/27/24 8:08 am

Changes proposed by: Nicole Turner

Art & Art History, BFA

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program **Review**
- 2. 1526 Head
- 3. KR Dean
- 4. University Librarian
- **5. COTE Programs**
- 6. Provost

7. Senate EPC

- 8. Senate
- 9. U Senate Conf
- 10. Board of Trustees
- 11. IBHE
- 12. HLC
- 13. DMI

Approval Path

- 1. 08/27/24 4:36 pm Donna Butler (dbutler): Approved for U Program Review
- 2. 08/28/24 10:37 am

Melissa Pokorny (mpokorny):

Approved for 1526 Head

3. 09/09/24 2:20 pm Nicole Turner (nicturn):

Approved for KR

Dean

4. 09/09/24 2:39 pm Claire Stewart (clairest):

Approved for

University Librarian

5. 09/09/24 2:42 pm Suzanne Lee

(suzannel):

Approved for COTE Programs

6. 09/13/24 10:30 am Brooke Newell (bsnewell): Approved for Provost

History

- 1. Mar 22, 2019 by Deb Forgacs (dforgacs)
- 2. Sep 3, 2019 by Nicole Turner (nicturn)
- 3. Apr 2, 2020 by Mark Avery (mavery)
- 4. Apr 28, 2022 by Melissa Pokorny (mpokorny)
- 5. Feb 1, 2024 by Nicole Turner (nicturn)
- 6. May 8, 2024 by Nicole Turner (nicturn)

Major (ex. Special Education)

This proposal is

for a:

Revision

Administration Details

Official Program

Art & Art History, BFA

Name

Diploma Title Bachelor of Fine Arts in Art and Art History

Sponsor College Fine & Applied Arts

Sponsor

Art and Design

Department

Sponsor Name Melissa Pokorny

Sponsor Email mpokorny@illinois.edu

College Contact Nicole Turner College Contact

nicturn@illinois.edu

College Budget

Greg Anderson

Officer

College Budget

gnanders@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.

Email

KR Dean

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)

Revise the Bachelor of Fine Arts in Art & Art History in the College of Fine and Applied Arts

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

1- Add 3 credit hours of a ARTS or ARTD course (any level) to major requirements

description of what changes are being made to the 2- Clarifying ARTH as rubric for Art History in major requirements

program.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

No

Why are these changes necessary?

- 1- The previous revision erroneously removed 3 credit hours from the Art & Art History course requirements, resulting in one less 3-credit hour studio for majors. Studios in the unit are provided through the rubrics ARTS (studio art) and ARTD (graphic and industrial design). The faculty group has already voted and this is a correction to what was approved by unit faculty. The course addition is a broad option for students, any 3 credit hours of any ARTS or ARTD coursework. This makes the total category of any ARTS or ARTD requirements 15 hours. This reduces the expected number of free electives from 9 to 6 hours.
- 2- Under major, advanced art history adding in parentheses the ARTH rubric for student clarity.

No changes to total hours in the 122-hour degree.

40 hour upper division/advanced course requirement
One advanced art history course (300 or 400 level) not used elsewhere: 3 hours
ARTH 495: 6 hours

31 hours of other major courses, general education courses, or free electives

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.

- 1. Students will develop art historical knowledge and skills in tandem with their development of a studio or design practice.
- 2. Students will be able to demonstrate familiarity with key artistic monuments and modes of art production from various global contexts.
- 3. Students will be able to analyze and interpret works of art and architecture situated in a variety of historical and social contexts, and in comparative perspective.
- 4. Students will be able to use visual and verbal primary sources, secondary sources, and core critical frameworks of art historical analysis to develop and articulate persuasive arguments about works of art and the cultures that produced them.

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.

Revised programs Art & Art History sample schedule FA 24 round 3.docx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

A portfolio review is required for admission to the School of Art and Design.

Statement for

Programs of
Study Catalog

Minimum house requirements

Minimum hours required for graduation: 122 hours.

University Requirements

Minimum of 40 hours of upper-division coursework, generally at the 300- or 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the <u>Student Code</u> (§ 3-801) and in the <u>Academic Catalog</u>.

General Education Requirements

Follows the <u>campus General Education (Gen Ed) requirements</u>. Some Gen Ed requirements may be met by courses required and/or electives in Art and Design.

Course List	
Code Title	Hours
Composition I	4-6
Advanced Composition	3
Humanities & the Arts (6 hours)	6
fulfilled by ARTH 110 and any other course approved as Humanities & the Arts	
Natural Sciences & Technology (6 hours)	6
Social & Behavioral Sciences (6 hours)	6
Cultural Studies: Non-Western Cultures (1 course)	3
Cultural Studies: US Minority Cultures (1 course)	3
Cultural Studies: Western/Comparative Cultures (1 course)	3
fulfilled by ARTH 110	
Quantitative Reasoning (2 courses, at least one course must be Quantitative Reasoning I)	6-10
Language Requirement (Completion of the third semester or equivalent of a language other than	0-15
English is required)	

First Year Curriculum

Course List

Code	Title	Hours
<u>FAA 101</u>	Arts at Illinois	1
<u>ARTF 101</u>	Contemporary Issues in Art	2
<u>ARTE 101</u>	Art, Design, and Society	2
<u>ARTH 110</u>	Introduction to the History of Art and Visual Cultur	e3
ARTF 103	Design I	3
<u>ARTF 105</u>	Design II	3
Select one	Drawing course:	3
ARTF 10	2Observational Drawing	
ARTF 104Expressive Drawing		
ARTF 106Visualization Drawing		
Total Hours		17

Art History

Course List

Code Title Hours 6 courses at the 200-400 level (3 credit hours each) 18
Students must take at least one course in three of the following areas: 1) Africa and the Middle East;

2) Asia; 3) the Americas; 4) Europe; Students must also take at least one course that covers material before 1700 and one course must cover material after 1700.

Code Title Hours

Though students must take a total of 6 courses, some courses may count toward the fulfillment of more than one area and period requirement. For instance, a course in 20th century African art could count as a class covering both Africa and the Middle East and material after 1700. With an advisor's approval, up to 6 credit hours of courses in the history of architecture or landscape architecture at the 200-400 may be taken towards the fulfillment of these required hours.

Other courses may be approved in consultation with the advisor.

1. Africa and the Middle East

ARTH 436

1. Africa and the Middle East		
ARTH 310	African Art and Society I	
ARTH 312	Central African Art	
ARTH 313	Modern and Contemp African Art	
ARTH 410	West African Art and Ideas	
ARTH 413	Sacred African Diaspora Arts	
ARTH 219	Islamic Gardens & Architecture	
2. Asia		
<u>ARTH 212</u>	East Asian Art History	
<u>ARTH 214</u>	Art in China	
<u>ARTH 320</u>	Sacred Sites in Japan	
ARTH 402	Ways of Seeing in Edo Japan	
ARTH 403	Word and Image in Chinese Art	
ARTH 404	China through Film	
3. The Americas		
<u>ARTH 242</u>	Art Since 1940	
ARTH 250	American Art	
<u>ARTH 260</u>	Graffiti and Murals	
ARTH 342	Arts of Colonial Latin America	
<u>ARTH 343</u>	Arts of Modern Latin America	
4. Europe		
<u>ARTH 215</u>	Greek Art	
<u>ARTH 218</u>	Ancient Greek Sanctuaries	
<u>ARTH 222</u>	Medieval Art	
<u>ARTH 230</u>	Italian Renaissance Art	
<u>ARTH 231</u>	Northern Renaissance Art	
<u>ARTH 235</u>	Art, Power and Culture in 17th-Century Europe	
<u>ARTH 241</u>	Modern Art, 1880-1940	
<u>ARTH 242</u>	Art Since 1940	
ARTH 344	Spanish Modern Art	
ARTH 415	The Archaeology of Greece	
<u>ARTH 416</u>	The Archaeology of Italy	
ARTH 423	Romanesque Art	
<u>ARTH 424</u>	Gothic Art	
ARTH 430	Topics: Italian Art 1300-1500	
ARTH 431	Topics: Northern Art 1300-1500	
ARTH 432	Sixteenth-Century Italian Art	
ARTH 433	Fifteenth-Century Italian Art	
ARTH 435	Italian Baroque Art	
ADTH 426	17th Contury Dutch & Florich Art	

17th-Century Dutch & Flemish Art

Code	Title
ARTH 440	Romantic Art
ARTH 443	The Russian Avant-Garde: Revolutionary Forms and Socialist Norms
ARTH 445	European Art Between the Wars
ARTH 447	France and Its Others
At least one course	must cover material before 1700
ARTH 215	Greek Art
<u>ARTH 218</u>	Ancient Greek Sanctuaries
<u>ARTH 222</u>	Medieval Art
ARTH 230	Italian Renaissance Art
ARTH 231	Northern Renaissance Art
ARTH 235	Art, Power and Culture in 17th-Century Europe
ARTH 342	Arts of Colonial Latin America
ARTH 360	Women and the Visual Arts
ARTH 415	The Archaeology of Greece
ARTH 416	The Archaeology of Italy
ARTH 423	Romanesque Art
ARTH 424	Gothic Art
ARTH 430	Topics: Italian Art 1300-1500
ARTH 431	Topics: Northern Art 1300-1500
ARTH 432	Sixteenth-Century Italian Art
ARTH 433	Fifteenth-Century Italian Art
ARTH 435	Italian Baroque Art
ARTH 436	17th-Century Dutch & Flemish Art
ARCH 412	Medieval Architecture
ARCH 414	Baroque & Rococo Arch
At least one course	must cover material after 1700
<u>ARTH 211</u>	Design History Survey
<u>ARTH 240</u>	Art of the Nineteenth Century
<u>ARTH 242</u>	Art Since 1940
ARTH 257	History of Photography
<u>ARTH 260</u>	Graffiti and Murals
<u>ARTH 300</u>	Art Criticism and Writing
<u>ARTH 343</u>	Arts of Modern Latin America
<u>ARTH 344</u>	Spanish Modern Art
<u>ARTH 345</u>	Realism to Postimpressionism
ARTH 350	American Art 1750-1900
<u>ARTH 351</u>	Early American Modernism
<u>ARTH 361</u>	Contemporary Art
<u>ARTH 440</u>	Romantic Art
ARTH 443	The Russian Avant-Garde: Revolutionary Forms and Socialist Norms
<u>ARTH 445</u>	European Art Between the Wars
<u>ARTH 447</u>	France and Its Others
<u>ARTH 450</u>	Institutional Critique
ARCH 415	Modernity's Mirror: Nineteenth-Century Architecture 1750-1900
ARCH 416	The Architecture of the United States, c.1650 to Present
ARCH 417	Modern and Contemporary Global Architecture
One Advanced art h	nistory course (ARTH) 300 or 400 level not used elsewhere

Hours

Code	Title	Hours		
Total Hours		18		
Art History Sem	inar			
	Course List			
Code Title	Hours			
ARTH 495Undergra	aduate Seminar in Art History (3 hours, completed twice)6			
Art & Design Elec	ctives			
	Course List			
Code	Title	Hours		
4 ARTS or ARTD co	ourses (at any level)	12		
5 ARTS or ARTD co	ourses (at any level)	<u>15</u>		
Seven (7) addition	al courses in the School of Art and Design (at any level), including courses with	the 21		
following rubrics: A	ARTE, ARTD, ARTH, ARTJ or ARTS			
Total Hours		36		
Summary of Cred	dit Hours for the Bachelor of Fine Arts in Art and Art History			
	Course List			
Code	Title	Hours		
General Education				
First-Year Curriculu	um	17		
Art History		18		
Art History Semina	ar	6		
Art & Design Elect	tives	36		
Electives to bring the total hours earned to 122, including a minimum of 40 credits at the 300- or				
400-level.				
Total Hours		122		
Corresponding	BFA Bachelor of Fine Arts			

Degree

Program Features

Academic Level Undergraduate

Does this major No

have transcripted concentrations?

What is the typical time to completion of this program?

4 years

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

122

CIP Code 500703 - Art History, Criticism and

Conservation.

Is This a Teacher Certification Program?

No

Will specialized accreditation be sought for this program?

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

Is this revision a change to the admission status of the program?

No

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.

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.

No impact.

Estimated Annual Number of Degrees Awarded

Year One Estimate

5th Year Estimate (or when fully implemented)

What is the

Fall

matriculation term for this program?

Budget

Are there

No

budgetary

implications for

this revision?

Will the program or revision require staffing (faculty, advisors, etc.)

beyond what is currently available?

No

Additional Budget

Information

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

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

FAA Differential

Are you seeking a change in the tuition rate or differential for this program?

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.

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 major revision.

EP Documentation

EP Control

EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal

No

requires HLC

inquiry

DMI Documentation

Attach Final <u>U Program Review Comments KEY 537 Art & Art History, BFA</u>

Approval Notices 8 27 2024.docx

Banner/Codebook

BFA: Art & Art History - UIUC

Name

Program Code:

10KR5720BFA

MinorConcDegreeBFAMajorCodeCodeCodeCode

5720

Senate Approval

Date

Senate

Conference

Approval Date

BOT Approval

Date

IBHE Approval

Date

HLC Approval

Date

DOE Approval

n/a

Date

Effective Date:

Attached

Document

Justification for

this request

Program Reviewer

Comments

Brooke Newell (bsnewell) (08/27/24 9:16 am): U Program Review comments are attached in the DMI Documentation section

Brooke Newell (bsnewell) (09/09/24 3:37 pm): Edit that was made to clarify ARTH rubric caused unintentional course linking. Worked with College contact to correct that in the Program of Study.

Key: 537

Date Submitted: 04/29/24 3:46 pm

Viewing: 10KR5639BS: Computer

Science + Music, BS

Last approved: 03/17/22 9:33 am

Last edit: 09/27/24 8:02 am

Changes proposed by: Nicole Turner

Computer Science + Music, BS

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1495 Committee Chair
- 3. 1495 Head
- 4. 1434 Head
- 5. KP Committee Chair
- 6. KP Dean
- 7. KR Dean
- 8. University Librarian
- 9. COTE Programs
- 10. Provost
- 11. Senate EPC
- 12. Senate
- 13. U Senate Conf
- 14. Board of Trustees
- 15. IBHE
- 16. HLC
- 17. DMI

Approval Path

- 1. 05/02/24 7:49 am
 Donna Butler
 (dbutler):
 Approved for U
- Program Review 2. 06/04/24 11:05
 - am

Gayle Magee

(gsmagee):

Approved for 1495

Committee Chair

3. 06/21/24 11:23 am

Linda Moorhouse (moorhouz):

Approved for 1495

Head

4. 08/07/24 1:41 pm Margaret Fleck

	(mfleck):
	Approved for 1434
	Head
5	08/09/24 8:50 am
٥.	Ashley Hallock
	(ahallock):
	Approved for KP
	Committee Chair
_	
0.	08/09/24 9:52 am
	Cindy Pruitt
	(cpruitt):
	Approved for KP
_	Dean
/.	09/11/24 10:13
	am
	Nicole Turner
	(nicturn):
	Approved for KR
	Dean
8.	09/17/24 6:51 am
	Claire Stewart
	(clairest):
	Approved for
	University
	Librarian
9.	09/19/24 1:32 pm
	Suzanne Lee
	(suzannel):
	Approved for
	COTE Programs
10.	09/19/24 1:39 pm
	Brooke Newell
	(bsnewell):
	Rollback to KR
	Dean for Provost
11.	09/20/24 12:37
	pm
	Nicole Turner
	(nicturn):
	Approved for KR
	Dean
12.	09/23/24 10:23
	am
	Tom Teper
	(tteper): Approved
	for University
	Librarian
13.	09/23/24 11:12

am
Suzanne Lee
(suzannel):
Approved for
COTE Programs

14. 09/25/24 3:43 pm
Brooke Newell
(bsnewell):
Approved for
Provost

History

- 1. Feb 22, 2019 by Deb Forgacs (dforgacs)
- 2. Feb 22, 2019 by Deb Forgacs (dforgacs)
- 3. Sep 9, 2019 by Nicole Turner (nicturn)
- 4. Feb 3, 2020 by Deb Forgacs (dforgacs)
- 5. Sep 24, 2020 by Linda Moorhouse (moorhouz)
- 6. Mar 17, 2022 by Linda Moorhouse (moorhouz)

Major (ex. Special Education)

This proposal is for a:

Revision

Administration Details

Official Program

Computer Science + Music, BS

Name

Diploma Title

Sponsor College Fine & Applied Arts

Sponsor

Music

Department

Sponsor Name Dr. Linda Moorhouse

Sponsor Email moorhouz@illinois.edu

College Contact Dr. Nicole Turner College Contact

Email

nicturn@illinois.edu

College Budget

Greg Anderson

Officer

College Budget

gnanders@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.

Sponsor will edit proposal if rolled back.

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)

Please describe the oversight/governance for this program, e.g., traditional departmental/college governance. Inclusion of/roles of elected faculty committees? Inclusion of/roles of any advisory committees.

Computer Science oversees the courses in their area. The School of Music oversees the program.

College Grainger College of Engineering

Department Siebel School Comp & Data Sci

Is there an additional department involved in governance?

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)

Revise the Bachelor of Science in Computer Science + Music in the College of Fine and Applied Arts

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 description of what changes are being made to the program.

- (1) The formatting of the POS and additional text (e.g., graduation requirements, university requirements, and general education requirements) has been modified to adhere to the campus General Education Template;
- (2) Remove MUS 409 as a course requirement 2 credit hours;
- (3) Add MUS 209 as a course requirement 3 credit hours;
- (4) Increase of the major required coursework by 1 credit hour; the overall total hours of the degree program remains unchanged;
- (5) Clarify that MUS 299 is the thesis/project course.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

<u>No</u>

Why are these changes necessary?

- (1) Per Office of the Provost General Education initiative for transparency and accessibility.
- (2) MUS 409 is currently a requirement for CS+Music majors. This is an electroacoustic seminar focusing on composition projects and topic presentations. It is tangentially related to the CS+Music degree, and may be of interest to some students, but its status as a degree requirement is not fully justifiable. the materials taught in MUS 409 (musical instrument digital interface, sound design, digital audio engineering techniques, etc.,) are not as necessary as the background and historical significance of these topics, which are covered in MUS 407, Electronic Music Techniques I. The School of Music, Composition-Theory Area proposes it be removed. Students are welcome to take this course as an additional free elective if they wish.
- (3) Currently, MUS 209 is not a required course for CS+Music majors. This course, previously a music technology survey, has been reconfigured to provide a stronger foundation in musical acoustics. It is an essential study for students working with sound quantitatively or scientifically, and provides important context for other courses in the degree. This change would ensure all CS+Music students take this important fundamentals course in music acoustics. MUS 209 is a Nat Sci Gen Ed, so this information is added to the Gen Ed table and one less gen ed course is included in the sample schedule.
- (4) While the major required coursework is increasing by 1 credit hour, the overall total hours of the degree program remains unchanged.
- (5) The program of study previously listed both a senior project/thesis and MUS 299, but MUS 299 fulfills that requirement and it is listed underneath to better indicate this in the program of study.

```
40 advanced hours met by:
MUS 313 (3)
MUS 314 (3)
MUS 305 (3)
MUS 407 (3)
CS 361 (3)
CS 374 (4)
CS 421 (3)
CS 448 (3)
CS 340 or 341 (4)
ECE 402 (3)
MUS 201 [MUS 102 and MUS 108] (2)
MUS 207 [MUS 201 and MUS 207] (2)
MUS 208 [MUS 207, MUS 108, MUS 107] (2)
```

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?

Νo

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.

CS+Music graduates will demonstrate:

- An ability to acquire, understand, and integrate foundational knowledge in music and computer science, and to apply that knowledge to discover and engineer creative solutions to various types of complex problems.
- An ability to communicate, collaborate, and effectively engage with diverse people, teams, and communities.
- An understanding of how to apply musical practices and computer engineering principles with a mindfulness toward global cultural, economic, and societal differences.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies, in furtherance of a culture of lifelong learning. These revisions will not impact the learning outcomes and assessment of these outcomes.

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.

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.

Revised programs <u>CS + Music sample schedule.docx</u>

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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

Graduation Requirements

Study Catalog

Minimum hours required for graduation: 120 hours.

University Requirements

Minimum of 40 hours of upper-division coursework, generally at the 300- or 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog.

General Education Requirements

Follows the campus General Education (Gen Ed) requirements. Some Gen Ed requirements may be met by courses required and/or electives in the program.

Course List

Code Title	Hours
Composition I	<u>4-6</u>
Advanced Composition	<u>3</u>
Humanities & the Arts (6 hours)	<u>6</u>
fulfilled by MUS 313 and MUS 314	
Natural Sciences & Technology (6 hours)	<u>6</u>
fulfilled by MUS 209 and any other course approved as Natural Sciences & Technology	
Social & Behavioral Sciences (6 hours)	<u>6</u>
Cultural Studies: Non-Western Cultures (1 course)	<u>3</u>
Cultural Studies: US Minority Cultures (1 course)	<u>3</u>
Cultural Studies: Western/Comparative Cultures (1 course)	<u>3</u>
Quantitative Reasoning (2 courses, at least one course must be Quantitative Reasoning I)	<u>6-10</u>
fulfilled by CS 124, CS 128, CS 225, MATH 220 or MATH 221, MATH 231	

Code	Title		Hours
	(Completion of the third semester or equiv	valent of a language other tha	
English is required)			
Orientation			
	Course List		
Code Title		Hours	
Orientation to Fine & Ap	plied Arts and Music		
FAA 101 Arts at II		1	
MUS 100 First-year	r Seminar for Music Majors	0	
General Education and C	Graduation Requirements		
Composition I		4	
Advanced Composition		3	
Humanities and the Arts	fulfilled by MUS 313 and MUS 314	6	
Cultural Studies: Wester	n/Comparative Culture(s)	3	
Cultural Studies: Non-W	'estern Culture(s)	3	
Cultural Studies: U.S. M	inority Culture(s)	3	
Natural Sciences and Tec	chnology	6	
Social and Behavioral So	ciences	6	
Quantitative Reasoning	I and II - fulfilled by CS 124 and CS 128	6	
Language Other Than Er	nglish	0-12	
Specifics of the langu	age requirements are listed in the Course	-Explorer.	
<u>Music Core</u>			
General Education and C	College OrientationMusic Core		
	Course List		
Code	Title		Hours
Music Theory and Musici	ianship		
MUS 101	Music Theory and Practice I		2
MUS 102	Music Theory and Practice II		2
MUS 201	Music Theory and Practice III		2
MUS 202	Music Theory and Practice IV		2
MUS 107	Musicianship I		2
MUS 108	Musicianship II		2
MUS 207	Musicianship III		2
MUS 208	Musicianship IV		2
Musicology			
MUS 110	Introd Art Mus: Intl Perspect		3
MUS 313	The History of Music I		3
MUS 314	The History of Music II		3
Keyboard Proficiency			
	eyboard students, must demonstrate key	, , , ,	
1	cy examination when they matriculate, or	by enrolling in MUS 172 and/	or
MUS 173.			_
MUS 172	Grp Instr Pno for Mus Major I		2
MUS 173	Grp Instr Pno for Mus Maj II		2
CS + Music Studies			
6.4.	Course List		
Code Title		ŀ	Hours
Music			

Code	Title	Hours
MUS 105	Computation and Music I	2
MUS 205	Computation and Music II	2
MUS 209	Musical Acoustics	<u>3</u>
MUS 305	Computation and Music III	3
MUS 407	Elect Music Techniques I	3
MUS 409	Elec Music Techniques II	2
Senior Proje	ect or Senior Thesis	
MUS 299	Thesis/Adv UG Honors in Music	1 or 2
Computer S	cience	
<u>CS 124</u>	Introduction to Computer Science I	3
<u>CS 128</u>	Introduction to Computer Science II	3
<u>CS 173</u>	Discrete Structures	3
<u>CS 222</u>	Software Design Lab	1
<u>CS 225</u>	Data Structures	4
Choose one	of the following CS combinations:	
<u>CS 233</u>	Computer Architecture	8
& <u>CS 341</u>	and System Programming	
or		
CS 340 Intro	oduction to Computer Systems	
and any t	two 400-level CS courses above <u>CS 403</u> , excluding <u>CS 421</u> and <u>CS 491</u> (6-8 hours	s)
<u>CS 361</u>	Probability & Statistics for Computer Science	3
Students	who are more interested in systems building can substitute $\underline{\text{CS 427}}$ for $\underline{\text{CS 361}}$.	
<u>CS 374</u>	Introduction to Algorithms & Models of Computation	4
<u>CS 421</u>	Programming Languages & Compilers	3
<u>CS 448</u>	Audio Computing Laboratory	3 or 4
Engineering		
ECE 402	Electronic Music Synthesis	3
Math		
MATH 220	Calculus (Students must take the ALEKS placement exam for course entry)	4 or 5
or MATH 22	<u>1</u> Calculus I	
MATH 231	Calculus II	3
MATH 225	Introductory Matrix Theory	2 or 3
	Z Linear Algebra with Computational Applications	
Total Hours		120

Corresponding I

BS Bachelor of Science

Degree

Program Features

Academic Level Undergraduate

Does this major No

have transcripted concentrations?

What is the typical time to completion of this program?

4 years

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

120

CIP Code 110199 - Computer and Information

Sciences, Other.

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 Fall 2025

Admissions Term

Is this revision a change to the admission status of the program?

<u>No</u>

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.

There are two parts to the CS+Music application: a portfolio and an interview. The portfolio includes or links to examples of sound art / sound design that demonstrate the applicant's experience and readiness for the degree. The interview involves discussion of the applicant's background, educational interests, and professional goals, and concludes with an ear training and musicianship diagnostic evaluation.

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.

The revision will not impact enrollment.

Estimated Annual Number of Degrees Awarded

Year One Estimate 5th Year Estimate (or when

fully implemented)

What is the Fall matriculation term for this program?

Budget

Are there

No

budgetary

implications for

this revision?

Will the program or revision require staffing (faculty, advisors, etc.)

beyond what is currently available?

No

Additional Budget

Information

The revision will not impact staffing. N/A

Attach File(s)

Financial Resources

How does the unit intend to financially support this proposal?

The revision will not impact finances. No impact.

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

No

Attach letters of

support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

Engineering Differential N/A

Are you seeking a change in the tuition rate or differential for this program?

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.

The revision will 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 program revision.

EP Documentation

EP Control

EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal

No

requires HLC

inquiry

DMI Documentation

Attach Final

Approval Notices

Banner/Codebook

BS:Computer Sci & Music - UIUC

Name

Program Code: 10KR5639BS

Minor Conc Degree BS Major Code Code Code Code

5639

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

Brooke Newell (bsnewell) (11/06/23 10:11 am): Rollback: Email sent to Megan,

Nicole, and Linda

Brooke Newell (bsnewell) (04/25/24 11:39 am): Rollback: Email sent to Nicole

Brooke Newell (bsnewell) (04/29/24 3:44 pm): Rollback: Discussion with Nicole **Brooke Newell (bsnewell) (09/19/24 1:39 pm):** Rollback: Per review by Director for General Education, Under Quantitative Reasoning it should read: "fulfilled by CS 124, CS 128, CS 225, MATH 220 or MATH 221, MATH 231". Please revise the Program of Study table accordingly and move forward again in workflow.

Key: 136

Date Submitted: 08/20/24 2:36 pm

Viewing: 10KR5665BASA: Studio Art,

BASA

Last approved: 05/08/24 12:41 pm

Last edit: 09/27/24 8:02 am

Changes proposed by: Nicole Turner

Studio Art, BASA

Catalog Pages Studio Art: Fashion, BASA

Using this Studio Art: General Studio Art, BASA

Program <u>Studio Art: New Media, BASA</u>

Studio Art: Painting, BASA
Studio Art: Photography, BASA
Studio Art: Printmaking, BASA
Studio Art: Sculpture, BASA

2. 1526 Head

1. U Program Review

In Workflow

- 3. KR Dean
- 4. University Librarian
- **5. COTE Programs**
- 6. Provost
- 7. Senate EPC
- 8. Senate
- 9. U Senate Conf
- 10. Board of Trustees
- 11. IBHE
- 12. HLC
- 13. DMI

Proposal Type:

Approval Path

- 1. 08/27/24 4:36 pm Donna Butler (dbutler): Approved for U
 - Program Review
- 2. 08/28/24 10:37 am
 - Melissa Pokorny (mpokorny):
 - Approved for 1526 Head
- 3. 09/09/24 2:20 pm Nicole Turner
 - (nicturn):
 - Approved for KR
 - Dean
- 4. 09/09/24 2:38 pm
 - Claire Stewart
 - (clairest):
 - Approved for
 - University
 - Librarian
- 5. 09/09/24 2:41 pm Suzanne Lee
 - (suzannel):

- Approved for COTE Programs
- 6. 09/10/24 2:54 pm Brooke Newell (bsnewell): Rollback to KR Dean for Provost
- 7. 09/23/24 12:51 pm Nicole Turner (nicturn): Approved for KR Dean
- 8. 09/23/24 1:32 pm
 Tom Teper
 (tteper): Approved
 for University
 Librarian
- 9. 09/23/24 1:40 pm Suzanne Lee (suzannel): Approved for COTE Programs
- 10. 09/25/24 3:43 pm Brooke Newell (bsnewell): Approved for Provost

History

- 1. Mar 21, 2019 by Deb Forgacs (dforgacs)
- 2. May 1, 2019 by Mark Avery (mavery)
- 3. Sep 3, 2019 by Nicole Turner (nicturn)
- 4. Jun 10, 2020 by Deb Forgacs (dforgacs)
- 5. Apr 2, 2021 by Nicole Turner (nicturn)
- 6. Feb 2, 2024 by Nicole Turner

(nicturn) 7. May 8, 2024 by Nicole Turner (nicturn)

Major (ex. Special Education)

This proposal is

for a: Revision

Administration Details

Official Program

Studio Art, BASA

Name

Diploma Title

Bachelor of Arts in Studio Art

Sponsor College

Fine & Applied Arts

Sponsor

Art and Design

Department

Sponsor Name

Melissa Pokorny

Sponsor Email

mpokorny@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

KR Dean Nicole Turner; 1526 Head Melissa Pokorny

Does this program have inter-departmental administration?

Nο

needs rolled back. And any other stakeholders.

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)

Revise the Bachelor of Arts in Studio Art in Studio Art in the College of Fine and Applied Arts

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 description of what changes are being made to the program.

1- Add 3 credit hours of a 200-level ARTS (Studio Art rubric) course from a list to major requirements; 2-Change number of total Studio Art requirements from 16 to 19 credit hours

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

No

Why are these changes necessary?

- 1- The previous revision erroneously removed 3 credit hours from the BASA course requirements, resulting in one less 3-credit hour studio for majors. The faculty group has already voted and this is a correction to what was approved by unit faculty. The course addition is a broad option for students, any 3 credit hours of 200-level ARTS coursework which are studio art courses from a specific list of ARTS courses regularly offered.
- 2- This addition adds 3 credit hours of major studio art requirements, changing the total for the major from 16 to 19 credit hours.

No changes to total degree hours.

40 ADVANCED HOURS (300/400 LEVEL) ARE: 300-level ARTS course (3 hours)
ARTS 392 (3 hours)
400-level ARTS course (3 hours)
ARTS 448 (4 hours)
27 hours of ARTH or free electives

Note: This program includes 36 amount of free electives in the sample schedule.

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?

Nο

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.

Upon completion of the BASA:

- 1. Students will understand and be able to apply basic principles of visual and material communication, including two-dimensional pictorial concepts, three-dimensional formal and spatial concepts, and a wide variety of media and formats for artistic production, and possess the ability to apply them to a specific aesthetic intent.
- 2. Students will demonstrate an ability and willingness to experiment and explore the expressive possibilities of various media, and artistic and creative strategies for self-directed artmaking and investigate the diverse activities and conceptual modes available to the contemporary artist, including work that directly addresses or engages with recent developments in the field of fine art as well as broader social questions and challenges. Students are trained in the production and critique of artworks that explore forms and technologies identified as new or emerging.
- 3. Students will gain knowledge of, understand, and be able to apply concepts of visual rhetoric in the development of content, and be able to recognize and critically analyze an evolving variety of communicative practices in art and visual culture, including those that that represent diverse cultures and sociopolitical positions, and to demonstrate openness to new social possibilities and a critical empathy towards both audiences and culture producers of differing histories, origins and identities.
- 4. Students will be willing and able to investigate and accommodate broad-ranging types of knowledge and artistic strategies for the purpose of synthesizing diverse and even disparate ideas to create sophisticated, unique works of art, participate in new types of collaboration, and to make innovative statements and hypotheses, or propose creative solutions to social, organizational, and societal problems using aesthetic strategies.
- 5. Students will develop an innovative, imaginative, and entrepreneurial self-directed studio practice, will gain a deep understanding of their own creativity, be able to apply it in any context, and will learn to independently generate thematic investigation and implementation of research in a broad variety of social locations, including art and educational institutions, activist forums, and cyberspace. Students in the BASA will produce web and print based documents that serve to market and promote their practice as independent makers.

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

Describe here:

Student learning outcomes for the sophomore and junior years are assessed primarily via successful completion of art and design coursework. All courses in the school of art and design studio art program provide syllabi with stated learning goals and outcomes. Successful completion of these goals is determined through individual and group critiques following each assigned project. Individual student performance will be used to evaluate students' achievement of the course goals and will be evaluated by course instructors at the end of each term. The senior year culminates in a capstone course that requires the completion of a portfolio of work, as well as a written statement that adequately identifies the works intent and positions the work within the broader context of historical and current art practices. BASA students exhibit their work in a group exhibition, which provides an additional assessment mechanism of individual and group levels of achievement.

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.

Course grades, exhibition of artwork, and student feedback are used by program faculty to review and assess the attainment of program student learning outcomes and our last scheduled program meeting each May

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

All programs within the School of Art and Design assess student learning outcomes on an annual basis, in response to the CLOA annual update prompt. Program assessment is led by program chairs, who share assessment plans each fall with the Executive Associate Director and the Program Chairs Committee, followed by a report on plan outcomes and potential impact on program courses and curriculum each spring. The School also has a standing Committee on Outcomes and Assessment who have oversight of shared school-wide courses, curricula, and learning outcomes. Program standards are further assessed by the National Association of Schools of Art and Design, the primary accrediting organization for colleges, schools, and universities in the United States.

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.

Revised programs BASA FA

BASA FA 24 Sample Schedule round

BASA side by side FA 24.xlsx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

The Bachelor of Arts in Studio Art (BASA) focuses on the study of art, design, and art history in the context of a broader program of general study offered through the diverse research and teaching activities across the University of Illinois, Urbana/ Champaign campus. The BASA degree is intended for those students who have strong interests in blending the study of art and creative practices with coursework in other academic areas. It differs from the Bachelor of Fine Arts in that it offers students rigorous education in studio art for students who plan to pursue dual majors, minors, or advanced degrees in non-art fields, while integrating a studio art experience into their undergraduate studies.

First year courses for the BA in Studio Art introduce basic materials and conceptual approaches to making art, using traditional media including drawing and painting, printmaking, clay, plaster, wood and metal, to code, digital imaging, interactive media, and time-based applications.

The advanced BA Studio Art student can look forward to a changing menu of courses on a variety of studio practices and topics, taught by a diverse faculty with expertise in a wide variety of conceptual, material and technical strategies for making art. The BA Studio Art's curriculum offerings are designed to reflect an increasingly dynamic culture and provide students with experiences and skills that promote adaptability after graduation.

BA Studio Art students are provided with studio spaces housed in a communal studio building, where they pursue a self-determined studio practice. The communal studio configuration provides the geography for a strong, vibrant community of student-artists working together as they establish their focus and participate in exhibitions, performances, and critiques.

Students in the School of Art and Design must complete the Campus General Education requirements. Some Art and Design courses will also apply toward the General Education requirements.

A portfolio review is required for admission to the School of Art and Design.

Statement for

Programs of

Graduation Requirements

Study Catalog Minimum hours required for graduation: 122 hours.

University Requirements

Minimum of 40 hours of upper-division coursework, generally at the 300- or 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog. **General Education Requirements**

Follows the <u>campus General Education (Gen Ed) requirements</u>. Some Gen Ed requirements may be met by courses required and/or electives in Art and Design.

_		
Course		ıct
Course	_	J

Code	Title	Hours
Composition I		4-6
Advanced Composition		3
Humanities & the Arts (6 hours)		6
fulfilled by ARTH 110 and any	other course approved as Humanities & the Arts	
Natural Sciences & Technology (6	hours)	6
Social & Behavioral Sciences (6 h	ours)	6
Cultural Studies: Non-Western Cu	ultures (1 course)	3
Cultural Studies: US Minority Cult	tures (1 course)	3
Cultural Studies: Western/Compa	rative Cultures (1 course)	3
fulfilled by ARTH 110		
Quantitative Reasoning (2 course	s, at least one course must be Quantitative Reasoning I)	6-10
Language Requirement (Complet	ion of the third semester or equivalent of a language other than	0-15
English is required)		
First-Year Curriculum		

Course List

	Course List			
Code	Title		Hours	
<u>FAA 101</u>	Arts at Illinois		1	
<u>ARTF 101</u>	Contemporary I	ssues in Art	2	
ARTE 101	Art, Design, and	l Society	2	
<u>ARTH 110</u>	Introduction to	the History of Art and V	isual Culture3	
ARTF 103	Design I		3	
ARTF 105	Design II		3	
Select one Drawing course:			3	
ARTF 102Observational Drawing				
ARTF 104Expressive Drawing				
ARTF 106Visualization Drawing				
Total Hours	5		17	
Course List				
Code	Title	Hours		

Code Title Hours

Art History Requirements

200 level and above ARTH courses9

Total Hours 9

Course List

Code Title Hours

Studio Art requirements

200-level ARTS course from the following list:

ARTS 205 Introduction to Printmaking

ARTS 210 Ceramics Sculpture I

ARTS 220 Introduction to Fashion

ARTS 221 Fashion Illustration

ARTS 245 Beginning Illustration

Code	Title	Hours	
<u>ARTS 241</u>	Image Practice		
ARTS 243	<u>Time Arts I</u>		
ARTS 251	Beginning Painting		
ARTS 264	Basic Photography		
ARTS 280	Beginning Sculpture		
Any additional 200-level ARTS course		3	
300-level ARTS course		3	
ARTS 392	Current Art Issues Seminar	3	
400-level ARTS course		3	
<u>ARTS 448</u>	BASA Capstone Project	4	
Total Hours		19	
Course List			
Code	Title		Hours
Summary of credits for Bachelor of Arts in Studio Arts			
General Education Requirements			
First-Year Cu	rriculum Requirements		17
Art History Requirements			9
Studio Art Requirements			19
Free Electives			
A minimum of 40 credits at the 300 or 400 course level are required			
Total Hours		·	122

Corresponding

BASA Bachelor of Arts in Studio Art

Degree

Program Features

Academic Level Undergraduate

Does this major No

have transcripted concentrations?

What is the typical time to completion of this program?

4 years

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

122

CIP Code 500702 - Fine/Studio Arts, General.

Is This a Teacher Certification Program?

Νo

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

Is this revision a change to the admission status of the program?

No

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.

A portfolio review is required for admission to the School of Art & Design.

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.

No impact.

Estimated Annual Number of Degrees Awarded

Year One Estimate 5th Year Estimate (or when migration migration

fully implemented)

What is the Fall matriculation term for this

program?

Budget

Are there No

budgetary

implications for

this revision?

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?

No impact on current support.

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

No

Attach letters of

support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

Undergraduate FAA Differential

Are you seeking a change in the tuition rate or differential for this program?

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.

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 major revision

EP Documentation

EP Control

EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal

No

requires HLC

inquiry

DMI Documentation

Attach Final

Approval Notices

Banner/Codebook

BASA: Studio Art - UIUC

Name

Program Code: 10KR5665BASA

MinorConcDegreeBASAMajorCodeCodeCodeCode

5665

Senate Approval

Date

Senate

Conference

Approval Date

BOT Approval

Date

IBHE Approval

Date

HLC Approval

Date

DOE Approval n/a

Date

Effective Date:

Attached

Document

Justification for

this request

Program Reviewer

Comments

Brooke Newell (bsnewell) (08/27/24 9:09 am): No U Program Review Comments Brooke Newell (bsnewell) (09/10/24 2:54 pm): Rollback: Rolled back per request from Nicole Turner

Key: 665

Date Submitted: 07/23/24 3:07 pm

Viewing: 10KL0051BS: Natural

Resources & Environmental Sciences, BS

Last approved: 03/01/22 10:48 am

Last edit: 09/27/24 8:02 am

Changes proposed by: James Miller

Catalog Pages

Program

Natural Resources & Environmental Sciences: Ecosystem

Stewardship & Restoration Ecology, BS

Using this Natural Resources & Environmental Sciences: Environmental

Science & Management, BS

Natural Resources & Environmental Sciences: Fish, Wildlife & Conservation Biology, BS 10. Senate Natural Resources & Environmental Sciences: Human Dimensions of the Environment,

BS

Proposal Type:

In Workflow

- 1. U Program **Review**
- **2. 1875 Committee** Chair
- 3. 1875 Head
- 4. KL Committee Chair
- 5. KL Dean
- 6. University Librarian
- 7. COTE Programs
- 8. Provost
- 9. Senate EPC
- 11. U Senate Conf
- 12. Board of Trustees
- 13. IBHE
- 14. HLC
- 15. DMI

Approval Path

- 1. 08/06/24 12:05 pm
 - **Emily Stuby**
 - (eastuby):
 - Approved for U
 - Program Review
- 2. 08/07/24 3:20 pm James Miller
 - (jrmillr): Approved
 - for 1875
 - Committee Chair
- 3. 08/08/24 9:41 am
 - Robert Schooley
 - (schooley): Approved for 1875
 - Head
- 4. 09/20/24 1:28 pm Brianna Gregg
 - (bjgray2):
 - Approved for KL
 - Committee Chair

5. 09/23/24 10:02 am Anna Ball (aball): Approved for KL Dean

6. 09/23/24 10:19
am
Tom Teper
(tteper): Approved
for University
Librarian

7. 09/23/24 11:12 am Suzanne Lee (suzannel): Approved for COTE Programs

8. 09/25/24 3:43 pm Brooke Newell (bsnewell): Approved for Provost

9. 10/04/24 7:31 am
Barbara Lehman
(bjlehman):
Approved for
Senate EPC

History

- 1. Mar 22, 2019 by Deb Forgacs (dforgacs)
- 2. Jun 12, 2020 by Susan Helmink (shelmink)
- 3. Aug 8, 2020 by Susan Helmink (shelmink)
- 4. Mar 1, 2022 by Brianna Gregg (bjgray2)

Major (ex. Special Education)

This proposal is for a:

Revision

Administration Details

Official Program

Natural Resources & Environmental Sciences, BS

Name

Diploma Title

Sponsor College Agr, Consumer & Env Sciences

Sponsor

Natural Res & Env Science

Department

Sponsor Name Jim Miller, Professor and Chair of the NRES Courses and

Curriculum Committee

Sponsor Email

jrmillr@illinois.edu

College Contact

Brianna Gregq Tony Yannarell, Associate College Contact

Professor and Chair of the ACES Courses

and Curriculum Committee

bjgray2@illinois.edu acyann@illinois.edu

Email

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.

Initiator

Does this program have inter-departmental administration?

Νo

Proposal Title

Effective Catalog Fall 2025

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)

Revise the Bachelor of Science in Natural Resources & Environmental Sciences in the College of Agricultural, Consumer and Environmental Sciences

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)."

This BS proposal (key 86) is related to the department's four concentrations: Ecosystem Stewardship and Restoration Ecology (key 634); Environmental Science and Management (key 632); Fish, Wildlife, and Conservation Biology (key 631); and Human Dimensions of the Environment (key 633).

Program Justification

Provide a brief description of what changes are being made to the program.

- 1. Adding ABE 152, ACES 102, ATMS 140, CPSC 113, GEOL 118, MCB 150 and NPRE 101 as electives in our Science requirement.
- 2. Adding ACE 262 and STAT 107 as an electives in the Statistics requirement.
- 3. Removing ACE 261 as an elective in the Statistics requirement.
- 4. Removing RHET 105.
- 5. Adding ALEC 115 to the Communications requirement.
- 6. Revising responses to concentration questions in Program Features.
- 7. Changing the name of the Human Dimensions of the Environment concentration to Environmental Social Sciences.
- 8. Adding graduation requirements, university requirements, and general education requirements per Office of the Provost General Education Initiative.
- 9. Moving the coursework required in the Speech Requirement, Quantitative Reasoning, Natural Sciences and Technology, and Social and Behavioral Sciences into a new subheading called Major Requirements. We also created additional headings underneath this requirement to appropriately identify the coursework.
- 10. Listing courses in the POS Table vertically.
- 11. Revising text in the Program Regulation and Assessment section.
- 12. Update course number for NRES 285 to NRES 385.
- 13. Including the names of the concentrations in the Program of Study table.
- 14. Changing range of hours for concentration prescribed courses from 19-29 to 18 -

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/) $\underline{\text{No}}$

Why are these changes necessary?

- 1. Adding 7 electives in our Science requirement to relieve a bottleneck that students have been experiencing with our current list of electives.
- 2. Adding ACE 262 and STAT 107 as an electives in our Statistics requirement as a response to numerous student petitions to substitute this particular course, and faculty input on the merits of the course in meeting the requirement.
- 3. Removing ACE 261 as an elective in our Statistics requirement because it is no longer offered.
- 4. Removing RHET 105 because students should follow the campus guidelines for Composition 1 replacement.
- 5. Adding ALEC 115 as another option from our college to meet the Communications requirement.
- 6. Revising to be accurate.
- 7. Changing the name of the Human Dimensions of the Environment concentration to Environmental Social Sciences as the latter is more representative of current scholarship in the department. This is a more contemporary label that emphasizes the scientific basis of disciplines revolving around human-environment interactions rather than the management or communication related outcomes from social science research.
- 8. To create more consistency to the General Education program across campus and make it easier for students, advisors, and others to navigate our Academic Catalog Programs of Study pages, campus has requested majors to use the Gen Ed template.
- 9. To adhere to the campus standards for gen ed requirements and as such, more specific lists of courses are now listed in the major that happen to fulfill gen ed requirements.
- 10. Listing courses in the POS table vertically instead of horizontally to adhere to formatting guidelines.
- 11. Revising for accuracy.
- 12, Course number for NRES 285 was changed to NRES 385 because the course is taken by juniors and seniors. This change also facilitates adherence to the IBHE 40 Upper-Division Hour Criterion.
- 13. Including concentration names for increased transparency and as part of the campus-wide concentration project.
- 14. Range of hours for concentration prescribed courses has evolved over a long period of time and needed to be updated.

Interim Guidance Regarding Implementation of the IBHE 40 Upper-Division Hour Criterion

Students can meet the 40 hour of upper division coursework requirement by taking the following:

Major Coursework:

NRES 201 - 4 hrs (prerequisites: MATH 115, MATH 234, or equivalent, and CHEM 102)

NRES 325 - 3 hrs

NRES 385 - 2 hrs

NRES 348 - 3 hrs

NRES 421 - 3 hrs

NRES 454 - 4 hrs

NRES 456 - 3 hrs

Concentration Coursework:

range of upper division course hours: 18 - 22

Note: NRES 385 has been approved, effective Fall 2025, and will show as course not found until the Academic Catalog rolls to the next Academic Year, in early 2025. See CIM Course approval documents in the Program of Study section.

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?

Yes

Courses outside

of the sponsoring

department/

interdisciplinary

departments

ABE 152 - Water in Global Environment

ACES 102 - Intro Sustainable Food Systems

ATMS 140 - Climate and Global Change

CPSC 113 - Environment, Agric, & Society

GEOL 118 - Natural Disasters

MCB 150 - Molec & Cellular Basis of Life

NPRE 101 - Introduction to Energy Sources

STAT 107 - Data Science Discovery

RHET 105 - Writing and Research

ACE 262 - App Stat Mthds & Data AnlytcsI

ALEC 115 - Talk About Food, Ag, Env

Please attach any Comp I Rhet Update - English Support Letter 1 Feb 12 2024.pdf letters of support/ LetterofSupport STAT 107 as an elective in NRES curriculum.pdf

acknowledgement LetterofSupport_ABE 152_NRES.pdf

for any <u>LetterofSupport ACE 262 as an NRES elective.pdf</u>
Instructional <u>LetterofSupport ALEC 115 as an NRES elective.pdf</u>

Resources <u>LetterofSupport_ACES102_NRES.pdf</u>
consider faculty, <u>LetterofSupport_ATMS_140_support.pdf</u>
students, and/or <u>LetterofSupport_CPSC_113_LOS_NRES.pdf</u>

other impacted <u>LetterofSupport_GEOL 118 as NRES elective.pdf</u>

units as <u>LetterofSupport_MCB 150 LOS NRES.pdf</u>

appropriate. LetterofSupport_NPRE 101 as an elective in the NRES

curriculum.pdf

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.

Students graduating with the B.S. in NRES should be able to:

- 1. <u>Understand the scientific method/ways of knowing and critically evaluate</u> information.
- <u>2.</u> <u>Integrate principles of biological, chemical, physical, and social sciences and apply them to resource and environmental issues using a systems approach.</u>
- <u>3.</u> <u>Understand ecological principles underpinning management of resources, populations, communities, and ecosystems.</u>
- <u>4.</u> Use data collection and analysis tools (such as field methods, GIS, modeling, and statistics) to develop plans for managing resource/environmental challenges and adapt plans in response to rapid change.
- <u>5.</u> Understand the policies governing resources and the environment and identify social dimensions (stakeholders, interests, trade-offs, synergies, ethical principles) to consider in the development of management plans.
- <u>6.</u> <u>Communicate effectively with colleagues, stakeholders, and the public about environmental and resource management issues.</u>
- 7. Recognize how diverse groups understand the environment, experience positive and negative environmental impacts, and perceive just and equitable solutions. All subject areas/courses in the major have been selected because they specifically address the learning objectives of the major. We therefore intend to use student performance in these courses as benchmarks to ensure that students have achieved these educational goals. All courses in Natural Resources and Environmental Sciences regularly undergo peer-review assessments, and we will continue this practice for all courses in the major.

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

Describe here:

Student learning outcomes will be assessed via biannual course-based assessment and analysis of department and campus annual surveys. Course-based assessment focuses on major core requirements taken by all students. The department conducts an annual senior survey to gauge the perspective of graduating seniors on their level of knowledge and preparedness regarding the student learning outcomes. Data collected in the Chancellor's Senior Survey is also considered.

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.

For most direct measurements in all student learning outcomes, faculty expect 75% or 80% of students to score 80% or higher. Faculty expectations might be higher or lower depending on the item being assessed and prior performance.

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

An annual summary report will be produced by a subcommittee of the NRES Courses and Curriculum Committee, consisting of the Academic Advising Coordinator, Student Services Coordinator, and Undergraduate Teaching Coordinator. A report on the findings from assessment efforts in the previous academic year is presented at the monthly meeting of the NRES faculty in late September/early October each year. The NRES Courses and Curriculum Committee shall be responsible for utilizing the information from the report and faculty feedback to initiate curriculum improvements.

Program
Description and
Requirements
Attach Documents

Is the career/profession for graduates of this program regulated by the State of Illinois?

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.

Revised programs NRES sample sequence Major July

2024.xlsx

NRES 385 Field Experience course

approval.pdf

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

No changes

Statement for

Programs of

Graduation Requirements

Study Catalog Minimum hours for graduation: 126 hours.

University Requirements

Minimum of 40 hours of upper-division coursework generally at the 300- and 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog. Prescribed Courses including Campus

General Education Requirements

Follows the campus General Education (Gen Ed) requirements. Some Gen Ed requirements may be met by

	or electives in the program.	ince by
	Course List	
Code	Title	Hours
Composition I		<u>4-6</u>
Advanced Composition		3
Humanities & the Arts	<u>s (6 hours)</u>	<u>3</u> <u>6</u> 6
Natural Sciences & Te	chnology (6 hours)	<u>6</u>
fulfilled by CHEM 1	02, CHEM 104, IB 103; and IB 104 or IB 150; and ABE 152 or ACES 102 or	
ATMS 140 or CPSC	113 or GEOL 107 or GEOL 118 or GGIS 103 or MCB 100 or MCB 150 or	
NPRE 101 or PHYS	101 or PHYS 211	
Social & Behavioral Social &	ciences (6 hours)	<u>6</u>
fulfilled by ACE 100	<u>or ECON 102; and NRES 287</u>	
<u>Cultural Studies: Non-</u>	-Western Cultures (1 course)	<u>3</u>
<u>Cultural Studies: Wes</u>	tern/Comparative Cultures (1 course)	<u>3</u>
fulfilled by NRES 28	<u>87</u>	
	Minority Cultures (1 course)	<u>3</u>
	g (6-10 hours; at least one course must be Quantitative Reasoning I)	<u>6-10</u>
fulfilled by MATH 220 or MATH 221 or MATH 234; and ACE 262 or CPSC 241 or ECON 202 or		
PSYC 235 or SOC 280 or STAT 100 or STAT 107		
<u>Language Requirement (0-15 hours; completion of the third semester or equivalent of a language</u>		<u>0-15</u>
other than English is required)		
	Course List	
Code	Title	Hours
Major Requirements		
Select one of the follo	-	6-7
	Writing and Research	
& CMN 101	and Public Speaking (or equivalent) (see College Composition I	
requirement)		
Communications Requirement		<u>3 or</u>
Calaat frama the fall	lavvia av	<u>6</u>
Select from the follows		
CMN 101 Public Speaking		

Code	Title	Hours
<u>CMN 111</u>	Oral & Written Comm I	
& <u>CMN 112</u>	and Oral & Written Comm II	
Advanced Composition	ì	
Select from campus ap	pproved list	3-4
Cultural Studies		
Select one course from	n Western culture, one from non-Western culture, and one from U.S. minority	9
culture from campus a	approved lists.	
Foreign Language		
	ve the third level is required for graduation.	
Quantitative Reasoning	g I	
Select one of the follow	-	4 -5
<u>ALEC 115</u>	Let's Talk about Food, Agriculture, and the Environment	
Economics Requirement	<u>nt</u>	<u>3-4</u>
Select from the follo	<u>owing:</u>	
ACE 100	Introduction to Applied Microeconomics	
Select one additional of	course from campus approved list.	3-4
Natural Resources and	l Environmental Sciences Required (Core)	
ECON 102	<u>Microeconomic Principles</u>	
Math Requirement		4-5
Select from the follo	<u>owing:</u>	
<u>MATH 220</u>	Calculus	
MATH 221	Calculus I	
MATH 234	Calculus for Business I	
Quantitative Reasoning	g II	
Select one of the follow		3-4
ACE 261	Course ACE 261 Not Found	
Statistics Requirement	t =	<u>3-4</u>
Select from the follo		
ACE 262	Applied Statistical Methods and Data Analytics I	
<u>CPSC 241</u>	Intro to Applied Statistics	
ECON 202	Economic Statistics I	
<u>PSYC 235</u>	Intro to Statistics	
SOC 280	Intro to Social Statistics	
<u>STAT 100</u>	Statistics	
Natural Sciences and 1	Technology	
<u>STAT 107</u>	<u>Data Science Discovery</u>	
Science Requirements		<u>19-22</u>
<u>CHEM 102</u>	General Chemistry I	
& <u>CHEM 103</u>	and General Chemistry Lab I	
<u>CHEM 104</u>	General Chemistry II	
& <u>CHEM 105</u>	and General Chemistry Lab II	
<u>IB 103</u>	Introduction to Plant Biology	
<u>IB 104</u>	Animal Biology	
or <u>IB 150</u>	Organismal & Evolutionary Biol	
& <u>IB 151</u>	and Organismal & Evol Biol Lab	
Select one of the follow	_	3-5
Select one additional course from the following:		

Code	Title	Hours
ABE 152	Water in the Global Environment	
ACES 102	Intro Sustainable Food Systems	
ATMS 140	Climate and Global Change	
CPSC 113	Environment, Agriculture, and Society	
GEOL 107	Physical Geology	
GEOL 118	Natural Disasters	
GGIS 103	Earth's Physical Systems	
MCB 100	Introductory Microbiology	
Humanities and the A	,	
Select from campus a	approved list.	6
Social and Behavioral		
MCB 150	Molec & Cellular Basis of Life	
NPRE 101	Introduction to Energy Sources	
PHYS 101	College Physics: Mech & Heat	
PHYS 211	University Physics: Mechanics	
College of ACES Requ		<u>2</u>
ACES 101	Contemporary Issues in ACES	=
	d Environmental Sciences Requirements (Core)	<u>31-33</u>
NRES 102	Introduction to NRES	
NRES 201	Introductory Soils	
NRES 219	Applied Ecology	
NRES 287	Environment and Society	
NRES 325	Natural Resource Policy Mgmt	
NRES 348	Fish and Wildlife Ecology	
NRES 385	Course NRES 385 Not Found	
NRES 421	Quantitative Methods in NRES	
NRES 454	GIS in Natural Resource Mgmt	
NRES 456	Integrative Ecosystem Management	
NRES 285	Field Experience	1,2
One additional Field E	Experience course	1-2
NRES 285	Field Experience (repeatable)	
Select one addition	nal field experience course from the following:	
NRES 293	Professional Internship	
NRES 294	Resident Internship	
NRES 295	Undergrad Research or Thesis	
NRES 385	Course NRES 385 Not Found	
NRES 396	UG Honors Research or Thesis	
ACES Required		
Required Concentration	on	
Concentration prescr	ibed courses. See specific requirements for each concentration listed below.	18-22
Ecosystem Stewardship & Restoration Ecology		
Environmental Science & Management		
Environmental Social Sciences		
Fish Wildlife & Con	servation Biology	
Total Hours		126

Program Features

Academic Level Undergraduate

Does this major Yes No

have transcripted concentrations?

Will you admit to <u>Yes</u>

the concentration

directly?

Is a concentration

Yes

required for graduation?

What is the typical time to completion of this program?

4 years

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

126

CIP Code 030104 - Environmental Science.

Is This a Teacher Certification Program?

Nο

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 Fall 2025

Admissions Term

Is this revision a change to the admission status of the program?

<u>No</u>

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.

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.

No change.

Estimated Annual Number of Degrees Awarded

Year One Estimate 5th Year Estimate (or when

fully implemented)

What is the

Fall

matriculation term for this program?

Budget

Are there

No

budgetary

implications for

this revision?

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?

These changes only impact courses currently offered, so we do not anticipate any

financial costs to this revision.

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

No

Attach letters of

support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

NRES Differential

Are you seeking a change in the tuition rate or differential for this program?

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 is anticipated.

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

EP Documentation

EP Control

EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal

No

requires HLC

inquiry

DMI Documentation

Attach Final <u>U Program Review Comments KEY 86 8_6_2024.docx</u>

Approval Notices

Banner/Codebook

BS: NRES-UIUC

Name

Program Code: 10KL0051BS

Minor Conc Degree BS Major Code Code Code Code

0051

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 Brooke Newell (bsnewell) (02/23/24 12:18 pm): Rollback: Per discussion and email to James Miller.

Brooke Newell (bsnewell) (03/20/24 9:04 am): Rollback: Email sent to Jim. Brooke Newell (bsnewell) (04/10/24 1:07 pm): Rollback: Email sent to Jim. Brooke Newell (bsnewell) (05/17/24 12:33 pm): Rollback: Email sent to Jim. Brooke Newell (bsnewell) (05/22/24 11:39 am): Rollback: Email sent to Jim. Brooke Newell (bsnewell) (06/27/24 1:06 pm): Rollback: Per discussion with Jim Brooke Newell (bsnewell) (07/09/24 12:11 pm): Rollback: Email sent to Jim Brooke Newell (bsnewell) (07/23/24 12:11 pm): Rollback: Email sent to Jim Brooke Newell (bsnewell) (07/23/24 3:00 pm): Rollback: Per discussion with Jim.

Brooke Newell (bsnewell) (08/06/24 8:27 am): U Program Review Comments are attached in DMI Documentation section

Key: 86

Date Submitted: 07/23/24 3:35 pm

Viewing: 5685: Natural Resources &

Environmental Sciences: Environmental Science & Management, BS

Natural Resources & Environmental Sciences: Environmental

Last approved: 11/14/23 5:39 pm

Last edit: 09/27/24 8:03 am

Changes proposed by: James Miller

Catalog Pages

Science & Management, BS

Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1875 Committee Chair
- 3. 1875 Head
- 4. KL Committee
 Chair
- 5. KL Dean
- 6. University
 Librarian
- 7. COTE Programs
- 8. Provost
- 9. Senate EPC
- 10. Senate
- 11. U Senate Conf
- 12. Board of Trustees
- 13. IBHE
- 14. HLC
- 15. DMI

Approval Path

- 1. 08/06/24 12:05 pm Emily Stuby (eastuby):
- Approved for U Program Review 2. 08/07/24 3:20 pm
 - James Miller (jrmillr): Approved

for 1875

for 18/5

Committee Chair

3. 08/08/24 10:06

am

Robert Schooley (schooley):

Approved for 1875

Head

4. 09/20/24 1:28 pm Brianna Gregg (bjgray2): Approved for KL

Committee Chair

5. 09/23/24 10:02

am

Anna Ball (aball): Approved for KL

Dean

6. 09/23/24 10:21

am

Tom Teper

(tteper): Approved

for University

Librarian

7. 09/23/24 11:13

am

Suzanne Lee

(suzannel):

Approved for

COTE Programs

8. 09/25/24 3:43 pm

Brooke Newell

(bsnewell):

Approved for

Provost

History

- 1. Mar 18, 2019 by Deb Forgacs (dforgacs)
- 2. Jun 12, 2020 by Susan Helmink (shelmink)
- 3. Mar 16, 2022 by Brianna Gregg (bjgray2)
- 4. Nov 14, 2023 by Kathy Martensen (kmartens)

Concentration (ex. Dietetics)

This proposal is

for a:

Revision

Administration Details

Official Program Name Natural Resources & Environmental Sciences: Environmental Science & Management, BS Diploma Title

Sponsor College Agr, Consumer & Env Sciences

Sponsor

Natural Res & Env Science

Department

Sponsor Name Jim Miller, Professor and Chair of the NRES Courses and

Curriculum Committee

Sponsor Email jrmillr@illinois.edu

College Contact Brianna Gregg Tony Yannarell, Associate College Contact

Professor and Chair of the ACES Courses Email

and Curriculum Committee bygray2@illinois.edu acyann@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 Fall 2025

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)

Revise the Concentration in Environmental Science & Management in the Bachelor of Science in Natural Resources & Environmental Sciences in the College of Agricultural, Consumer and Environmental Sciences

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)."

This concentration proposal (Key 632) is related to the NRES, BS proposal (Key 86) and concentrations Environmental Social Science (Key 633), Fish Wildlife & Conservation Biology (631), and Ecosystem Stewardship & Restoration Ecology (Key 634).

Program Justification

Provide a brief description of what changes are being made to the program.

CHANGES TO THE MAJOR

- 1. Adding ABE 152, ACES 102, ATMS 140, CPSC 113, GEOL 118, MCB 150 and NPRE 101 as electives in our Science requirement.
- 2. Adding ACE 262 and STAT 107 as an electives in the Statistics requirement.
- 3. Removing ACE 261 as an elective in the Statistics requirement.
- 4. Removing RHET 105.
- 5. Adding ALEC 115 to the Communications requirement.
- 6. Moving the coursework required in the Speech Requirement, Quantitative Reasoning, Natural Sciences and Technology, and Social and Behavioral Sciences into a new subheading called Major Requirements. We also created additional headings underneath this requirement to appropriately identify the coursework.
- 7. Listing courses in the POS Table vertically.
- 8. Revising text in the Program Regulation and Assessment section.
- 9. Updating course number for NRES 285 to NRES 385.
- 10. Adding the major requirements into the Program of Study table as per campus request.
- 11. Adding graduation requirements, university requirements, and general education requirements per Office of the Provost General Education Initiative.

CHANGES TO THE CONCENTRATION

- 12. Removing NRES 402 as a core requirement in the NRES ESM concentration and replacing it with NRES 401.
- 13. Removing CEE (GGIS) 459, NRES 438, CPSC 336, UP 405 as electives in the NRES ESM concentration.
- 14. Adding NRES 482, NRES 455, ESE 445, ESE 482, GGIS 476, and IB 361 to the NRES ESM concentration.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

No

CHANGES TO THE MAJOR

- 1. Adding 7 electives in our Science requirement to relieve a bottleneck that students have been experiencing with our current list of electives.
- 2. Adding ACE 262 and STAT 107 as an electives in our Statistics requirement as a response to numerous student petitions to substitute this particular course, and faculty input on the merits of the course in meeting the requirement.
- 3. Removing ACE 261 as an elective in our Statistics requirement because it is no longer offered.
- 4. Removing RHET 105 because students should follow the campus guidelines for Composition 1 replacement.
- 5. Adding ALEC 115 as another option from our college to meet the Communications requirement.
- 6. To adhere to the campus standards for gen ed requirements and as such, more specific lists of courses are now listed in the major that happen to fulfill gen ed requirements.
- 7. Listing courses in the POS table vertically instead of horizontally to adhere to formatting guidelines.
- 8. Revising for accuracy.
- 9, Course number for NRES 285 was changed to NRES 385 because the course is taken by juniors and seniors. This change also facilitates adherence to the IBHE 40 Upper-Division Hour Criterion.
- 10. Adding the major requirements for increased transparency and accuracy.
- 11. To create more consistency to the General Education program across campus and make it easier for students, advisors, and others to navigate our Academic Catalog Programs of Study pages, campus has requested majors to use the Gen Ed template.

CHANGES TO THE CONCENTRATION

- 12. NRES 402 is no longer offered; NRES 401 is a substitute for NRES 402 in the concentration
- 13. CEE (GGIS) 459 has proven to be very difficult for our students and has rarely been taken. CPSC 336 and UP 405 are offered irregularly the former was last taught in 2021 and the latter in 2018.
- 14. NRES 482, NRES 455 and GGIS 476 are new since the last time the electives in the ESM concentration were revised and are considered suitable for this concentration. ESE 445, ESE 482, and IB 361 are also considered suitable electives for this concentration.

Interim Guidance Regarding Implementation of the IBHE 40 Upper-Division Hour Criterion

Students can meet the 40 hour of upper division coursework requirement by taking the following:

Major Coursework:

NRES 201 - 4 hrs (prerequisites: MATH 115, MATH 234, or equivalent, and CHEM 102)

NRES 325 - 3 hrs

NRES 385 - 2 hrs

NRES 348 - 3 hrs

NRES 421 - 3 hrs

NRES 454 - 4 hrs

NRES 456 - 3 hrs

Concentration Coursework:

NRES 351 - 3 hrs

NRES 401 - 3 hrs

NRES 475 - 3 hrs

Two soil and water science courses - 6-8 hrs

One environmental quality course - 3-4 hrs

range of upper division course hours in concentration: 18 - 21

Note: NRES 385 has been approved, effective Fall 2025, and will show as course not found until the Academic Catalog rolls to the next Academic Year, in early 2025. See CIM Course approval documents in the Program of Study section.

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?

Yes

Courses outside

of the sponsoring

department/

interdisciplinary

departments

ABE 152 - Water in Global Environment

ACES 102 - Intro Sustainable Food Systems

CPSC 113 - Environment, Agric, & Society

ATMS 140 - Climate and Global Change

GEOL 118 - Natural Disasters

MCB 150 - Molec & Cellular Basis of Life

NPRE 101 - Introduction to Energy Sources

ACE 262 - App Stat Mthds & Data AnlytcsI

STAT 107 - Data Science Discovery

RHET 105 - Writing and Research

ALEC 115 - Talk About Food, Ag, Env

GGIS 459 - Ecohydraulics

CPSC 336 - Tomorrow's Environment

ESE 445 - Earth Resources Sustainability

ESE 482 - Challenges of Sustainability

GGIS 476 - Environmental Remote Sensing

IB 361 - Ecology and Human Health

UP 405 - Watershed Ecology and Planning

Please attach any Comp I Rhet Update - English Support Letter 1 Feb 12 2024.pdf

letters of support/ NRES ESM concentration course addition letters.pdf
acknowledgement NRES ESM concentration course subtraction letters.pdf

for any LetterofSupport STAT 107 as an elective in NRES curriculum.pdf

Instructional <u>LetterofSupport_ABE_152_NRES.pdf</u>

Resources <u>LetterofSupport ACE 262 as an NRES elective.pdf</u> consider faculty, <u>LetterofSupport ALEC 115 as an NRES elective.pdf</u>

students, and/or LetterofSupport ACES102 NRES.pdf
other impacted LetterofSupport ATMS 140 support.pdf
units as LetterofSupport CPSC 113 LOS NRES.pdf

appropriate. <u>LetterofSupport_GEOL 118 as NRES elective.pdf</u>

LetterofSupport MCB 150 LOS NRES.pdf

LetterofSupport NPRE 101 as an elective in the NRES

curriculum.pdf

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.

Students graduating with the B.S. in NRES should be able to:

- 1. <u>Understand the scientific method/ways of knowing and critically evaluate information.</u>
- 2. <u>Integrate principles of biological, chemical, physical, and social sciences and apply them to resource and environmental issues using a systems approach.</u>
- <u>3. Understand ecological principles underpinning management of resources, populations, communities, and ecosystems.</u>
- <u>4.</u> <u>Use data collection and analysis tools (such as field methods, GIS, modeling, and statistics) to develop plans for managing resource/environmental challenges and adapt plans in response to rapid change.</u>
- <u>5.</u> Understand the policies governing resources and the environment and identify social dimensions (stakeholders, interests, trade-offs, synergies, ethical principles) to consider in the development of management plans.
- <u>6.</u> <u>Communicate effectively with colleagues, stakeholders, and the public about environmental and resource management issues.</u>
- 7. Recognize how diverse groups understand the environment, experience positive and negative environmental impacts, and perceive just and equitable solutions. All subject areas/courses in the major have been selected because they specifically address the learning objectives of the major. We therefore intend to use student performance in these courses as benchmarks to ensure that students have achieved these educational goals. All courses in Natural Resources and Environmental Sciences regularly undergo peer-review assessments, and we will continue this practice for all courses in the major.

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

Describe here:

Student learning outcomes will be assessed via biannual course-based assessment and analysis of department and campus annual surveys. Course-based assessment focuses on major core requirements taken by all students. The department conducts an annual senior survey to gauge the perspective of graduating seniors on their level of knowledge and preparedness regarding the student learning outcomes. Data collected in the Chancellor's Senior Survey is also considered.

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.

For most direct measurements in all student learning outcomes, faculty expect 75% or 80% of students to score 80% or higher. Faculty expectations might be higher or lower depending on the item being assessed and prior performance.

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

An annual summary report will be produced by a subcommittee of the NRES Courses and Curriculum Committee, consisting of the Academic Advising Coordinator, Student Services Coordinator, and Undergraduate Teaching Coordinator. A report on the findings from assessment efforts in the previous academic year is presented at the monthly meeting of the NRES faculty in late September/early October each year. The NRES Courses and Curriculum Committee shall be responsible for utilizing the information from the report and faculty feedback to initiate curriculum improvements.

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.

Revised programs NRES 385 Field Experience course

<u>approval.pdf</u>

NRES sample sequence ESM 2024

July.xlsx

NRES_ESM_curriculum_revision_proposal_2024

final.docx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

No changes

Statement for

Programs of

Graduation Requirements

Study Catalog Minimum hours for graduation: 126 hours.

University Requirements

Minimum of 40 hours of upper-division coursework generally at the 300- and 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog.

General Education Requirements

Follows the campus General Education (Gen Ed) requirements. Some Gen Ed requirements may be met by

courses required and/or electives in the program.			
Carla	Course List		
Code Title			Hours
Composition I			<u>4-6</u>
Advanced Compo			<u>3</u>
Humanities & the	· · · · · · · · · · · · · · · · · · ·		<u>6</u> <u>6</u>
	& Technology (6 hours)	ADE 152 av ACEC 102 av	<u>6</u>
	EM 102, CHEM 104, IB 103; and IB 104 or IB 150; and		
	CPSC 113 or GEOL 107 or GEOL 118 or GGIS 103 or Mi	CB 100 OF MCB 150 OF	
	PHYS 101 or PHYS 211		6
	ral Sciences (6 hours)		<u>6</u>
	E 100 or ECON 102; and NRES 287		2
	Non-Western Cultures (1 course)		<u>3</u>
	Western/Comparative Cultures (1 course)		<u>3</u>
fulfilled by NR			2
	US Minority Cultures (1 course)	Hall to December 1)	<u>3</u>
	soning (6-10 hours; at least one course must be Quant		<u>6-10</u>
	TH 220 or MATH 221 or MATH 234; and ACE 262 or CP	SC 241 or ECON 202 or	
	SOC 280 or STAT 100 or STAT 107		0.45
	ement (0-15 hours; completion of the third semester of	r equivalent of a language	<u>0-15</u>
other than Englis			
	Course List		
Code	Title	Hours	
Major Requireme			
Communications	<u> </u>	<u>3 or 6</u>	
Select from th			
<u>CMN 101</u>	Public Speaking		
CMN 111	Oral & Written Comm I		
	and Oral & Written Comm II		
ALEC 115	Let's Talk about Food, Agriculture, and the Environme		
Economics Requi		<u>3-4</u>	
Select from th			
<u>ACE 100</u>	Introduction to Applied Microeconomics		
ECON 102	Microeconomic Principles		
Math Requiremen		<u>4-5</u>	
Select from th			
<u>MATH 220</u>	<u>Calculus</u>		
MATH 221	<u>Calculus I</u>		
<u>MATH 234</u>	<u>Calculus for Business I</u>		
Statistics Require		<u>3-4</u>	
Select from the following:			
<u>ACE 262</u>	<u>Applied Statistical Methods and Data Analytics I</u>		
<u>CPSC 241</u>	Intro to Applied Statistics		
ECON 202 Economic Statistics I			
PSYC 235 Intro to Statistics			
SOC 280	Intro to Social Statistics		
STAT 100 Statistics			
<u>STAT 107</u>	<u>Data Science Discovery</u>		

Code	Title		Hours
			19-22
Science Requirements CHEM 102 Congral Chemistry I			19-22
<u>CHEM 102</u> <u>General Chemistry I</u> <u>& CHEM 103</u> <u>and General Chemistry Lab I</u>			
CHEM 104 General Chemistry II & CHEM 105 and General Chemistry Lab II			
IB 103	Introduction to Plant Biology		
IB 104	Animal Biology		
or IB 150			
& IB 151	and Organismal & Evol Biol Lab		
	Iditional course from the following:		
ABE 152	Water in the Global Environment		
ACES 102	Intro Sustainable Food Systems		
ATMS 140	Climate and Global Change		
CPSC 113	Environment, Agriculture, and Society		
GEOL 118	Physical Geology		
GEOL 118	Natural Disasters Farth's Physical Systems		
GGIS 103	Earth's Physical Systems		
MCB 150	Introductory Microbiology		
MCB 150	Molec & Cellular Basis of Life		
NPRE 101	Introduction to Energy Sources		
PHYS 101	College Physics: Mech & Heat		
PHYS 211	University Physics: Mechanics		2
College of ACES	Requirements (Core)		<u>2</u>
A OF C 4 C 4			
ACES 101	Contemporary Issues in ACES	(6)	24 22
Natural Resourc	es and Environmental Sciences Requirem	nents (Core)	<u>31-33</u>
Natural Resource	es and Environmental Sciences Requirem Introduction to NRES	nents (Core)	<u>31-33</u>
Natural Resource NRES 102 NRES 201	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils	nents (Core)	<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology	nents (Core)	<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society	nents (Core)	31-33
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt	nents (Core)	<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology	nents (Core)	31-33
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found	nents (Core)	<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 421	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES	nents (Core)	<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 421 NRES 454	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt	nents (Core)	<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 421 NRES 454 NRES 456	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt Integrative Ecosystem Management		<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 348 NRES 348 NRES 454 NRES 454 NRES 456 Select one acceptance	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt Integrative Ecosystem Management Iditional field experience course from the		<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 421 NRES 454 NRES 456 Select one acounty of the select one acou	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt Integrative Ecosystem Management Iditional field experience course from the		<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 421 NRES 454 NRES 456 Select one ac NRES 293 NRES 294	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt Integrative Ecosystem Management Integrative Ecosystem Management Iditional field experience course from the Professional Internship Resident Internship		<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 421 NRES 454 NRES 456 Select one act NRES 293 NRES 294 NRES 295	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt Integrative Ecosystem Management Iditional field experience course from the Professional Internship Resident Internship Undergrad Research or Thesis		<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 421 NRES 454 NRES 456 Select one ac NRES 293 NRES 294 NRES 295 NRES 385	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt Integrative Ecosystem Management Iditional field experience course from the Professional Internship Resident Internship Undergrad Research or Thesis Course NRES 385 Not Found		31-33
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 421 NRES 454 NRES 456 Select one act NRES 293 NRES 294 NRES 295	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt Integrative Ecosystem Management Iditional field experience course from the Professional Internship Resident Internship Undergrad Research or Thesis Course NRES 385 Not Found UG Honors Research or Thesis		<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 421 NRES 454 NRES 456 Select one ac NRES 293 NRES 294 NRES 295 NRES 385 NRES 396	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt Integrative Ecosystem Management Iditional field experience course from the Professional Internship Resident Internship Undergrad Research or Thesis Course NRES 385 Not Found UG Honors Research or Thesis Course List	following:	<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 421 NRES 454 NRES 456 Select one ac NRES 293 NRES 294 NRES 295 NRES 385 NRES 385 NRES 396 Code Title	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt Integrative Ecosystem Management Iditional field experience course from the Professional Internship Resident Internship Undergrad Research or Thesis Course NRES 385 Not Found UG Honors Research or Thesis Course List e		<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 454 NRES 456 Select one acc NRES 293 NRES 294 NRES 295 NRES 385 NRES 385 Code Titl Concentration Comparison	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt Integrative Ecosystem Management Iditional field experience course from the Professional Internship Resident Internship Undergrad Research or Thesis Course NRES 385 Not Found UG Honors Research or Thesis Course List e Fore Requirements	following:	<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 421 NRES 454 NRES 456 Select one act NRES 293 NRES 294 NRES 295 NRES 385 NRES 396 Code Titl Concentration Concen	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt Integrative Ecosystem Management Iditional field experience course from the Professional Internship Resident Internship Undergrad Research or Thesis Course NRES 385 Not Found UG Honors Research or Thesis Course List e Fore Requirements For Requirements	following: Hours	<u>31-33</u>
Natural Resource NRES 102 NRES 201 NRES 219 NRES 287 NRES 325 NRES 348 NRES 385 NRES 454 NRES 456 Select one accompanies 293 NRES 294 NRES 295 NRES 385 NRES 396 Code Titl Concentration Concentrati	es and Environmental Sciences Requirem Introduction to NRES Introductory Soils Applied Ecology Environment and Society Natural Resource Policy Mgmt Fish and Wildlife Ecology Course NRES 385 Not Found Quantitative Methods in NRES GIS in Natural Resource Mgmt Integrative Ecosystem Management Iditional field experience course from the Professional Internship Resident Internship Undergrad Research or Thesis Course NRES 385 Not Found UG Honors Research or Thesis Course List e Fore Requirements	following:	<u>31-33</u>

Code	Title	Hours
NRES 401	Watershed Hydrology	<u>3</u>
NRES 475	Environmental Microbiology	3
Concentrati	on Elective Requirements	
Two Soil an	d Water Science Courses	6-8
NRES 42	9Aquatic Ecosystem Conservation	
NRES 47	<u>1</u> Pedology	
NRES 47	4Soil and Water Conservation	
CPSC 33	6Tomorrow's Environment	
NRES 48	2Aquatic Biogeochemistry	
NRES 48	Stream Ecosystem Management	
NRES 48	<mark>7</mark> Soil Chemistry	
NRES 48	8Soil Fertility and Fertilizers	
NRES 49	OSurface Water System Chemistry	
ABE 454	Environmental Soil Physics	
GGIS 40	<u>6</u> Fluvial Geomorphology	
GGIS 45	9 Ecohydraulics	
One Enviror	nmental Quality Course	3-4
NRES 40	3Watersheds and Water Quality	
NRES 43	8Soil Nutrient Cycling	
NRES 45	<u>5Advanced GIS for Environmental Managemer</u>	<u>nt</u>
ATMS 44	9Biogeochemical Cycles	
CPSC 43	<u>1</u> Plants and Global Change	
ESE 320	Water Planet, Water Crisis	
ESE 445	Earth Resources Sustainability	
ESE 482	Challenges of Sustainability	
GEOL 38	OEnvironmental Geology	
GGIS 47	<u>6 Environmental Remote Sensing</u>	
<u>IB 361</u>	Ecology and Human Health	
ETMA 35	2Land and Water Mgt Systems	
UP 405	Watershed Ecology and Planning	
Total Conce	entration Hours	18-21
<u>Total Hours</u>		<u>126</u>

Program Relationships

Corresponding

Program(s):

Corresponding Program(s)

Natural Resources & Environmental Sciences, BS

Program Features

Academic Level Undergraduate

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.

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 do not anticipate impacts on enrollment or degrees awarded.

Budget

Are there

No

budgetary

implications for

this revision?

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?

These changes only impact courses currently offered, so we do not anticipate any financial costs to this revision.

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

No

Attach letters of support

Faculty Resources

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

Faculty resources are sufficient to support this proposal.

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

EP Documentation

EP Control

EP.25.014

No

Number

Attach Rollback/ Approval Notices

This proposal

requires HLC

inquiry

DMI Documentation

Attach Final <u>U Program Review Comments KEY 632 8_6_2024.docx</u>

Approval Notices

Banner/Codebook

Environmental Science and Management

Name

Program Code: 5685

Minor Conc 5685 Degree BS Major Code Code Code Code

0051

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 **Brooke Newell (bsnewell) (08/06/24 8:27 am):** U Program Review Comments are attached in DMI Documentation section

Brooke Newell (bsnewell) (09/24/24 11:05 am): Compiled NRES ESM concentration course addition letters.pdf letter of support includes letters of support for ESE 445, ESE 467 and ESE 482; GGIS 476; and IB 329, IB 361, IB 407, and IB 444. Compiled NRES ESM concentration course subtraction letters.pdf includes letters of acknowledgement for CPSC 336; CEE 432 and CEE 459; and UP 405.

Key: 632

Date Submitted: 07/23/24 3:34 pm

Viewing: 5686: Natural Resources & Environmental Sciences: Ecosystem Stewardship & Restoration Ecology, BS

Last approved: 06/12/20 11:20 am

Last edit: 09/27/24 8:03 am

Changes proposed by: James Miller

Catalog Pages

Using this Program Natural Resources & Environmental Sciences: Ecosystem Stewardship & Restoration Ecology, BS

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1875 Committee Chair
- 3. 1875 Head
- 4. KL Committee Chair
- 5. KL Dean
- 6. University
 Librarian
- 7. COTE Programs
- 8. Provost
- 9. Senate EPC
- 10. Senate
- 11. U Senate Conf
- 12. Board of Trustees
- 13. IBHE
- 14. HLC
- 15. DMI

Approval Path

- 1. 08/06/24 12:05 pm Emily Stuby (eastuby): Approved for U
- 08/07/24 3:20 pm James Miller (jrmillr): Approved for 1875 Committee Chair

Program Review

3. 08/08/24 10:10 am

Robert Schooley (schooley):
Approved for 187

Approved for 1875

Head

4. 09/20/24 1:28 pm Brianna Gregg (bjgray2): Approved for KL

Committee Chair 5. 09/23/24 10:02 am Anna Ball (aball): Approved for KL Dean 6. 09/23/24 10:21 am Tom Teper (tteper): Approved for University Librarian 7. 09/23/24 11:13 am Suzanne Lee (suzannel): Approved for **COTE Programs** 8. 09/24/24 11:50 am Brooke Newell (bsnewell): Rollback to KL Committee Chair for Provost 9. 09/24/24 12:26 pm Brianna Gregg (bjgray2): Approved for KL Committee Chair 10. 09/24/24 12:53 pm Anna Ball (aball): Approved for KL Dean 11. 09/24/24 1:19 pm Tom Teper (tteper): Approved for University Librarian 12. 09/24/24 1:54 pm Suzanne Lee (suzannel): Approved for **COTE Programs** 13. 09/25/24 3:43 pm **Brooke Newell**

(bsnewell): Approved for Provost

History

- 1. Mar 18, 2019 by Deb Forgacs (dforgacs)
- 2. Jun 12, 2020 by Susan Helmink (shelmink)

Concentration (ex. Dietetics)

This proposal is

for a:

Revision

Administration Details

Official Program Natural Resources & Environmental Sciences:

Name Ecosystem Stewardship & Restoration Ecology, BS

Diploma Title

Sponsor College Agr, Consumer & Env Sciences

Sponsor

Natural Res & Env Science

Department

Sponsor Name Jim Miller, Professor and Chair of the NRES Courses and

Curriculum Committee

Sponsor Email jrmillr@illinois.edu

College Contact Brianna Gregg Tony Yannarell, Associate College Contact

Professor and Chair of the ACES Courses Email

and Curriculum Committee <u>bjgray2@illinois.edu</u> acyann@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 Fall 2025

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)

Revise the Concentration in Ecosystem Stewardship & Restoration Ecology in the Bachelor of Science in Natural Resources & Environmental Sciences in the College of Agricultural, Consumer and Environmental Sciences

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)."

This concentration proposal (Key 634) is related to the NRES, BS proposal (Key 86) and concentrations Environmental Social Science (Key 633), Environmental Science & Management (Key 632), and Fish Wildlife & Conservation BIology (Key 631).

Program Justification

Provide a brief description of what changes are being made to the program.

CHANGES TO THE MAJOR

- 1. Adding ABE 152, ACES 102, ATMS 140, CPSC 113, GEOL 118, MCB 150 and NPRE 101 as electives in our Science requirement.
- 2. Adding ACE 262 and STAT 107 as an electives in the Statistics requirement.
- 3. Removing ACE 261 as an elective in the Statistics requirement.
- 4. Removing RHET 105.
- 5. Adding ALEC 115 to the Communications requirement.
- 6. Moving the coursework required in the Speech Requirement, Quantitative Reasoning, Natural Sciences and Technology, and Social and Behavioral Sciences into a new subheading called Major Requirements. We also created additional headings underneath this requirement to appropriately identify the coursework.
- 7. Listing courses in the POS Table vertically.
- 8. Revising text in the Program Regulation and Assessment section.
- 9. Updating course number for NRES 285 to NRES 385.
- 10. Adding the major requirements into the Program of Study table as per campus

request.

11. Adding graduation requirements, university requirements, and general education requirements per Office of the Provost General Education Initiative.

CHANGES TO THE CONCENTRATION

- 12. Removing NRES 402, CEE 432, and UP 405 as electives in the NRES ESRE concentration.
- 13, Adding NRES 407, IB 329, IB 444, NRES 409, NRES 434, NRES 455, NRES 480, NRES 482, and GGIS 476 as electives in the NRES ESRE concentration.
- 14. Changing the range of course hours under Concentration Elective Requirements Two Ecology courses from 6-7 to 6-8 which also shifts the total concentration hours from 19-21 to 19-22

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

<u>No</u>

CHANGES TO THE MAJOR

- 1. Adding 7 electives in our Science requirement to relieve a bottleneck that students have been experiencing with our current list of electives.
- 2. Adding ACE 262 and STAT 107 as an electives in our Statistics requirement as a response to numerous student petitions to substitute this particular course, and faculty input on the merits of the course in meeting the requirement.
- 3. Removing ACE 261 as an elective in our Statistics requirement because it is no longer offered.
- 4. Removing RHET 105 because students should follow the campus guidelines for Composition 1 replacement.
- 5. Adding ALEC 115 as another option from our college to meet the Communications requirement.
- 6. To adhere to the campus standards for gen ed requirements and as such, more specific lists of courses are now listed in the major that happen to fulfill gen ed requirements.
- 7. Listing courses in the POS table vertically instead of horizontally to adhere to formatting guidelines.
- 8. Revising for accuracy.
- 9, Course number for NRES 285 was changed to NRES 385 because the course is taken by juniors and seniors. This change also facilitates adherence to the IBHE 40 Upper-Division Hour Criterion.
- 10. Adding the major requirements for increased transparency and accuracy.
- 11. To create more consistency to the General Education program across campus and make it easier for students, advisors, and others to navigate our Academic Catalog Programs of Study pages, campus has requested majors to use the Gen Ed template.

CHANGES TO THE CONCENTRATION

- 12. NRES 402 is no longer offered. CEE 432 was last taught in 2019 and UP 405 was last taught in 2018.
- 13. NRES 455, NRES 480, NRES 482, and NRES 434 are new since the last time the electives in the ESRE concentration were revised and are considered suitable for this concentration. NRES 407, IB 329, IB 444, NRES 409, and GGIS 476 are also considered suitable electives for this concentration.
- 14. The range of course hours changed with the addition of new courses.

Interim Guidance Regarding Implementation of the IBHE 40 Upper-Division Hour

Criterion

Students can meet the 40 hour of upper division coursework requirement by taking the following:

Major Coursework:

NRES 201 - 4 hrs (prerequisites: MATH 115, MATH 234, or equivalent, and CHEM 102)

NRES 325 - 3 hrs

NRES 385 - 2 hrs

NRES 348 - 3 hrs

NRES 421 - 3 hrs

NRES 454 - 4 hrs

NRES 456 - 3 hrs

Concentration Coursework:

NRES 419 - 3 hrs

NRES 420 - 4 hrs

NRES 465 - 3 hrs

Two ecology courses - 6-8 hrs

One ecosystem or management course - 3-4 hrs

range of upper division course hours in concentration: 19 - 22

Note: NRES 385 has been approved, effective Fall 2025, and will show as course not found until the Academic Catalog rolls to the next Academic Year, in early 2025. See CIM Course approval documents in the Program of Study section.

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?

Yes

Courses outside

of the sponsoring

department/

interdisciplinary

departments

ABE 152 - Water in Global Environment

ACES 102 - Intro Sustainable Food Systems

ATMS 140 - Climate and Global Change

CPSC 113 - Environment, Agric, & Society

GEOL 118 - Natural Disasters

MCB 150 - Molec & Cellular Basis of Life

NPRE 101 - Introduction to Energy Sources

STAT 107 - Data Science Discovery

ALEC 115 - Talk About Food, Ag, Env

ACE 262 - App Stat Mthds & Data AnlytcsI

IB 444 - Insect Ecology

IB 329 - Animal Behavior

GGIS 476 - Environmental Remote Sensing

CEE 432 - Stream Ecology

UP 405 - Watershed Ecology and Planning

Please attach any Comp I Rhet Update - English Support Letter 1 Feb 12 2024.pdf letters of support/ LetterofSupport_STAT 107 as an elective in NRES curriculum.pdf

acknowledgement <u>LetterofSupport ABE 152 NRES.pdf</u>

for any <u>LetterofSupport ACE 262 as an NRES elective.pdf</u>
Instructional <u>LetterofSupport ALEC 115 as an NRES elective.pdf</u>

Resources <u>LetterofSupport ACES102 NRES.pdf</u>
consider faculty, <u>LetterofSupport ATMS 140 support.pdf</u>
students, and/or <u>LetterofSupport CPSC 113 LOS NRES.pdf</u>

other impacted <u>LetterofSupport_GEOL 118 as NRES elective.pdf</u>

units as <u>LetterofSupport_MCB 150 LOS NRES.pdf</u>

appropriate. <u>LetterofSupport_NPRE_101 as an elective in the NRES</u>

curriculum.pdf

LetterofSupport UP405 NRES curriculum.pdf
LetterofSupport GGIS476 NRES curriculum.pdf
LetterofSupport IBCourses NRES curriculum.pdf
LetterofSupport CEE459 NRES curriculum.pdf

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.

Students graduating with the B.S. in NRES should be able to:

- 1. <u>Understand the scientific method/ways of knowing and critically evaluate information.</u>
- 2. <u>Integrate principles of biological, chemical, physical, and social sciences and apply them to resource and environmental issues using a systems approach.</u>
- <u>3. Understand ecological principles underpinning management of resources, populations, communities, and ecosystems.</u>
- <u>4.</u> <u>Use data collection and analysis tools (such as field methods, GIS, modeling, and statistics) to develop plans for managing resource/environmental challenges and adapt plans in response to rapid change.</u>
- <u>5.</u> Understand the policies governing resources and the environment and identify social dimensions (stakeholders, interests, trade-offs, synergies, ethical principles) to consider in the development of management plans.
- <u>6.</u> <u>Communicate effectively with colleagues, stakeholders, and the public about environmental and resource management issues.</u>
- 7. Recognize how diverse groups understand the environment, experience positive and negative environmental impacts, and perceive just and equitable solutions. All subject areas/courses in the major have been selected because they specifically address the learning objectives of the major. We therefore intend to use student performance in these courses as benchmarks to ensure that students have achieved these educational goals. All courses in Natural Resources and Environmental Sciences regularly undergo peer-review assessments, and we will continue this practice for all courses in the major.

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

Describe here:

Student learning outcomes will be assessed via biannual course-based assessment and analysis of department and campus annual surveys. Course-based assessment focuses on major core requirements taken by all students. The department conducts an annual senior survey to gauge the perspective of graduating seniors on their level of knowledge and preparedness regarding the student learning outcomes. Data collected in the Chancellor's Senior Survey is also considered.

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.

For most direct measurements in all student learning outcomes, faculty expect 75% or 80% of students to score 80% or higher. Faculty expectations might be higher or lower depending on the item being assessed and prior performance.

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

An annual summary report will be produced by a subcommittee of the NRES Courses and Curriculum Committee, consisting of the Academic Advising Coordinator, Student Services Coordinator, and Undergraduate Teaching Coordinator. A report on the findings from assessment efforts in the previous academic year is presented at the monthly meeting of the NRES faculty in late September/early October each year. The NRES Courses and Curriculum Committee shall be responsible for utilizing the information from the report and faculty feedback to initiate curriculum improvements.

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.

Revised programs NRES sample sequence ESRE 2024

July.xlsx

NRES 385_ Field Experience course

approval.pdf

NRES_ESRE_curriculum_revision_proposal_2024

final_1.docx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

No changes

Statement for

Programs of

Graduation Requirements

Study Catalog Minimum hours for graduation: 126 hours.

University Requirements

Minimum of 40 hours of upper-division coursework generally at the 300- and 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog.

General Education Requirements

Follows the campus General Education (Gen Ed) requirements. Some Gen Ed requirements may be met by

courses required and/or electives in the program.			
	Course List		
Code	Title		Hours
Composition I			<u>4-6</u>
Advanced Compo			<u>3</u>
Humanities & the			<u>6</u> <u>6</u>
Natural Sciences & Technology (6 hours)			<u>6</u>
	EM 102, CHEM 104, IB 103; and IB 104 or IB 150; and		
	CPSC 113 or GEOL 107 or GEOL 118 or GGIS 103 or M	CB 100 or MCB 150 or	
	PHYS 101 or PHYS 211		6
	ral Sciences (6 hours)		<u>6</u>
	E 100 or ECON 102; and NRES 287		2
	Non-Western Cultures (1 course)		<u>3</u>
	Western/Comparative Cultures (1 course)		<u>3</u>
fulfilled by NR			2
	US Minority Cultures (1 course)	Challes Decree 1	<u>3</u>
	soning (6-10 hours; at least one course must be Quan		<u>6-10</u>
	ATH 220 or MATH 221 or MATH 234; and ACE 262 or CF	SC 241 or ECON 202 or	
	SOC 280 or STAT 100 or STAT 107		0.45
	rement (0-15 hours; completion of the third semester of	or equivalent of a language	<u>0-15</u>
other than Englis			
	Course List		
Code	Title	Hours	
Major Requireme			
Communications Requirement 3 or 6			
Select from th			
<u>CMN 101</u>	Public Speaking		
CMN 111	Oral & Written Comm I		
	and Oral & Written Comm II		
ALEC 115	Let's Talk about Food, Agriculture, and the Environme		
Economics Requi		<u>3-4</u>	
Select from th			
ACE 100	Introduction to Applied Microeconomics		
ECON 102	Microeconomic Principles		
Math Requiremen		<u>4-5</u>	
Select from th			
MATH 220	Calculus		
MATH 221	<u>Calculus I</u>		
MATH 234	<u>Calculus for Business I</u>		
Statistics Requirement 3-4			
Select from th			
ACE 262	Applied Statistical Methods and Data Analytics I		
<u>CPSC 241</u>	Intro to Applied Statistics		
ECON 202	Economic Statistics I		
PSYC 235	Intro to Statistics		
SOC 280	Intro to Social Statistics		
STAT 100	Statistics		
<u>STAT 107</u>	<u>Data Science Discovery</u>		

Code Title Hours Science Requirements 19-22 CHEM 102 General Chemistry I & CHEM 103 and General Chemistry Lab I CHEM 104 General Chemistry II & CHEM 105 and General Chemistry Lab II IB 103 Introduction to Plant Biology or IB 150 Organismal & Evolutionary Biol & IB 151 and Organismal & Evol Biol Lab Select one additional course from the following: ABE 152 Water in the Global Environment ACES 102 Intro Sustainable Food Systems ATMS 140 Climate and Global Change CPSC 113 Environment, Agriculture, and Society GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mech & Heat PHYS 211 University Physics: Mech & Heat PHYS 211 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 3 NRES 102 Introduction to NRES		
CHEM 102 General Chemistry I & CHEM 103 and General Chemistry Lab I CHEM 104 General Chemistry II & CHEM 105 and General Chemistry Lab II IB 103 Introduction to Plant Biology IB 104 Animal Biology or IB 150 Organismal & Evolutionary Biol & IB 151 and Organismal & Evol Biol Lab Select one additional course from the following: ABE 152 Water in the Global Environment ACES 102 Intro Sustainable Food Systems ATMS 140 Climate and Global Change CPSC 113 Environment, Agriculture, and Society GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) 2 ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
& CHEM 103 and General Chemistry Lab I CHEM 104 General Chemistry II & CHEM 105 and General Chemistry Lab II IB 103 Introduction to Plant Biology or IB 150 Organismal & Evolutionary Biol & IB 151 and Organismal & Evol Biol Lab Select one additional course from the following: ABE 152 Water in the Global Environment ACES 102 Intro Sustainable Food Systems ATMS 140 Climate and Global Change CPSC 113 Environment, Agriculture, and Society GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
CHEM 104 General Chemistry II & CHEM 105 and General Chemistry Lab II IB 103 Introduction to Plant Biology IB 104 Animal Biology or IB 150 Organismal & Evolutionary Biol & IB 151 and Organismal & Evol Biol Lab Select one additional course from the following: ABE 152 Water in the Global Environment ACES 102 Intro Sustainable Food Systems ATMS 140 Climate and Global Change CPSC 113 Environment, Agriculture, and Society GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
& CHEM 105 and General Chemistry Lab II IB 103		
IB 103		
IB 104 Animal Biology or IB 150 Organismal & Evolutionary Biol & IB 151 and Organismal & Evol Biol Lab Select one additional course from the following: ABE 152 Water in the Global Environment ACES 102 Intro Sustainable Food Systems ATMS 140 Climate and Global Change CPSC 113 Environment, Agriculture, and Society GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
or IB 150 Organismal & Evolutionary Biol & IB 151 and Organismal & Evol Biol Lab Select one additional course from the following: ABE 152 Water in the Global Environment ACES 102 Intro Sustainable Food Systems ATMS 140 Climate and Global Change CPSC 113 Environment, Agriculture, and Society GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
8 IB 151 and Organismal & Evol Biol Lab Select one additional course from the following: ABE 152 Water in the Global Environment ACES 102 Intro Sustainable Food Systems ATMS 140 Climate and Global Change CPSC 113 Environment, Agriculture, and Society GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
Select one additional course from the following: ABE 152 Water in the Global Environment ACES 102 Intro Sustainable Food Systems ATMS 140 Climate and Global Change CPSC 113 Environment, Agriculture, and Society GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
ABE 152 Water in the Global Environment ACES 102 Intro Sustainable Food Systems ATMS 140 Climate and Global Change CPSC 113 Environment, Agriculture, and Society GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
ACES 102 Intro Sustainable Food Systems ATMS 140 Climate and Global Change CPSC 113 Environment, Agriculture, and Society GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
ATMS 140 Climate and Global Change CPSC 113 Environment, Agriculture, and Society GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
CPSC 113 Environment, Agriculture, and Society GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
GEOL 107 Physical Geology GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
GEOL 118 Natural Disasters GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
GGIS 103 Earth's Physical Systems MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) 2 ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
MCB 100 Introductory Microbiology MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
MCB 150 Molec & Cellular Basis of Life NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) 2 ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
NPRE 101 Introduction to Energy Sources PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
PHYS 101 College Physics: Mech & Heat PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) 2 ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
PHYS 211 University Physics: Mechanics College of ACES Requirements (Core) 2 ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
College of ACES Requirements (Core)2ACES 101Contemporary Issues in ACESNatural Resources and Environmental Sciences Requirements (Core)31-33		
ACES 101 Contemporary Issues in ACES Natural Resources and Environmental Sciences Requirements (Core) 31-33		
Natural Resources and Environmental Sciences Requirements (Core) 31-33		
NRES 102 Introduction to NRES		
NRES 201 Introductory Soils		
NRES 219 Applied Ecology		
NRES 287 Environment and Society		
NRES 325 Natural Resource Policy Mgmt		
NRES 348 Fish and Wildlife Ecology		
NRES 385 Course NRES 385 Not Found		
NRES 421 Quantitative Methods in NRES		
NRES 454 GIS in Natural Resource Mgmt		
NRES 456 Integrative Ecosystem Management		
Select one additional field experience course from the following:		
NRES 293 <u>Professional Internship</u>		
NRES 294 Resident Internship		
NRES 295 Undergrad Research or Thesis		
NRES 385 Course NRES 385 Not Found		
NRES 385 Course NRES 385 Not Found NRES 396 UG Honors Research or Thesis		
NRES 396 UG Honors Research or Thesis Course List Code Title Hours		
NRES 396 UG Honors Research or Thesis Course List Code Title Hours Concentration Core Requirements		
NRES 396 Course List Code Title Hours Concentration Core Requirements NRES 419 Env and Plant Ecosystems 3		
NRES 396 UG Honors Research or Thesis Course List Code Title Hours Concentration Core Requirements		

Code	Title	Hours
Concentratio	n Elective Requirements	
Two Ecology	Courses	6-8
NRES 302	Dendrology	
NRES 362	Ecology of Invasive Species	
NRES 407	Wildlife Population Ecology	
NRES 415	Native Plant ID and Floristics	
CPSC 431	Plants and Global Change	
<u>IB 329</u>	Animal Behavior	
<u>IB 439</u>	Biogeography	
<u>IB 444</u>	Insect Ecology	
<u>IB 452</u>	Ecosystem Ecology	
<u>IB 453</u>	Community Ecology	
One Ecosyste	em or Management Course	3-4
NRES 401	Watershed Hydrology	
NRES 402	Course NRES 402 Not Found	
NRES 409	Fishery Ecol and Conservation	
NRES 418	Wetland Ecology & Management	
NRES 427	Modeling Natural Resources	
NRES 429	Aquatic Ecosystem Conservation	
NRES 434	Environment, Policy, and Conflict	
NRES 455	Advanced GIS for Environmental Managemen	<u>t</u>
NRES 480	Human-Wildlife Interactions	
NRES 482	Aquatic Biogeochemistry	
NRES 485	Stream Ecosystem Management	
CPSC 437	Principles of Agroecology	
CEE 432	Stream Ecology	
GGIS 476	Environmental Remote Sensing	
<u>IB 361</u>	Ecology and Human Health	
<u>IB 451</u>	Conservation Biology	
UP 405	Watershed Ecology and Planning	
<u>UP 406</u>	Urban Ecology	
Total Concen	tration Required Hours:	19-21
Total Concen	tration Hours	<u>19-22</u>
<u>Total Hours</u>		<u>126</u>

Program Relationships

Corresponding

Program(s):

Corresponding Program(s)

Natural Resources & Environmental Sciences, BS

Program Features

Academic Level Undergraduate

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.

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 do not anticipate impacts on enrollment or degrees awarded.

Budget

Are there No

budgetary

implications for

this revision?

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?

These changes only impact courses currently offered, so we do not anticipate any financial costs to this revision.

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

No

Attach letters of

support

Faculty Resources

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

Faculty resources are sufficient to support this proposal.

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

EP Documentation

EP Control

EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal

requires HLC

inquiry

No

DMI Documentation

Attach Final <u>U Program Review Comments KEY 634 8 6 2024.docx</u>

Sciences Ecosystem Stewardship & Restoration Ecology, BS KEY

634 9 24 2024.docx

Banner/Codebook

Ecosystem Stewardship and Restoration Ecology

Name

Program Code: 5686

Minor Conc 5686 Degree BS Major Code Code Code Code

0051

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 **Brooke Newell (bsnewell) (08/06/24 8:27 am):** U Program Review Comments are attached in DMI Documentation section

Brooke Newell (bsnewell) (09/24/24 11:50 am): Rollback: Provost Review Comments attached in DMI Documentation section. Rolled back per discussion with Jim Miller.

Key: 634

Date Submitted: 07/23/24 3:32 pm

Viewing: 5687: Natural Resources &

Environmental Sciences: Fish Wildlife & Conservation Biology, BS

Last approved: 11/14/23 5:38 pm

Last edit: 09/27/24 8:03 am

Changes proposed by: James Miller

Catalog Pages Using this

Program

Natural Resources & Environmental Sciences: Fish, Wildlife &

Conservation Biology, BS

Proposal Type:

In Workflow

- 1. U Program **Review**
- **2. 1875 Committee** Chair
- 3. 1875 Head
- 4. KL Committee Chair
- 5. KL Dean
- 6. University Librarian
- 7. COTE Programs
- 8. Provost
- 9. Senate EPC
- 10. Senate
- 11. U Senate Conf
- 12. Board of Trustees
- 13. IBHE
- 14. HLC
- 15. DMI

Approval Path

- 1. 08/06/24 12:05 pm **Emily Stuby** (eastuby): Approved for U
- Program Review 2. 08/07/24 3:20 pm
 - James Miller
 - (jrmillr): Approved
 - for 1875
 - Committee Chair
- 3. 08/08/24 10:14
 - am Robert Schooley
 - (schooley):
 - Approved for 1875 Head
- 4. 09/20/24 1:28 pm Brianna Gregg (bjgray2): Approved for KL

Committee Chair

5. 09/23/24 10:02

am

Anna Ball (aball): Approved for KL

Dean

6. 09/23/24 10:20

am

Tom Teper

(tteper): Approved

for University

Librarian

7. 09/23/24 11:13

am

Suzanne Lee

(suzannel):

Approved for

COTE Programs

8. 09/25/24 3:43 pm

Brooke Newell

(bsnewell):

Approved for

Provost

History

- 1. Mar 18, 2019 by Deb Forgacs (dforgacs)
- 2. Jun 12, 2020 by Susan Helmink (shelmink)
- 3. Nov 14, 2023 by Kathy Martensen (kmartens)

Concentration (ex. Dietetics)

This proposal is

for a:

Revision

Administration Details

Official Program

Natural Resources & Environmental Sciences: Fish

Name

Wildlife & Conservation Biology, BS

Diploma Title

Sponsor College Agr, Consumer & Env Sciences

Sponsor Natural Res & Env Science

Department

Sponsor Name Jim Miller, Professor and Chair of the NRES Courses and

Curriculum Committee

Sponsor Email jrmillr@illinois.edu

College Contact Brianna Gregg Tony Yannarell, Associate College Contact

Professor and Chair of the ACES Courses Email

and Curriculum Committee bygray2@illinois.edu acyann@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.

Jim Miller

Does this program have inter-departmental administration?

No

Proposal Title

Effective Catalog Fall 2025

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)

Revise the Concentration in Fish Wildlife & Conservation Biology in the Bachelor of Science in Natural Resources & Environmental Sciences in the College of Agricultural, Consumer and Environmental Sciences

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)."

This concentration proposal (Key 631) is related to the NRES, BS proposal (Key 86) and concentrations Environmental Social Science (Key 633), Environmental Science & Management (Key 632), and Ecosystem Stewardship & Restoration Ecology (Key 634).

Program Justification

Provide a brief CHANGES TO THE MAJOR

description of 1. Adding ABE 152, ACES 102, ATMS 140, CPSC 113, GEOL 118, MCB 150 and NPRE

what changes are being made to the program. 101 as electives in our Science requirement.

- 2. Adding ACE 262 and STAT 107 as an electives in the Statistics requirement.
- 3. Removing ACE 261 as an elective in the Statistics requirement.
- 4. Removing RHET 105.
- 5. Adding ALEC 115 to the Communications requirement.
- 6. Moving the coursework required in the Speech Requirement, Quantitative Reasoning, Natural Sciences and Technology, and Social and Behavioral Sciences into a new subheading called Major Requirements. We also created additional headings underneath this requirement to appropriately identify the coursework.
- 7. Listing courses in the POS Table vertically.
- 8. Revising text in the Program Regulation and Assessment section.
- 9. Updating course number for NRES 285 to NRES 385.
- 10. Adding the major requirements into the Program of Study table as per campus request.
- 11. Adding graduation requirements, university requirements, and general education requirements per Office of the Provost General Education Initiative.

CHANGES TO THE CONCENTRATION

- 12. Removing IB 335 as an elective in the NRES FWLCB concentration.
- 13. Adding NRES 480, IB 361, IB 444, and IB 407 as electives in the NRES FWLCB concentration.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

No

Why are these changes necessary?

CHANGES TO THE MAJOR

- 1. Adding 7 electives in our Science requirement to relieve a bottleneck that students have been experiencing with our current list of electives.
- 2. Adding ACE 262 and STAT 107 as an electives in our Statistics requirement as a response to numerous student petitions to substitute this particular course, and faculty input on the merits of the course in meeting the requirement.
- 3. Removing ACE 261 as an elective in our Statistics requirement because it is no longer offered.
- 4. Removing RHET 105 because students should follow the campus guidelines for Composition 1 replacement.
- 5. Adding ALEC 115 as another option from our college to meet the Communications requirement.
- 6. To adhere to the campus standards for gen ed requirements and as such, more specific lists of courses are now listed in the major that happen to fulfill gen ed requirements.
- 7. Listing courses in the POS table vertically instead of horizontally to adhere to formatting guidelines.
- 8. Revising for accuracy.
- 9. Course number for NRES 285 was changed to NRES 385 because the course is taken by juniors and seniors. This change also facilitates adherence to the IBHE 40 Upper-Division Hour Criterion.
- 10. Adding the major requirements for increased transparency and accuracy.
- 11. To create more consistency to the General Education program across campus and make it easier for students, advisors, and others to navigate our Academic Catalog Programs of Study pages, campus has requested majors to use the Gen Ed template.

CHANGES TO THE CONCENTRATION

- 12. IB 335 is no longer offered.
- 13. These are all courses that are new since the last time the electives in the FWLCB concentration were revised. All are considered suitable electives for this concentration.

Interim Guidance Regarding Implementation of the IBHE 40 Upper-Division Hour Criterion

Students can meet the 40 hour of upper division coursework requirement by taking the following:

Major Coursework:

NRES 201 - 4 hrs (prerequisites: MATH 115, MATH 234, or equivalent, and CHEM 102)

NRES 325 - 3 hrs

NRES 385 - 2 hrs

NRES 348 - 3 hrs

NRES 421 - 3 hrs

NRES 454 - 4 hrs

NRES 456 - 3 hrs

Concentration Coursework:

NRES 407 - 4 hrs

NRES 409 - 4 hrs

One organismal Biology/identification course - 4 hrs

One specialization course - 3-4 hrs

One plant classification/identification course - 4 hrs

range of upper division course hours in concentration: 19 - 20

Note: NRES 385 has been approved, effective Fall 2025, and will show as course not found until the Academic Catalog rolls to the next Academic Year, in early 2025. See CIM Course approval documents in the Program of Study section.

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?

Yes

Courses outside

of the sponsoring

department/

interdisciplinary

departments

ABE 152 - Water in Global Environment

ACES 102 - Intro Sustainable Food Systems

ATMS 140 - Climate and Global Change

CPSC 113 - Environment, Agric, & Society

GEOL 118 - Natural Disasters

MCB 150 - Molec & Cellular Basis of Life

NPRE 101 - Introduction to Energy Sources

STAT 107 - Data Science Discovery

RHET 105 - Writing and Research

ACE 262 - App Stat Mthds & Data AnlytcsI

ALEC 115 - Talk About Food, Ag, Env

IB 361 - Ecology and Human Health

IB 444 - Insect Ecology

IB 407 - Plant Diversity and Evolution

Please attach any <u>IB courses as NRES electives.pdf</u>

for any <u>LetterofSupport_ABE 152_NRES.pdf</u>

Instructional <u>LetterofSupport ACE 262 as an NRES elective.pdf</u>
Resources <u>LetterofSupport ALEC 115 as an NRES elective.pdf</u>

consider faculty, LetterofSupport ACES102 NRES.pdf
students, and/or LetterofSupport ATMS 140 support.pdf
other impacted LetterofSupport CPSC 113 LOS NRES.pdf

units as <u>LetterofSupport_GEOL 118 as NRES elective.pdf</u>

appropriate. <u>LetterofSupport_MCB 150 LOS NRES.pdf</u>

LetterofSupport_NPRE 101 as an elective in the NRES

curriculum.pdf

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.

Students graduating with the B.S. in NRES should be able to:

- 1. <u>Understand the scientific method/ways of knowing and critically evaluate information.</u>
- 2. <u>Integrate principles of biological, chemical, physical, and social sciences and apply them to resource and environmental issues using a systems approach.</u>
- <u>3. Understand ecological principles underpinning management of resources, populations, communities, and ecosystems.</u>
- <u>4.</u> <u>Use data collection and analysis tools (such as field methods, GIS, modeling, and statistics) to develop plans for managing resource/environmental challenges and adapt plans in response to rapid change.</u>
- <u>5.</u> Understand the policies governing resources and the environment and identify social dimensions (stakeholders, interests, trade-offs, synergies, ethical principles) to consider in the development of management plans.
- <u>6.</u> <u>Communicate effectively with colleagues, stakeholders, and the public about environmental and resource management issues.</u>
- 7. Recognize how diverse groups understand the environment, experience positive and negative environmental impacts, and perceive just and equitable solutions. All subject areas/courses in the major have been selected because they specifically address the learning objectives of the major. We therefore intend to use student performance in these courses as benchmarks to ensure that students have achieved these educational goals. All courses in Natural Resources and Environmental Sciences regularly undergo peer-review assessments, and we will continue this practice for all courses in the major.

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

Describe here:

Student learning outcomes will be assessed via biannual course-based assessment and analysis of department and campus annual surveys. Course-based assessment focuses on major core requirements taken by all students. The department conducts an annual senior survey to gauge the perspective of graduating seniors on their level of knowledge and preparedness regarding the student learning outcomes. Data collected in the Chancellor's Senior Survey is also considered.

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.

For most direct measurements in all student learning outcomes, faculty expect 75% or 80% of students to score 80% or higher. Faculty expectations might be higher or lower depending on the item being assessed and prior performance.

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

An annual summary report will be produced by a subcommittee of the NRES Courses and Curriculum Committee, consisting of the Academic Advising Coordinator, Student Services Coordinator, and Undergraduate Teaching Coordinator. A report on the findings from assessment efforts in the previous academic year is presented at the monthly meeting of the NRES faculty in late September/early October each year. The NRES Courses and Curriculum Committee shall be responsible for utilizing the information from the report and faculty feedback to initiate curriculum improvements.

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.

Revised programs NRES 385_ Field Experience course

<u>approval.pdf</u>

NRES_FWCB_curriculum_revision_proposal_2024

final.docx

NRES sample sequence FWLCB 2024

July.xlsx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

No changes

Statement for

Programs of

Graduation Requirements

Study Catalog Minimum hours for graduation: 126 hours.

University Requirements

Minimum of 40 hours of upper-division coursework generally at the 300- and 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog.

General Education Requirements

Follows the campus General Education (Gen Ed) requirements. Some Gen Ed requirements may be met by

courses required and/or electives in the program.			
Carla	Course List		
Code	Title		Hours
Composition I	attian		<u>4-6</u>
Advanced Compo			<u>3</u>
Humanities & the			<u>6</u> <u>6</u>
Natural Sciences & Technology (6 hours) fulfilled by CHEM 102, CHEM 104, IB 103; and IB 104 or IB 150; and ABE 152 or ACES 102 or			<u>6</u>
	CPSC 113 or GEOL 107 or GEOL 118 or GGIS 103 or MC	TR 100 OL WCR 120 OL	
	PHYS 101 or PHYS 211		6
	al Sciences (6 hours) 100 or ECON 102; and NRES 287		<u>6</u>
	Non-Western Cultures (1 course)		2
	Western/Comparative Cultures (1 course)		<u>3</u> <u>3</u>
fulfilled by NRI			<u>3</u>
	US Minority Cultures (1 course)		2
	soning (6-10 hours; at least one course must be Quant	itativo Poaconing I)	<u>3</u> 6-10
	TH 220 or MATH 221 or MATH 234; and ACE 262 or CPS		<u>0-10</u>
	OC 280 or STAT 100 or STAT 107	3C 241 01 LCON 202 01	
	ement (0-15 hours; completion of the third semester o	r oquivalent of a language	0-15
other than Englis	•	r equivalent of a language	<u>0-13</u>
other than Englis	Course List		
Code	Title	Hours	
Major Requireme		Hours	
Communications Requirement 3 or 6			
Select from the following:			
CMN 101	Public Speaking		
CMN 111	Oral & Written Comm I		
	and Oral & Written Comm II		
ALEC 115	Let's Talk about Food, Agriculture, and the Environme	nt	
Economics Requir	· · ·	<u>3-4</u>	
Select from the			
ACE 100	Introduction to Applied Microeconomics		
ECON 102	Microeconomic Principles		
Math Requiremen	<u> </u>	<u>4-5</u>	
Select from the	_	<u> </u>	
MATH 220	<u>Calculus</u>		
MATH 221	Calculus I		
MATH 234	Calculus for Business I		
Statistics Require		<u>3-4</u>	
Select from the following:			
ACE 262	Applied Statistical Methods and Data Analytics I		
CPSC 241	Intro to Applied Statistics		
ECON 202	Economic Statistics I		
PSYC 235	Intro to Statistics		
SOC 280	Intro to Social Statistics		
STAT 100	<u>Statistics</u>		
STAT 107	Data Science Discovery		

Code	Title	Hours
Science Requirer	<u>ments</u>	19-22
CHEM 102	General Chemistry I	
& CHEM 10	and General Chemistry Lab I	
CHEM 104	General Chemistry II	
<u>& CHEM 10</u>	ond General Chemistry Lab II	
<u>IB 103</u>	Introduction to Plant Biology	
<u>IB 104</u>	Animal Biology	
<u>or IB 150</u>	Organismal & Evolutionary Biol	
<u>& IB 151</u>	and Organismal & Evol Biol Lab	
Select one ad	ditional course from the following:	
<u>ABE 152</u>	Water in the Global Environment	
ACES 102	Intro Sustainable Food Systems	
<u>ATMS 140</u>	Climate and Global Change	
<u>CPSC 113</u>	Environment, Agriculture, and Society	
<u>GEOL 107</u>	Physical Geology	
<u>GEOL 118</u>	Natural Disasters	
GGIS 103	Earth's Physical Systems	
MCB 100	Introductory Microbiology	
MCB 150	Molec & Cellular Basis of Life	
<u>NPRE 101</u>	Introduction to Energy Sources	
PHYS 101	College Physics: Mech & Heat	
PHYS 211	<u>University Physics: Mechanics</u>	
College of ACES	Requirements (Core)	<u>2</u>
ACES 101	Contemporary Issues in ACES	
Natural Resource	es and Environmental Sciences Requirements (Core)	<u>31-33</u>
NRES 102	Introduction to NRES	
NRES 201	Introductory Soils	
NRES 219	Applied Ecology	
NRES 287	Environment and Society	
NRES 325	Natural Resource Policy Mgmt	
NRES 348	Fish and Wildlife Ecology	
NRES 385	Course NRES 385 Not Found	
NRES 421	Quantitative Methods in NRES	
NRES 454	GIS in Natural Resource Mgmt	
NRES 456	Integrative Ecosystem Management	
Select one ad	ditional field experience course from the following:	
NRES 293	Professional Internship	
NRES 294	Resident Internship	
NRES 295	<u>Undergrad Research or Thesis</u>	
NRES 385	Course NRES 385 Not Found	
NRES 396	UG Honors Research or Thesis	
	Course List	
Code Title	e Hours	
Concentration Co	ore Requirements	
NRES 407 Wile	dlife Population Ecology 4	
	nery Ecol and Conservation 4	
Concentration El	ective Requirements	

Code Title Hours One Organismal Biology/Identification Course4 IB 461 Ornithology IB 462 Mammalogy IB 463 Ichthyology IB 464 Herpetology One Specialization Course 3-4 NRES 362 Ecology of Invasive Species NRES 418 Wetland Ecology & Management NRES 419Env and Plant Ecosystems NRES 420 Restoration Ecology NRES 429 Aquatic Ecosystem Conservation NRES 465 Landscape Ecology NRES 480Human-Wildlife Interactions NRES 485 Stream Ecosystem Management IB 329 Animal Behavior IB 361 Ecology and Human Health IB 444 Insect Ecology IB 451 Conservation Biology One Plant Classification/Identification Course 4 NRES 302 Dendrology NRES 415 Native Plant ID and Floristics IB 335 Course IB 335 Not Found IB 407 Plant Diversity and Evolution Total Concentration Hours 19-20 **Total Hours** 126

Program Relationships

Corresponding

Program(s):

Corresponding Program(s)

Natural Resources & Environmental Sciences, BS

Program Features

Academic Level Undergraduate

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.

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 do not anticipate impacts on enrollment or degrees awarded.

Budget

Are there

Nο

budgetary

implications for

this revision?

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?

These changes only impact courses currently offered, so we do not anticipate any financial costs to this revision.

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

No

Attach letters of support

Faculty Resources

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

Faculty resources are sufficient to support this proposal.

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

EP Documentation

EP Control

EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal

No

requires HLC

inquiry

DMI Documentation

Attach Final <u>U Program Review Comments KEY 631 8 6 2024.docx</u>

Approval Notices

Banner/Codebook

Fish Wildlife and Conservation Biology

Name

Program Code: 5687

Minor Conc 5687 Degree BS Major Code Code Code Code

0051

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 Brooke Newell (bsnewell) (07/09/24 12:13 pm): Rollback: Email sent to Jim Brooke Newell (bsnewell) (07/23/24 12:21 pm): Rollback: Email sent to Jim Brooke Newell (bsnewell) (08/06/24 8:28 am): U Program Review Comments are attached in DMI Documentation section

Key: 631

Date Submitted: 08/12/24 1:55 pm

Viewing: 10KR5907BA & 10KS5907MUP

: JP: Urban Studies & Planning, BA & Urban Planning, MUP

Last approved: 10/02/23 8:39 am

Last edit: 10/07/24 7:49 am Changes proposed by: Nicole Turner

Urban Studies & Planning, BA & Urban Planning, MUP

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1733 Committee Chair
- 3. 1733 Head
- 4. KR 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. 08/26/24 3:13 pm Donna Butler (dbutler): Approved for U
- 2. 09/06/24 4:00 pm Mary Margaret Edwards (mmedward):

Program Review

Approved for 1733

Committee Chair

3. 09/26/24 11:53 am

Mark Doussard (mdouss1):

Approved for 1733 Head

4. 09/26/24 12:06 pm Nicole Turner

(nicturn):

Approved for KR Dean

- 5. 09/27/24 12:37 pm
 Claire Stewart
 (clairest):
 Approved for
 University
- Librarian
 6. 10/01/24 4:20 pm
 Allison McKinney
 (agrindly):
 Approved for
 Grad_College
- 7. 10/01/24 4:21 pm
 Suzanne Lee
 (suzannel):
 Approved for
 COTE Programs
- 8. 10/02/24 2:52 pm Brooke Newell (bsnewell): Approved for Provost

History

- 1. Jun 29, 2020 by Nicole Turner (nicturn)
- 2. Feb 3, 2022 by Deb Forgacs (dforgacs)
- 3. Sep 28, 2022 by Nicole Turner (nicturn)
- 4. Mar 15, 2023 by Nicole Turner (nicturn)
- 5. Oct 2, 2023 by Nicole Turner (nicturn)

Joint Program (ex. Master of Public Health & PhD. in Community Health)

This proposal is

for a:

Revision

Administration Details

Official Program JP: Urban Studies & Planning, BA & Urban Planning,

Name MUP

Diploma Title Bachelor of Arts in Urban Studies and Planning; Master of Urban

Planning

Sponsor College Fine & Applied Arts

Sponsor Urban & Regional Planning

Department

Sponsor Name Marc Doussard

Sponsor Email mdouss1@illinois.edu

College Contact Nicole Turner College Contact

Email

nicturn@illinois.edu

College Budget Greg Anderson

Officer

College Budget gnanders@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.

KR Dean

Does this program have inter-departmental administration?

Νo

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)

Revise the Joint Program in the Bachelor of Arts in Urban Studies & Planning and the Master of Urban Planning in Urban Planning in the College of Fine and Applied Arts 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 description of what changes are being made to the program.

(1) Add Gen Ed template; (2) Embed BAUSP FA 24 curricular changes; (3) Minor editorial updates to headers. (4) Created joint program summary table.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

No

Why are these changes necessary?

- 1- Inputting new campus gen ed requirement template per office of the provost initiative.
- 2- Remove RHET 105 from the BAUSP foundation core (letter attached).
- 3- Change header acronyms to typed out names.
- 4- Created summary table to summarize the 120 credit hour undergraduate degree and 32 hour master's degree for a total of 152 credit hours.

No changes to sample schedule, major requirements, or degree hours.

40 hour upper division/advanced course requirement

UP 312 - 4 hours

UP 316 - 3 hours

UP 347 - 4 hours

Senior Workshop - 4 hours

UP 401 - 1 hour

24 hours selected from UP course electives/select from list, UP concentration courses, or free electives

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?

Yes

Courses outside of the sponsoring department/ interdisciplinary

departments

RHET 105 - Writing and Research

Please attach any

<u>Comp I Rhet Update - English Support Letter FA 24-1.docx</u>

letters of support/

acknowledgement

for any

Instructional

Resources

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.

To be consistent with our accreditation requirements, we are using the Knowledge, Skills, and Values identified by the Planning Accreditation Board as desired outcomes for planning education:

- 1. General planning knowledge
- a. Purpose and Meaning of Planning
- b. Planning Theory
- c. Planning Law
- d. Human Settlements and History of Planning
- e. The Future
- f. Global Dimensions of Planning
- 2. Planning skills
- a. Research Written, Oral and Graphic Communication
- b. Quantitative and Qualitative Methods
- c. Plan Creation and Implementation
- d. Planning Process Methods
- e. Leadership
- 3. Values and ethics
- a. Professional Ethics and Responsibility
- b. Governance and Participation
- c. Sustainability and Environmental Quality
- d. Growth and Development
- e. Social Justice

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

Describe here:

In AY 2016-2017, the Department approved a new protocol for student learning outcomes assessment for all its degree programs (BAUSP, MUP, MSSUM, and Ph.D.). For the BAUSP and MUP programs, we initiated an annual cycle in which a two-person team of Department faculty evaluate the outcomes of one core course per year from each program. Faculty instructors for the courses under review provide access to course materials and completed student work from the semester in question. Other teams review capstone projects of the previous year's MUP students and one of the concentration-specific BAUSP student workshops. For both the course-based and the capstone-based reviews, the assessment teams selected five students at random and assessed their work, basing their assessments upon the degree to which students have met, partially met, or not met the criteria identified for that course on the Curriculum Map.

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.

In 2020-2021, a team of two faculty members assessed learning outcomes of five students in UP 501 Planning History and Theory and five Capstone Projects/Theses. UP 501 is a core course for the first year MUP students. The team reviewed the course syllabus and five instances of one assignment selected at random by the course instructor. The assignment required students to evaluate the processes through which planning interventions transform knowledge into action. Students are required to select and analyze an 'award-winning' plan, focusing on the alignment between planning processes and anticipated planning outcomes. The assignments demonstrated students' understanding of the roles of assumptions underpinning particular theories of change, which in turn influence policy and planning approaches. For the second year MUP students, the team randomly selected five complete capstone projects from the 2020 pool. They reviewed each of the projects against the LOA criteria. Overall, the assessment results show that both MUP1 and MUP2 students demonstrated their competence. For UP 501 Assignment, only two students received '1= not yet competent' in 'social justice' and one student in 'planning theory' while all students' work were assessed to meet or exceed expectations in all other categories. The two reviewers assess 2020 Capstone projects to exceed expectations in many KSV categories, especially in 'planning skills'. The 2019-2020 reviewers reported concerns about our students' writing skills and lack of reflection on policy and planning implications of their own work. The 2020-2021 reviewers, however, assess that four students exceed expectations in 'written, oral and graphic communication' and two in 'plan creation and implementation'. This is a huge progress.

In 2021-2022, a pair of randomly selected faculty reviewers reviewed, independently from one another, 5 sample work products from early in the program (an essay assigned in a core course) and the end of the program (capstones). Reviews of learning were independently tabulated and then harmonized in a synthetic write-up, with back-checking for concordance. Work products were systematically evaluated on 18 distinct dimensions. We learned that capstones are exceeding expectations, in that they show significant comfort with core planning skills. We also became aware of potentially valuable improvements to underlying methodological skill acquisition for both quantitative and qualitative methods. The essays were uniformly above expectations, In addition to above-grade writing and data organization skills, they demonstrated high levels of competence with core planning knowledge about human settlements, the future and global elements of planning.

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

The assessment results are shared with the instructors and both the instructor and capstone advisor will offer improved advising due to knowledge gained from the assessment. For 2022-2023, it will be determined avenues for sharing assessment results and moving forward with continued assessment, consulting five randomly selected capstones and five early-program work products in a core course. The latter will be from a different course ideally, in order to maximize curricular coverage.

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.

Revised programs BA MUP FA 24 sample schedule.docx

BA MUP FA 24 side by side.xlsx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

The 4+1 program allows for students completing the BAUSP degree in the Department to complete the MUP on an accelerated timeline. The 4+1 program is highly selective. Each year, a limited number of outstanding BAUSP juniors are identified and invited to apply to the program. While students can notify the BAUSP Director of their interest in the 4+1 program, the Department will independently review student academic records to identify eligible candidates for the program.

In the fall and spring semesters of their senior year, the BAUSP Director will collect feedback on 4+1 student performance from their course instructors, and will make a determination regarding adequate progress in the program.

At the end of the senior year, the 4+1 student is qualified to graduate with the BAUSP degree, having met all the requirements of that program. In the senior year, 4+1 students wishing to complete the MUP degree will formally apply to the MUP program, submitting a full application package including recommendations, GRE scores, and transcripts.

Statement for

Programs of **Graduation Requirements**

Study Catalog Minimum hours required for graduation: 152 hours.

Bachelor of Arts in Urban Studies & Planning Requirements: 120 hours.

Master of Urban Planning in Urban Planning: 32 hours.

University Requirements

BAUSPGeneraleducation: Students must complete the Campus General Education requirements including the campus general education languagerequirement. Minimum hours for graduation is 120 to include a minimum of 40 hours of upper-division coursework, coursework generally at the 300- or and 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement. degree.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog.

General Education Requirements

Follows - Students must complete the campus Campus General Education (Gen Ed) requirements. <u>requirements including the campus general education language requirement.</u> Some Gen Ed requirements may be met by courses required and/or electives in the program.

Course List

Code	Title	Hours
Composition I		<u>4-6</u>
Advanced Composition		<u>3</u>
fulfilled by UP 312		
Humanities & the Arts (6 hours)		<u>6</u>
Natural Sciences & Technology (6 hours)		<u>6</u>
Social & Behavioral Sciences (6 hours)		<u>6</u>
fulfilled by ECON 102 or ACE 100; and AAS 100 or	AFRO 100 or AIS 102 or GGIS 101 or GGIS 104	<u>4</u>
or LLS 100 or SOC 100		
<u>Cultural Studies: Non-Western Cultures (1 course)</u>		<u>3</u>
<u>Cultural Studies: US Minority Cultures (1 course)</u>		<u>3</u>
Cultural Studies: Western/Comparative Cultures (1 co	<u>urse)</u>	<u>3</u>
Quantitative Reasoning (2 courses, at least one course	e must be Quantitative Reasoning I)	<u>6-10</u>
fulfilled by UP 116 or STAT 100; and UP 316		
Language Requirement (Completion of the third seme	ster or equivalent of a language other than	<u>0-15</u>
English is required)		

Urban Studies & Planning Foundation Courses

Course List

Code	Title	Hours	
FAA 101	Arts at Illinois	1	
RHET 105	Writing and Research (or equivalent)4	
ECON 102	Microeconomic Principles	3	
or <u>ACE 100</u>	Introduction to Applied Microeconon	nics	
<u>UP 116</u>	Urban Informatics I (or equivalent)	3	
or <u>STAT 100</u> Statistics			
3-4 hours se	elected from:	3-4	
AAS 100	Intro Asian American Studies		
AFRO 100 Intro to African American St			
<u>AIS 102</u>	Contemp Issues in Ind Country		
GGIS 101 Global Development & Environment			
GGIS 104 Social and Cultural Geography			
<u>LLS 100</u>	Intro Latina/Latino Studies		
SOC 100	Introduction to Sociology		
Total Hours		10	

Urban Studies & Planning Core

Course List

Code	Title	Hours
<u>UP 101</u>	Introduction to City Planning	3
<u>UP 201</u>	Planning in Action	3
<u>UP 203</u>	Cities: Planning & Urban Life	3
or <u>UP 204</u> Chicago: Planning & Urban Life		

Code T	itle	Hours		
<u>UP 211</u> L	ocal Planning, Gov't and Law	3		
<u>UP 312</u> C	Communication for Planners	4		
<u>UP 316</u>	Jrban Informatics II	3		
<u>UP 347</u> J	unior Planning Workshop	4		
<u>UP 401</u> P	rofessional Development Seminar	·1		
Total Hours		24		
<u>Urban Stu</u>	dies & Planning Required Conc	<u>centration</u>		
Cou	rse List			
Code 7	ītle Hours			
Choose one	e below:			
<u>Sustaina</u>	<u>bility</u>			
Global C	<u>ties</u>			
Policy &	Planning			
Social Ju	<u>stice</u>			
Total Hours	9-11			
		Course List		
Code	Title		Hours	
BAUSP Sen				
	•	rements for UP electives and planning-related electives.		
	·	st year MUP core courses in their senior year, although		
	t yet admitted to the MUP program			
		or discuss other offerings with your advisor)	4	
<u>UP 447</u>	Land Use Planning V	·		
<u>UP 455</u>	Economic Developm	·		
<u>UP 456</u>	Sustainable Planning	•		
<u>UP 457</u>	Small Town/Rural Plant	,		
<u>UP 478</u>	Community Develop	ment Workshop		
	ast four courses from:	1	16-20	
<u>UP 501</u>	Planning History and	Ineory		
<u>UP 503</u>	Physical Planning	4		
<u>UP 504</u>	Urban History and T	•		
<u>UP 505</u>	Urban and Regional	Analysis		
<u>UP 511</u>	Law and Planning			
<u>Master</u>	<u>of Urban Planning in</u>	<u> Urban Planning Requirements</u>		
		Course List		
Code	Title		Hours	
Complete a	ny of the 500-level courses not co	ompleted in year four (<u>UP 501</u> , <u>503</u> , <u>504</u> , <u>505</u> , <u>511</u>)	0-4	
<u>UP 510</u>	Plan Making		4	
<u>UP 591</u>	Capstone Seminar (enrollment i	required for two terms- 0 hours each for Thesis students	0 OR	
	or 4 in fall, 0 in spring for Non-1	Thesis students)	4	
<u>UP 598</u>	Master's Project (<u>UP 598</u> for 4 to	otal hours or <u>UP 599</u> for 8 total hours)	4 OR	
			8	
or <u>UP 599</u>	Thesis Research			
Once admit	ted to the MUP program, a $4\!+\!1$ st	tudent must take 32 hours of graduate courses, 20 of	32	
which must	be UP courses. These courses inc	clude the capstone seminar and master's project or		
	-	minimum requirement for the MUP degree; it cannot be	9	
reduced by	reduced by <u>UP 590</u> internship or course waivers.			

Grad Other Degree Requirements

Requirement Description

Other MUP Requirements

Up to two MUP core courses may be included among the 32 hours. If more core courses are needed, then correspondingly more than 32 hours will be required for the MUP degree.

Minimum Hours Required Within the Unit: 20

Minimum 500-level Hours Required Overall: 16 (12 in

UP)

Hours

Minimum GPA: 3.0

<u>Summary of Credits for the joint Bachelor of Arts in Urban Studies and Planning and Master of Urban Planning in Urban Planning</u>

Course List

Title

	1100	
BA in Urban Studies & Planning		<u>120</u>
General Education		

 Foundation
 10

 Core
 24

 Concentration
 9-11

 Senior Year
 20-24

Free Electives

MUP in Urban Planning 32

A minimum of 16 credits at the 500 course level are required, 12 must be in UP.

Total Hours 152

MUP

Code

Program Relationships

Identify the existing programs to be joined:

Corresponding Program(s)

Urban Planning, MUP

Urban Studies & Planning, BA

Program Features

Academic Level Undergraduate

Graduate

What is the typical time to completion of this program?

5 years

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

152

What is the 3.0

required GPA?

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

Is this revision a change to the admission status of the program?

No

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.

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.

No impact.

Estimated Annual Number of Degrees Awarded

Year One Estimate

5th Year Estimate (or when fully implemented)

Budget

Are there

No

budgetary

implications for

this revision?

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?

There is no financial impact of this proposal.

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

No

Attach letters of

support

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts

necessary)

FAA Undergrad Differential/4 years and FAA Grad Differential/1

year

Are you seeking a change in the tuition rate or differential for this

program?

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.

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 joint program revision.

EP Documentation

EP Control

EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal

No

requires HLC

inquiry

DMI Documentation

Attach Final

U Program Review Comments KEY 943 8-24-2024.docx

Approval Notices

Banner/Codebook

BA:BA USP/MUP UP - UIUC & MUP:BA USP/MUP UP - UIUC

Name

Program Code: 10KR5907BA & 10KS5907MUP

NA

Minor Conc 5907 Degree Major Code Code Code 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

Mary Lowry (lowry) (07/26/24 4:07 pm): Rollback: Please see email sent to

Nicole Turner dated 7-26-24.

Mary Lowry (lowry) (08/23/24 4:27 pm): U Program Review comments attached

in DMI Documentation section

Key: 943

Date Submitted: 09/23/24 9:42 am

Viewing: 0365 : Social Work Minor, UG

Last approved: 09/27/22 1:40 pm

Last edit: 10/07/24 7:49 am

Changes proposed by: Erin Cockrum

Social Work Minor

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1783 Head
- 3. LL Committee Chair
- 4. LL Dean
- 5. University Librarian
- **6. COTE Programs**
- 7. Provost
- 8. Senate EPC
- 9. Senate
- 10. U Senate Conf
- 11. Board of Trustees
- 12. IBHE
- 13. HLC
- 14. DMI

Approval Path

- 1. 09/25/24 1:54 pm Donna Butler (dbutler): Approved for U Program Review
- 2. 09/25/24 2:01 pm Cheryl Street (street): Approved for 1783 Head
- 3. 09/25/24 2:03 pm Cheryl Street (street): Approved for LL Committee Chair
- 4. 09/25/24 5:35 pm
 Janet Liechty
 (jliechty):
 Approved for LL
 Dean
- 5. 09/25/24 6:07 pm Claire Stewart (clairest): Approved for

University Librarian

- 6. 09/25/24 9:06 pm Suzanne Lee (suzannel): Approved for COTE Programs
- 7. 10/02/24 2:52 pm Brooke Newell (bsnewell): Approved for Provost

History

1. Sep 27, 2022 by Erin Cockrum (cockrum)

Minor (ex. European Union Studies)

This proposal is

for a:

Revision

Administration Details

Official Program

Social Work Minor, UG

Name

Diploma Title

Sponsor College Social Work, School of

Sponsor

Social Work

Department

Sponsor Name Flavia Andrade Erin Cockrum

Sponsor Email <u>fandrade@illinois.edu</u> <u>cockrum@illinois.edu</u>

College Contact Erin Cockrum College Contact

Email

cockrum@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.

Initiator

Does this program have inter-departmental administration?

No

Proposal Title

Effective Catalog

Spring 2025

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)

Revise the Undergraduate Minor in Social Work in the School of Social Work

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 program.

- 1. Adding new course to the choose-from list: SOCW 220: Technology and Social Issues
- 2. Updating renumbered courses with accurate course numbers in the choose-from list: SOCW 210 was renumbered to SOCW 425 and SOCW 375 was renumbered to SOCW 445
- 3. Removing course that is not currently offered from the choose-from list: SOCW 436: Intl SW & Development
- 4. Updating the Program Regulation and Assessment: Student Learning Outcomes
- 5. Added minimum required hours wording to Study Table ("Minimum required hours and supporting coursework: At least six hours of advanced (300-400 level) coursework must be distinct from credit earned for the student's major or another minor. Minimum hours for minor: 18 credit hours.")

Total hours for the minor remain unchanged.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

<u>No</u>

Why are these changes necessary?

- 1 . Adding SOCW 220 aligns with current trends and addresses emerging topics while giving the SW minor students expanded options to explore the Social Work field.
- 2. Updating the renumbered courses to bring the choose-from list for the SW minor up-to-date.
- 3. Remove a course not currently offered from the choose-from list to ensure students do not encounter obsolete courses while planning the SW minor.
- 4. Adding Student Learning Outcomes for the Social Work minor as requested. However, the students will only be assessed as part of the minor, and these learning outcomes are expected as part of the minor coursework requirements.
- 5. The minimum hours required for the study table were added to clarify the requirements for the social work minor.

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?

Nο

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.

- Grasp the core values of social work, including service, social justice, dignity and worth of the person, importance of human relationships, integrity, and competence.
- Gain an understanding of human behavior in the social environment across the lifespan.
- Learn about the history and current structures of social welfare services and policies.
- Understand the ethical principles and standards of the social work profession.
- Develop cultural competency to work effectively in a diverse society. N/A

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.

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 for 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

Revised programs <u>Side by Side Social Work, Minor.xlsx</u>
Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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 Study Catalog

Minimum required hours and supporting coursework: At least six hours of advanced (300-400 level) coursework must be distinct from credit earned for the

student's major or another minor. Minimum hours for minor: 18 credit hours.

Course List

Code Title Hours
Minor required courses: 12

SOCW 200 Introduction to Social Work

Code Title Hours SOCW 300 Diversity: Identities & Issues SOCW 410 Social Welfare Pol and Svcs SOCW 451 HBSE I: Human Development Choose Two: 6 SOCW 210 Course SOCW 210 Not Found SOCW 220 Technology and Social Issues SOCW 240 Death & Dying SOCW 245 Doing Good through the Nonprofit Sector SOCW 297 Asian Families in America SOCW 310 UG Research Assistance SOCW 315 Social Work Services for Older Adults SOCW 321 Social Entre & Social Change **SOCW 330 International Perspectives** SOCW 360 Social Work and the Military **SOCW 370** Social Work and Disability Studies SOCW 375 Course SOCW 375 Not Found **SOCW 380** Current Topics in Social Work SOCW 412Hispanics in the U.S. SOCW 416 Child Welfare Issues & Trends SOCW 418 Independent Study SOCW 420 Subst Use in Social Context SOCW 436 Intl SW & Development SOCW 425 Queer Visibility SOCW 445 Social Enterprise Lab SOCW 455 Social Work with Women SOCW 475 Undergraduate Research Abroad SOCW 480 UG Research Project **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.

Admission to/enrollment in the Social Work minor is overseen through the use of minor forms, which can be accessed online or in paper format.

Are there any prerequisites for the proposed minor?

Nc

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.

Revisions will not impact enrollment or degree awarded.

Budget

Are there No

budgetary

implications for

this revision?

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

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.

Assessment from Behavioral Sciences librarian Yali Feng:

The new course SOCW 220 Technology and Social Issues should be well-supported by the existing library resources, and its impact on library resources is expected to be minimal. The other changes (i.e., removing a course and renumbering two courses) to the minor have no impact on the Library's resources, collections, and services.

EP Documentation

EP Control

EP.25.014

No

Number

Attach Rollback/ **Approval Notices**

This proposal

requires HLC

inquiry

DMI Documentation

Attach Final U Course Review Comments KEY 295 Social Work Minor

Approval Notices 9 10 2024.docx

Banner/Codebook

Name

Social Work

Program Code:

0365

Minor 0365 Conc Degree Major Code Code Code Code

Senate Approval

Date

Senate

Conference

Approval Date

BOT Approval

Date

IBHE Approval

Date

HLC Approval

Date

DOE Approval

NA

Date

Effective Date:

Attached
Document
Justification for
this request

Program Reviewer Comments

Brooke Newell (bsnewell) (10/16/23 8:22 pm): Rollback: Email sent to Erin and Carol

Brooke Newell (bsnewell) (03/19/24 2:05 pm): Rollback: Email sent to Erin and Carol

Brooke Newell (bsnewell) (09/10/24 9:47 am): U Program Review comments attached in DMI Documentation section

Brooke Newell (bsnewell) (09/10/24 9:48 am): Rollback: Per discussion with Erin and Cheryl.

Brooke Newell (bsnewell) (09/25/24 12:52 pm): No U Program Review Comments

Key: 295

Date Submitted: 09/23/24 1:17 pm

Viewing: 6216: Studio Art:

Interdisciplinary Practice, BFASA

Last approved: 08/02/24 5:03 pm

Last edit: 10/07/24 7:50 am

Changes proposed by: Nicole Turner

Studio Art: Interdisciplinary Practice, BFASA

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1526 Head
- 3. KR Dean
- 4. University Librarian
- **5. COTE Programs**
- 6. Provost
- 7. Senate EPC
- 8. Senate
- 9. U Senate Conf
- 10. Board of Trustees
- 11. IBHE
- 12. HLC
- 13. DMI

Approval Path

1. 09/26/24 11:25

am

Donna Butler

(dbutler):

Approved for U

Program Review

2. 09/26/24 11:45

am

Melissa Pokorny

(mpokorny):

Approved for 1526 Head

3. 09/26/24 12:06

pm

Nicole Turner

(nicturn):

Approved for KR

Dean

4. 09/27/24 12:37

pm

Claire Stewart

(clairest):

Approved for

University

Librarian

5. 09/27/24 2:03 pm Suzanne Lee (suzannel): Approved for COTE Programs

6. 10/02/24 2:53 pm
Brooke Newell
(bsnewell):
Approved for
Provost

History

- 1. Mar 13, 2019 by Deb Forgacs (dforgacs)
- 2. Apr 16, 2021 by Nicole Turner (nicturn)
- 3. Aug 2, 2024 by Nicole Turner (nicturn)

Concentration (ex. Dietetics)

This proposal is

for a:

Revision

Administration Details

Official Program

Name

Studio Art: Interdisciplinary Practice, BFASA

Diploma Title Bachelor of Fine Arts in Studio Art

Sponsor College Fine & Applied Arts

Sponsor

Art and Design

Department

Sponsor Name Melissa Pokorny

Sponsor Email mpokorny@illinois.edu

College Contact Nicole Turner College Contact

Email

nicturn@illinois.edu

College Budget

Officer

Greg Anderson

College Budget gnanders@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.

Nicole Turner; Melissa Pokorny

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)

Revise the Concentration in Interdisciplinary Practice in the Bachelor of Fine Arts in Studio Art in Studio Art in the College of Fine and Applied Arts

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 description of what changes are being made to the program.

1- Specify 3 credit hours from the 12 hours of 200-level ARTS (Studio Art rubric) course requirement to be from a set list of 10 course options

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

No

Why are these changes necessary?

1- The previous revision included the courses in the added list within the first-year curricula. With that change, the specification of the specific 200-level courses was removed. The studio art faculty has voted to revise the 12 credit hours of additional 200-level ARTS coursework to be 3 hours from a set list of ARTS 200-level courses (10 options) and 9 additional hours of any ARTS 200-level courses.

No changes to total degree hours or total concentration hours.

40 advanced hours

ARTS 351 - 3 hrs

ARTS 450 - 3 hrs

ARTS 350 - 3 hrs

Additional 300/400 level ARTS - 24 hrs

ARTS 392 - 3 hrs

ARTS 451 - 4 hrs

The sample schedule allows for 3 credit hours of free electives, which is unchanged from the previous revision.

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.

ALL BFASA concentrations share the following 7 LO's, with each concentration having additional learning outcomes reflective of those specializations.

- 1. Students will understand and be able to apply basic principles of visual and material communication, including two-dimensional pictorial concepts, three-dimensional formal and spatial concepts, and a wide variety of media and formats for artistic production, and possess the ability to apply them to a specific aesthetic intent.
- 2. Students will demonstrate an ability and willingness to experiment and explore the expressive possibilities of various media, and artistic and creative strategies for self-directed art-making and investigate the diverse activities and conceptual modes available to the contemporary artist, including work that directly addresses or engages with recent developments in the field of fine art as well as broader social questions and challenges. Students are trained in the production and critique of artworks that explore forms and technologies identified as new or emerging.
- 3. Students will gain knowledge of, understand, and be able to apply concepts of visual rhetoric in the development of content, and be able to recognize and critically analyze an evolving variety of communicative practices in art and visual culture, including those that represent diverse cultures and sociopolitical positions, and to demonstrate openness to new social possibilities and a critical empathy towards both audiences and culture producers of differing histories, origins and identities.
- 4. Students will develop an innovative, imaginative, and entrepreneurial self-directed studio practice, will gain a deep understanding of their own creativity, be able to apply it in any context, and will learn to independently generate thematic investigation and implementation of research in a broad variety of social locations, including art and educational institutions, activist forums, and cyberspace.
- 5. Students will be willing and able to investigate and accommodate broad-ranging types of knowledge and artistic strategies for the purpose of synthesizing diverse and even disparate ideas in order to create sophisticated, unique works of art, participate in new types of collaboration, and to make innovative statements and hypotheses, or propose creative solutions to social, organizational and societal problems using aesthetic strategies.
- 6. While pursuing a BFASA, students prepare for work as artists at a time when artists are employed in a variety of spheres artistic direction, project management, education, research, fine art, curation, performance, non-profit work, activism, advertising, and many others. As digital medias evolve, our graduates will be flexible, able to understand the best use of emerging technologies while crafting new economic and social connections.
- 7. Students will produce an integrated, cohesive, critically informed body of work for a thesis exhibition, supported by a written thesis document that serves to position their artistic practice within the broader sphere of contemporary art practices, exhibition strategies, audiences, and economies.

In addition, for the Interdisciplinary Practice concentration:

- 8. BFASA students in the Interdisciplinary Practice concentration will have the ability to conceive, design, and create works in one or more specific fine arts disciplines.
- 9. Students in the Interdisciplinary Practice concentration will have an understanding of the similarities, differences, and relationships among the various fine arts areas.
- 10. Students in the Interdisciplinary Practice concentration will have experiences that encourage familiarity with a broad variety of work in various specializations and media, including broad exposure to works of art.
- 11. Students in the Interdisciplinary Practice concentration will have opportunities to develop an area of emphasis in at least one fine arts area, process, or medium.

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

Describe here:

Student learning outcomes for the sophomore and junior years are assessed primarily via successful completion of art and design coursework. All courses in the school of art and design studio art program provide syllabi with stated learning goals and outcomes. Successful completion of these goals is determined through individual and group critiques following each assigned project. Individual student performance will be used to evaluate students' achievement of the course goals and will be evaluated by course instructors at the end of each term. The senior year culminates in a capstone course that requires the completion of a portfolio of work, as well as a written statement that adequately identifies the works intent and positions the work within the broader context of historical and current art practices. BASA students exhibit their work in a group exhibition, which provides an additional assessment mechanism of individual and group levels of achievement.

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.

Course grades, exhibition of artwork, and student feedback are used by program faculty to review and assess the attainment of program student learning outcomes and our last scheduled program meeting each May.

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

The programs within the School of Art and Design assess student learning outcomes on an annual basis, in response to the CLOA annual update prompt. Program assessment is led by program chairs, who share assessment plans each fall with the Executive Associate Director and the Program Chairs Committee, followed by a report on plan outcomes and potential impact on program courses and curriculum each spring. The school also has a standing Committee on Outcomes and Assessment who have oversight of shared school-wide courses, curricula, and learning outcomes. Program standards are further assessed by the National Association of Schools of Art and Design, the primary accrediting organization for colleges, schools, and universities in the United States.

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.

Revised programs BFA Interdisc FA 24 side by side

92624.xlsx

Studio Art Interdisciplinary Practice, BFASA sample schedule-2.docx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

A portfolio review is required for admission to the School of Art and Design.

The BFA in Studio Art with a concentration in Interdisciplinary Practice offers a student-initiated path through a variety of studio art course offerings. This concentration is meant for those students who want to develop multiple approaches to making art, rather than focusing on a singular discipline or medium. The contemporary art world is inherently interdisciplinary, flexible, and responsive to new technologies and methods of expression. The Interdisciplinary Studio concentration recognizes this and offers students the opportunity to approach, hone and develop skills across the wide range of related fine arts practices offered in the School of Art and Design. Students who choose the Interdisciplinary Practice concentration develop an array of practical approaches, weaving together experience and skills from courses across our studio areas and faculty expertise. Interdisciplinary courses at the sophomore, junior, and senior level focus on developing practical skills in a variety of material applications. Advanced courses center on building critical, theoretical, and professional competencies and expertise in unique studio practices.

Students in the BFA Studio Art degree, major in Studio Art, must declare one concentration and students may not declare more than one concentration.

Statement for

Programs of **Graduation Requirements**

Study Catalog Minimum hours required for graduation: 122 hours.

University Requirements

Minimum of 40 hours of upper-division coursework, generally at the 300- or 400-level. These hours can be

drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the <u>Student Code</u> (§ 3-801) and in the <u>Academic Catalog</u>.

General Education Requirements

Follows the <u>campus General Education (Gen Ed) requirements</u>. Some Gen Ed requirements may be met by courses required and/or electives in Art and Design.

_						
(\sim	ш	rc	Δ	Ιı	st

Code	9	Hours
Composition I		4-6
Advanced Composition		3
Humanities & the Arts (6 hours)		6
fulfilled by ARTH 110 and any other course approved as	Humanities & the Arts	
Natural Sciences & Technology (6 hours)		6
Social & Behavioral Sciences (6 hours)		6
Cultural Studies: Non-Western Cultures (1 course)		3
Cultural Studies: US Minority Cultures (1 course)		3
Cultural Studies: Western/Comparative Cultures (1 course))	3
fulfilled by <u>ARTH 110</u>		
Quantitative Reasoning (2 courses, at least one course mu	st be Quantitative Reasoning I)	6-10
Language Requirement (Completion of the third semester	or equivalent of a language other than	0-15
English is required)		

First Year Curriculum

Course List

Code	Title	Hours
FAA 101	Arts at Illinois	1
<u>ARTF 101</u>	Contemporary Issues in Art	2
<u>ARTE 101</u>	Art, Design, and Society	2
<u>ARTH 110</u>	Introduction to the History of Art and Visual Cultur	e3
<u>ARTF 103</u>	Design I	3
<u>ARTF 105</u>	Design II	3
Select one Drawing course:		3
ARTF 10	2Observational Drawing	
ARTF 104Expressive Drawing		
ARTF 10	<mark>6</mark> Visualization Drawing	
Total Hours		17

Art History Requirements

Course List

Code Title Hours

200 level and above ARTH courses9

Interdisciplinary Practice Concentration Requirements

Students must declare one concentration, students may not declare more than one concentration.

Course List

Code Title Hours

ARTS 252 Making and Meaning 3

200-level ARTS course from the following list: 3

ARTS 205Introduction to Printmaking

ARTS 210Ceramics Sculpture I

Code	Title	Hours	
ARTS 22	20Introduction to Fashion		
ARTS 22	21Fashion Illustration		
ARTS 24	11Image Practice		
ARTS 24	13Time Arts I		
ARTS 24	15Beginning Illustration		
ARTS 25	51Beginning Painting		
ARTS 26	54Basic Photography		
	30Beginning Sculpture		
	200-level ARTS courses	9	
<u>ARTS 350</u>	Interdisciplinary Studio	3	
ARTS 351		3	
	Advanced Interdisciplinary		
	300- and 400-level ARTS co		
Total Hours		48	
Capstone	Requirements		
	Course List		
		lours	
	Current Art Issues Seminar3		
	SFASA Capstone Studio 4		
Summary	of credits for Bachelor o	f Fine Arts in Studio Arts	
Code		Course List	Цания
General Ed	ucation	Title	Hours
First-Year (17
Art History			9
Concentrat			48
Capstone	.1011		7
·	ves to bring the total hours	earned to 122, including a minimum of 40 credits at th	-
or 400-leve	_	carned to 122, including a minimum of 40 credits at th	C 300
Total Hours			122
.ocai i ioui c			

Program Relationships

Corresponding

Program(s):

Corresponding Program(s)

Studio Art, BFASA

Program Features

Academic Level Undergraduate

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.)

Students in the BFASA Interdisciplinary Practice concentration will be advised by program faculty and staff advisors.

Delivery Method

This program is

available:

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

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.

No impact.

Budget

Are there

No

budgetary

implications for

this revision?

Will the program or revision require staffing (faculty, advisors, etc.)

beyond what is currently available?

No

Additional Budget

Information

No new staffing is required.

Attach File(s)

Financial Resources

How does the unit intend to financially support this proposal?

Not applicable.

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

No

Attach letters of

support

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.

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's resources, collections, and services are sufficient to meet the needs of the program outlined in this proposal.

EP Documentation

EP Control

EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal

No

requires HLC

inquiry

DMI Documentation

Attach Final <u>U Program Review Comments KEY 645 Studio Art</u>
Approval Notices <u>Interdisciplinary Practice, BFASA 9 25 2024.docx</u>

Banner/Codebook

Interdisciplinary Practice

Name

Program Code: 6216

Minor Conc 6216 Degree BFASA Major Code Code Code Code

5665

Senate Approval

Date

Senate

Conference

Approval Date

BOT Approval

Date

IBHE Approval

Date

HLC Approval

Date

DOE Approval na Date

Effective Date:

Attached
Document
Justification for
this request

Program Reviewer Comments **Brooke Newell (bsnewell) (09/25/24 2:13 pm):** U Program Review Comments attached in the DMI Documentation section

Key: 645

Date Submitted: 09/23/24 3:23 pm

Viewing: 10KV0300BS: Chemical

Engineering, BS

Last approved: 03/30/19 6:10 pm

Last edit: 10/07/24 7:50 am Changes proposed by: Kathy Thomas-Stagg

Chemical Engineering, BS

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1687 Head
- 3. SOCS Head
- 4. KV Dean
- 5. University Librarian
- 6. COTE Programs
- 7. Provost
- 8. Senate EPC
- 9. Senate
- 10. U Senate Conf
- 11. Board of Trustees
- 12. IBHE
- 13. HLC
- 14. DMI

Approval Path

- 1. 09/25/24 1:54 pm
 Donna Butler
 (dbutler):
 Approved for U
 Program Review
- 2. 09/25/24 2:21 pm Christopher Rao (cvrao): Approved for 1687 Head
- 3. 09/25/24 2:23 pm Paul Kenis (kenis): Approved for SOCS Head
- 4. 10/01/24 2:57 pm Stephen Downie (sdownie): Approved for KV Dean
- 5. 10/01/24 4:41 pm
 Claire Stewart
 (clairest):
 Approved for
 University
 Librarian

- 6. 10/01/24 5:44 pm
 Suzanne Lee
 (suzannel):
 Approved for
 COTE Programs
- 7. 10/02/24 2:52 pm Brooke Newell (bsnewell): Approved for Provost

History

1. Mar 30, 2019 by Deb Forgacs (dforgacs)

Major (ex. Special Education)

This proposal is

for a:

Revision

Administration Details

Official Program

omeiai i rogiam

Chemical Engineering, BS

Name

Diploma Title Bachelor of Science in Chemical Engineering

Sponsor College

Liberal Arts & Sciences

Sponsor

Chemical and Biomolecular Engineering

Department

Sponsor Name <u>Chris Rao</u>

Sponsor Email <u>cvrao@illinois.edu</u>

College Contact <u>Stephen R. Downie</u>

Email

College Contact

sdownie@illinois.edu

College Budget

Michael Wellens

Officer

College Budget

<u>wellens@illinois.edu</u>

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>Baron Peters - DUS head - baronp@illinois.edu</u>

<u>Kathy Thomas-Stagg - CHBE Undergraduate Coordinator - chbeugprogramoffice@illinois.edu</u>

Does this program have inter-departmental administration?

No

Proposal Title

Effective Catalog

Spring 2025

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)

Revise the Bachelor of Science in Chemical Engineering in the College of Liberal Arts and Sciences

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)."

This BS proposal (key 268) is related to the Chemical Engineering: Biomolecular Engineering, BS concentration (Key 734).

Program Justification

Provide a brief description of what changes are being made to the program.

- 1) Updated ENG 100 to the appropriate 1 credit hour. Due to this increase, we are decreasing Technical Electives by 1 credit hour. This decrease is reflected in the currently approved requirement, which states that students can take "Any 400 level course from List 2" and is being revised to say "One additional 400-level course from List 1 or List 2.""
- 2) Adding MATH 257 as alternative course choice for MATH 415.
- 3) Adding CHBE 411 and STAT 400 as alternative course options to IE 300.
- 4) Removing the additional 4 hours of Humanities/Social Science elective to be in line with campus standards.
- 5) Adding list of courses to the technical electives and removing the link to an external department website with the course listings.

- 6) Modifying the formatting of the POS and additional text (e.g., graduation requirements, university requirements, and general education requirements) to adhere to the campus General Education Template. Removed RHET 105 as being a requirement in the POS.
- 7) Updated the header names to more clearly indicate what is major vs. concentration coursework.
- 8) Removed footnotes and moved relevant material from footnotes into the POS table.
- 9) Program features and concentration questions have been updated for accuracy.
- 10) Added text about optional concentration within the POS table.
- 11) Updated/reworded text in Technical Elective heading to read, "These courses stress the rigorous analysis and design principles practiced in the major subdisciplines of chemical engineering, embodied in the standard chemical engineering program and in the biomolecular engineering concentration."
- 12) Reworded "total hours" statement for technical core and tech electives.
- 13) Edited the list of 548 tech elective options offered to ChBE students down to a list of 138 tech elective options.
- 14) Attached a letter the ChBE department sent out to those departments whose tech electives we are using or have removed from our initial list of approved tech electives when we started the CIM-P revision process.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

<u>No</u>

Why are these changes necessary?

- 1) A few years ago, ENG 100 was increased from 0 to 1 credit hours. In order for us to account for that change, we have decreased our Chemical Engineering Technical Electives requirement from 19 to 18 hours. Thus, the credit hours for this degree program remain unchanged. The requirement has been expanded to include more options for students.
- 2) Math recommends MATH 257 for engineering students because it combines numerical examples and algorithm implementation via Python programming making it more relevant for modern engineering students and applicable to data science needs.
- 3) All three courses include an introduction to the foundations of probability and statistics with applications -- random variables, distribution function models, hypothesis testing, confidence intervals, regression techniques, analysis of variance, and error propagation. CHBE 411 adds specific applications for chemistry, chemical engineering, and biomolecular engineering. CHBE 411 is now the preferred course for the Chemical Engineering degree with IE 300 and STAT 400 as acceptable substitutes.
- 4) This change makes CHBE consistent with other programs across campus, improves accessibility for students, and improves cross campus transparency. The additional 4 hours of required Social Sciences or Humanities was based on historical requirements from accreditation agencies, which have long since been removed.
- 5) Required by the Office of the Provost to conform with CIM-P process, increasing transparency and accessibility to course lists.
- 6) Per Office of the Provost General Education initiative for transparency and accessibility. Removed RHET 105 requirement because students should follow the campus guidelines for Composition I placement.
- 7) Header names updated to more accurately convey the standard ChemE program of study, which does not require any Biomolecular Engineering technical core classes in order to complete the program.
- 8) Removed footnotes and added relevant material from footnotes in the POS table for accessibility.
- 9) Program features concentration questions were updated to reflect current practice.
- 10) Added text about optional concentration within the POS table for transparency and clarity.
- 11) Updated text/reworded text in Technical Elective heading for clarity and transparency and following the request and suggestion of the Provost's Office.
- 12) Reworded for clarity and transparency.
- 13 & 14) At the beginning of this revision process, we had 548 tech electives, and each owning departments were contacted for approval of the use of their course in the ChBE

POS and approval letters from those departments were collected for the CIM-P revisions. Upon further review, because of the large amount of tech electives, the department researched what electives were only being taken by the ChBE department's students over the past 5 years. Those classes/tech electives that had 1 or fewer students taking the course were deleted from the tech elective list and the corresponding/owning departments were notified of their deletion from the ChBE Tech Elective list. This created a new/updated list of 138 tech electives, which significantly improves the focus of the ChBE Tech Elective lists for ChBE students with negligible impact on any other department.

List of upper-division courses (Note: 200-level courses having two or more prerequisites also constitute upper-division (upper-level) courses and are not indicated in the list below.):

```
2 hrs CHEM 315: Instrumental Chem Systems Lab
```

- 2 hrs CHEM 420: Instrumental Characterization
- 3 hrs MCB 450: Introductory Biochemistry
- 4 hrs CHEM 442: Physical Chemistry I
- 4 hrs CHBE 321: Thermodynamics
- 3 hrs CHBE 411 Probability and Statistics
- 4 hrs CHBE 421: Momentum and Heat Transfer
- 4 hrs CHBE 422: Mass Transfer Operations
- 3 hrs CHBE 424: Chemical Reaction Engineering
- 4 hrs CHBE 430: Unit Operations Laboratory
- 4 hrs CHBE 431: Process Design
- 3 hrs CHBE 440: Process Control and Dynamics
- 3 hrs Technical Elective (list 2, 400 level)
- 3 hrs Technical Elective (CHBE 400 level)
- 3 hrs Technical Elective (CHBE 400 level)
- 3 hrs Technical Elective (list 1, 400 level)
- -52 hrs of Upper-Level Course
- -NOTE: Total credit hours of program remain unchanged with this revision.

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?

Courses outside of the sponsoring department/ interdisciplinary departments ABE 436 - Renewable Energy Systems ABE 483 - Engr Props Food Materials ABE 488 - Bioprocessing Biomass for Fuel ABE 425 - Engrg Measurement Systems ABE 430 - Project Management ABE 497 - Independent Study ABE 498 - Special Topics ANSC 445 - Statistical Methods ANSC 450 - Comparative Immunobiology ATMS 420 - Atmospheric Chemistry ATMS 421 - Earth Systems Modeling BADM 461 - Tech, Eng, & Mgt Final Project BIOC 446 - Physical Biochemistry BIOE 476 - Tissue Engineering CEE 320 - Construction Engineering CEE 330 - Environmental Engineering CEE 350 - Water Resources Engineering CEE 407 - Airport Design CEE 440 - Fate Cleanup Environ Pollutant CEE 442 - Env Eng Principles, Physical CEE 443 - Env Eng Principles, Chemical CEE 450 - Surface Hydrology CEE 452 - Hydraulic Analysis and Design CEE 497 - Independent Study CEE 498 - Special Topics CHEM 436 - Fundamental Organic Chem II CHEM 437 - Organic Chemistry Lab CHEM 444 - Physical Chemistry II CHEM 445 - Physical Principles Lab I CHEM 483 - Solid State Structural Anlys CHEM 497 - Individual Study Senior CPSC 414 - Forage Crops & Pasture Ecology CPSC 415 - Bioenergy Crops CPSC 418 - Crop Growth and Management CPSC 419 - Midwest Agricultural Practices CPSC 453 - Principles of Plant Breeding CS 357 - Numerical Methods I CS 411 - Database Systems

CS 427 - Software Engineering I
CS 440 - Artificial Intelligence
CS 446 - Machine Learning
CS 498 - Special Topics
ECE 304 - Photonic Devices

ECE 313 - Probability with Engrg Applic
ECE 333 - Green Electric Energy
ECE 380 - Biomedical Imaging
ECE 416 - Biosensors
ECE 444 - IC Device Theory & Fabrication
ECE 481 - Nanotechnology
ECE 490 - Introduction to Optimization
FSHN 414 - Food Chemistry
FSHN 418 - Food Analysis
FSHN 426 - Biochemical Nutrition I
FSHN 428 - Community Nutrition
FSHN 460 - Food Processing Engineering
FSHN 465 - Principles of Food Technology
FSHN 471 - Food & Industrial Microbiology
FSHN 480 - Basic Toxicology
FSHN 481 - Food Processing Unit Ops I
FSHN 483 - Food Processing Unit Ops II
GEOL 450 - Investigating Earth's Interior
<u>GEOL 451</u> - <u>Environmental Geophysics</u>
GEOL 454 - Introduction to Seismology
GEOL 470 - Introduction to Hydrogeology
IB 451 - Conservation Biology
IS 467 - Ethics & Policy for Data Scien
MATH 402 - Non Euclidean Geometry
MATH 413 - Intro to Combinatorics
MATH 417 - Intro to Abstract Algebra
MATH 442 - Intro Partial Diff Equations
MATH 446 - Applied Complex Variables
MATH 461 - Probability Theory
MATH 487 - Advanced Engineering Math
MCB 408 - Immunology
MCB 424 - Microbial Biochemistry
MCB 436 - Global Biosecurity
MCB 450 - Introductory Biochemistry
MCB 462 - Integrative Neuroscience
ME 400 - Energy Conversion Systems
ME 471 - Finite Element Analysis
ME 482 - Musculoskel Tissue Mechanics
ME 483 - Mechanobiology
ME 487 - MEMS-NEMS Theory & Fabrication
MSE 304 - Electronic Properties of Matls
MSE 307 - Materials Laboratory I
MSE 308 - Materials Laboratory II
MSE 401 - Thermodynamics of Materials
MSE 402 - Kinetic Processes in Materials
MSE 403 - Synthesis of Materials
MSE 406 - Thermal-Mech Behavior of Matls

MSE 420 - Ceramic Materials & Properties

MSE 441 - Metals Processing MSE 450 - Polymer Science & Engineering MSE 457 - Polymer Chemistry MSE 458 - Polymer Physics MSE 460 - Electronic Materials I MSE 470 - Design and Use of Biomaterials MSE 473 - Biomolecular Materials Science MSE 480 - Surfaces and Colloids MSE 487 - Materials for Nanotechnology MSE 489 - Matl Select for Sustainability MSE 497 - Independent Study MSE 498 - Special Topics NPRE 201 - Energy Systems NPRE 402 - Nuclear Power Engineering NPRE 412 - Nuclear Power Econ & Fuel Mgmt NPRE 441 - Radiation Protection NPRE 442 - Radioactive Waste Management NPRE 457 - Safety Anlys Nucl Reactor Syst NPRE 461 - Probabilistic Risk Assessment NPRE 470 - Fuel Cells & Hydrogen Sources NPRE 475 - Wind Power Systems NPRE 480 - Energy and Security NPRE 483 - Seminar on Security NPRE 498 - Special Topics NRES 488 - Soil Fertility and Fertilizers PHYS 435 - Electromagnetic Fields I PHYS 470 - Subatomic Physics SE 400 - Engineering Law SE 411 - Reliability Engineering STAT 400 - Statistics and Probability I STAT 410 - Statistics and Probability II STAT 420 - Methods of Applied Statistics STAT 430 - Topics in Applied Statistics STAT 440 - Statistical Data Management TAM 211 - Statics TAM 251 - Introductory Solid Mechanics TAM 461 - Cellular Biomechanics UP 406 - Urban Ecology UP 430 - Urban Transportation Planning CEE 421 - Construction Planning CEE 422 - Construction Cost Analysis CEE 432 - Stream Ecology CEE 437 - Water Quality Engineering RHET 105 - Writing and Research MATH 257 - Linear Algebra w Computat Appl IE 300 - Analysis of Data CS 450 - Numerical Analysis

MSE 474 - Biomaterials and Nanomedicine

Please attach any Letter of Acknowledgement_IE 300.pdf letters of support/ Letter of Support_UP.pdf acknowledgement Letter of Support TAM.pdf for any Letter of Support STAT.pdf Letter of Support SE.pdf Instructional Letter of Support_PHYS.pdf Resources Letter of Support NRES.pdf consider faculty, students, and/or Letter of Support_NPRE.pdf other impacted Letter of Support MSE.pdf Letter of Support_ME.pdf units as appropriate. Letter of Support MCB.pdf <u>Letter of Support_MATH.pdf</u> Letter of Support IS.pdf Letter of Support_IB.pdf Letter of Support GEOL.pdf Letter of Support FSHN.pdf Letter of Support_ECE.pdf Letter of Support_ECE 2.pdf Letter of Support CS-CSE.pdf Letter of Support CPSC.pdf Letter of Support CHEM.pdf Letter of Support_CEE.pdf Letter of Support BIOE.pdf Letter of Support BIOC.pdf Letter of Support BADM.pdf Letter of Support_ATMS.pdf Letter of Support ANSC.pdf Letter of Support_ANSC 2.pdf Letter of Support ABE.pdf Letter of Removal_CHBE Tech Electives.pdf Letter of Acknowledgement RHET 105.pdf Letter of Support MATH 257.pdf

Program Regulation and Assessment

Plan to Assess and Improve Student Learning

Letter of Support_STAT 400.pdf

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.

Student learning outcomes are based on learning outcomes in line with the Accreditation Board for Engineering and Technology (ABET) accreditation process.

Upon completing this program, students are expected to be able to:

- 1) Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- 2) Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- 3) Communicate effectively with a range of audiences.
- 4) Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- 5) Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- 6) Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- 7) Acquire and apply new knowledge as needed, using appropriate learning strategies.

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

Describe here:

Course and Student Outcomes are directly and quantitatively measured in undergraduate core chemical engineering courses each semester. Adjustments and changes to lectures, problem sets, course projects and course emphasis are based on student performance on specific outcomes. The assessment process was applied to the core courses and quantitative and qualitative assessment of student performance, based on specific outcomes, have significantly shaped course improvement and instruction.

At the individual course level, course outcomes are developed by the faculty teaching that course with input from the entire faculty and are described within the individual course syllabi. Each of the course outcomes are matched with relevant student outcomes. Our approach for evaluating student achievement of outcomes involves instructors completing spreadsheets each semester for core courses. In their entirety, the documentation contained within the outcomes assessment spreadsheets directly and quantitatively demonstrates the achievement of student outcomes and tracks course improvement. Our spreadsheet-based process for documenting and measuring the achievement of our outcomes involves several steps:

- 1. Each instructor or teaching team develops and documents their course outcomes, with input from the faculty.
- <u>2. Each instructor designs assessment tools (exams, quizzes, projects, homework assignments, etc.) for each course outcome.</u> <u>These course outcomes are then mapped to student outcomes.</u>
- 3. Each instructor determines the acceptable level of achievement for each outcome for which students as a whole will be assessed. These attainment levels typically range from 60% to 75% depending upon the type and difficulty of the assessment tool and course material.
- <u>4.</u> Each instructor, with the help of a TA, compiles overall student achievement levels for each assessment tool and compares this average to the predetermined minimum achievement level.
- 5. If any outcome is not achieved, instructors suggest changes or possible reasons for the achievement level below the minimum acceptable level. These course improvements can also be prompted by lower than expected student performance on specific assessment instruments, instructor observations of the course, or best practices in engineering education.
- 6. In subsequent semesters, the instructors or teaching team close the loop and implement their suggested changes. Individual instructors adjust lectures, problem sets and course deliverables in response to course assessments. Once a change has been implemented, it is evaluated for efficacy. If an outcome is still not being achieved, further modifications are considered. These suggestions for modification can be instructor-derived, or solicited from other faculty, from a faculty, subcommittee, annual Curriculum Assessment and Review meeting, or from one of the various teaching support resources available to faculty outlined in Criterion 8. This process of iterative

continuous improvement is performed each time the course is offered.

7. Faculty members submit spreadsheets documenting items 1 through 6 as well as graded samples of all assessment tools which directly measure the achievement of one or more course outcomes tied to one or more student outcomes. This documentation is reviewed for completeness and archived by the Assessment Committee.

Extensive quantitative assessment of student outcomes is reviewed every six years.

Additional qualitative assessment are performed based on instructor observation, which prompt additional course improvements. Individual course spreadsheets, along with course improvement suggestions, samples of graded student work, and annual curriculum meeting minutes are collected and archived by the Assessment Committee every semester and can be made available if desired.

Graduating Student Survey

Senior students are surveyed starting 1-2 months before graduation to collect feedback on outcomes achievement and overall perception of the program. The graduating senior survey is kept open and available for completion for 1-2 months after graduation. This survey is conducted twice a year to allow every student an opportunity to provide feedback, as some students graduate in December. One important aspect of this survey is collecting feedback on the students' own perceived level of achievement of the student outcomes. Though these data are self-reflective, it is an important aspect of assessment since it helps us gauge the students' perceived level of preparedness, achievement and confidence at the time of graduation.

Students are asked to rate on a 1-5 scale their perceived level of achievement of the student outcomes.

For all surveys, any qualitative suggestions are documented and grouped based on topic. The quantitative and qualitative results of the Graduating Senior Survey are compiled, documented, and presented to the faculty once a year. Faculty discussion and resulting action items are documented in the Faculty Curriculum meeting minutes. Often action items are delegated to a sub group of faculty, such as the Undergraduate Curriculum Committee, for further analysis and suggested action if warranted.

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.

Additional qualitative assessment are performed based on instructor observation, which prompt additional course improvements. Individual course spreadsheets, along with course improvement suggestions, samples of graded student work, and annual curriculum meeting minutes are collected and archived by the Assessment Committee every semester and can be made available if desired.

Graduating Student Survey

Senior students are surveyed starting 1-2 months before graduation to collect feedback

on outcomes achievement and overall perception of the program. The graduating Explain the process that will be implemented to ensure that assessment results are used to improve student

learning.

graduation. This survey is conducted twice a year to allow every student an opportunity Annually CHBE faculty hold a Curriculum Assessment and Review meeting. Within this <u>meeting, a representative from each core CHBE course reports, assessment information,</u> overall perceptions of student strengths, and areas in peed of improvement. This meeting is an opportunity to discuss the curriculum, as a whole and the propagation of student skills throughout the program. Facilitating amouth transitions from a prerequisite class to a higher level course are discussed and improvements to strengthen the prerequisite course or its structure are evaluated Specifically of the evaluations of overall student strengths and areas in need of improvement are conducted by the faculty teaching the capstone courses, design (CHBE 431) and unit eperations (CHBE 430) who continuously evaluate and improve the curriculum through a holistic approach, If the results of this annual Curriculum Assessment and Review meeting suggest the need for significant changes in course structure of coverage on these concerns are referred to the Undergraduate Curriculum Committee for minutes. Greation tems are delegated to a sub group of faculty, such as the Undergraduate Curriculum Committee, for further analysis and suggested action if warranted.

Program

Description and Requirements

Attach Documents

Indirect Assessments/Informal Data Sources

To augment Alumni and Employer Surveys which often have very low response rates, Is the career/profession for graduates of this program regulated by the State of Illinois? In the career/profession are alumni, when they visit campus. Representatives from industry visit faculty

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.

Revised programs (LAS) Sample Sequence Chemical Engineering,

BS v 9-17-24 for CIMP.docx

Side by Side - Chemical Engineering v

9-23-2024.xlsx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

The first two years of the Chemical Engineering curriculum provide a strong foundation in basic sciences through Physics, Mathematics, Chemistry, an introduction to what Chemical Engineers do, and the fundamental basis of Chemical Engineering (Mass and Energy Balances and Thermodynamics.) In the third year, students delve deeper into more specialized Chemistry courses such as Physical and Analytical Chemistry, while exploring fundamental Chemical Engineering courses such as Momentum Transfer, Separations, and Reactor Design. The Senior year incorporates all of this learning through high level technical electives, Process Control, Capstone Lab, and Capstone Design courses. It is through the lab and design class that students apply everything they have learned in previous Chemical Engineering courses to real-world team projects and presentations.

The Chemical Engineering specialized curriculum provides a concentration in Biomolecular Engineering, with the Biomolecular concentration's technical electives focusing more on bio-applied processing and technology.

Statement for

Programs of Study Catalog

Graduation Requirements

Minimum hours required for graduation: 129 hours.

Generaleducation: Students must complete the Campus General Education requirements including the campus general education languagerequirement. Minimum required major and supporting coursework: A grade point average of 2.5 or higher in all courses required for the major earned on the UIUC campus is required in order to be accepted by the department as juniors and seniors.

University Requirements

Minimum of 40 hours of upper-division coursework, generally at the 300- or 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog.

General Education Requirements

<u>Follows the campus General Education (Gen Ed) requirements.</u> <u>Some Gen Ed requirements may be met by courses required and/or electives in the program.</u>

Course List Code Title Hours Composition I 4-6 **Advanced Composition** <u>3</u> fulfilled by CHBE 431 Humanities & the Arts (6 hours) <u>6</u> Natural Sciences & Technology (6 hours) <u>6</u> fulfilled by CHEM 202 and CHEM 204, or CHEM 102 and CHEM 104; and PHYS 211, PHYS 212 Social & Behavioral Sciences (6 hours) <u>6</u> <u>3</u> Cultural Studies: Non-Western Cultures (1 course) Cultural Studies: US Minority Cultures (1 course) <u>3</u> Cultural Studies: Western/Comparative Cultures (1 course) <u>3</u> Quantitative Reasoning (2 courses, at least one course must be Quantitative Reasoning I) 6-10

Code Title Hours

fulfilled by MATH 220 or MATH 221; and MATH 231, MATH 241, MATH 285, PHYS 211, PHYS 212, CS 101

Language Requirement (Completion of the third semester or equivalent of a language other than English is required.)

0-15

Minimum hours required forgraduation: The curriculum requires 129 hours for graduation and is organized as shownbelow. Orientation and Professional Development

These courses introduce opportunities and resources the college, department, and curriculum offers students.

These courses introduce opportunities and resources the college, department, and curriculum offers students. They also provide background on the Chemical Engineering curriculum, what chemical engineers do, and the skills to work effectively and successfully in the engineering profession.

Course List

Code	Title		Hours
CHBE 121	CHBE Profession		1
For non-first	<u>-year students, CHBE 121 ca</u>	n be replaced with 1 hour of credit from	<u> Technical Elective</u>
List 1 or List	2. (Ref List 1 and List 2 belo	<u>.w.)</u>	
<u>ENG 100</u>	Grainger Engineering	Orientation Seminar	1
Total Hours			2

Foundational Mathematics and Science

Foundational Mathematics and Science

These courses stress the basic mathematical and scientific principles upon which the engineering discipline is based.

Course List

	Codi Se List	
Code	Title	Hours
Select one group	of courses (Accelerated or General Chemistry)	<u>10-12</u>
<u>CHEM 202</u>	Accelerated Chemistry I	
& <u>CHEM 20</u>	3 and Accelerated Chemistry Lab I	
& <u>CHEM 20</u>	4 and Accelerated Chemistry II	
& <u>CHEM 20</u>	5 and Accelerated Chemistry Lab II	
CHEM 203	Accelerated Chemistry Lab I	2
CHEM 204	Accelerated Chemistry II	3
CHEM 205	Accelerated Chemistry Lab II	2
<u>OR</u>		
<u>CHEM 102</u>	General Chemistry I	
<u>& CHEM 103</u>	and General Chemistry Lab I	
<u>& CHEM 104</u>	and General Chemistry II	
<u>& CHEM 105</u>	and General Chemistry Lab II	
<u>& CHEM 222</u>	and Quantitative Analysis Lecture	
<u>& CHEM 223</u>	and Quantitative Analysis Lab	
<u>MATH 221</u>	Calculus I (MATH 220 may be substituted. MATH 220 is appropriate for students	4
	with no background in calculus. 4 or 5 credit hours count towards the degree.)	

Code	Title	Hours
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 257	Linear Algebra with Computational Applications	<u>3</u>
or MATH 415	Applied Linear Algebra	
<u>MATH 285</u>	Intro Differential Equations	3
or <u>MATH 441</u>	Differential Equations	
MATH 415	Applied Linear Algebra	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 214	Univ Physics: Quantum Physics	2
Total Hours		37-39

Chemical Engineering Technical Core

Chemical and Biomolecular Engineering Technical Core

These courses stress fundamental concepts and basic laboratory techniques that comprise the common intellectual understanding of chemical engineering and chemical science.

Course List

Code	Title	Hours
CHBE 221	Principles of CHE	3
CHBE 321	Thermodynamics	4
CHBE 421	Momentum and Heat Transfer	4
<u>CHBE 422</u>	Mass Transfer Operations	4
<u>CHBE 424</u>	Chemical Reaction Engineering	3
<u>CHBE 430</u>	Unit Operations Laboratory	4
CHBE 431	Process Design	4
<u>CHBE 440</u>	Process Control and Dynamics	3
<u>CHEM 236</u>	Fundamental Organic Chem I	4
<u>CHEM 237</u>	Structure and Synthesis	2
<u>CHEM 315</u>	Instrumental Chem Systems Lab	2
Students must regist	ter in one of the Chemical Engineering-specific CHEM 315 lab sections	<u>5.</u>
<u>CHEM 420</u>	Instrumental Characterization	2
<u>CHEM 442</u>	Physical Chemistry I	4
<u>CS 101</u>	Intro Computing: Engrg & Sci	3
IE 300	Analysis of Data	3
<u>CHBE 411</u>	Probability and Statistics for ChBE	<u>3-4</u>
<u>or IE 300</u>	Analysis of Data	
or STAT 400	Statistics and Probability I	
Total Hours		49-50

Note: An optional Biomolecular Engineering concentration can be elected. See Chemical Engineering: Biomolecular Engineering, BS. Those who do not elect the optional concentration are required to take the coursework below.

Chemical Engineering Technical Core (cont.)

Course List

Code Title Hours **CHEM 436** Fundamental Organic Chem II 3

or MCB 450 Introductory Biochemistry

Total Hours for Chemical Engineering Technical Core52-53

Chemical Engineering Technical Electives

For Chemical Engineering

Course List

Code **Title** Hours Technical Core 49 CHEM 436 Fundamental Organic Chem II3 or MCB 450Introductory Biochemistry

Technical Electives

CEE 350 CEE 421

Total Hours

These courses stress the rigorous analysis and design principles practiced in the major subdisciplines of chemical engineering, engineering embodied in the standard chemical engineering program and biomolecular engineering concentration. concentrations.

θ

Course List	
Code Title	Hours
Selected from the departmentally approved List of Approved Chemical Engineering Technical	
Electives, satisfying these distribution requirements: 6	
400-level ChBE courses, with not more than 3 hours being CHBE 497 or CHBE 499 7	6
Any 400 level course from List 1 7	3
Any courses from List 1 7	6
Any 400 level course from List 2	4
Select 18 credit hours from List 1 and List 2, with specific requirements noted below.	
Note: A maximum of 10 credit hours of undergraduate research may be counted toward Technical	
Elective credit.	
Two 400-level ChBE courses from List 1, with not more than 3 hours being CHBE 497 or CHBE 499	<u>6</u>
One Additional 400-level course from List 1	6 3 6 3
Two Additional courses from List 1	
One Additional 400-level course from List 1 or List 2	
Total Hours for Chemical Engineering Technical Electives	<u>18</u>
<u>LIST 1</u>	
Any 400-level ChBE Course, excluding ChBE core courses CHBE 421, 422, 424, 430, 431 & 440	
ABE 436 Renewable Energy Systems	
ABE 483 Engineering Properties of Food Materials	
ABE 488 Bioprocessing Biomass for Fuel	
ATMS 420 Atmospheric Chemistry	
BIOE 476 <u>Tissue Engineering</u>	
CEE 320 Construction Engineering	
CEE 330 Environmental Engineering	

Water Resources Engineering

Construction Planning

Code	Title	Hours
CEE 422	Construction Cost Analysis	
CEE 432	Stream Ecology	
CEE 437	Water Quality Engineering	
CEE 440	Fate Cleanup Environ Pollutant	
CEE 442	Environmental Engineering Principles, Physical	
CEE 443	Env Eng Principles, Chemical	
CEE 450	Surface Hydrology	
CEE 452	Hydraulic Analysis and Design	
CHBE 297	Individual Study Sophomores	
CHBE 397	Individual Study for Juniors	
CS 357	Numerical Methods I	
CS 411	Database Systems	
CS 427	Software Engineering I	
CS 440	Artificial Intelligence	
CS 446	Machine Learning	
<u>CS 450</u>	Numerical Analysis	
CS 498	Special Topics	
ECE 304	Photonic Devices	
ECE 313	Probability with Engrg Applic	
ECE 333	Green Electric Energy	
ECE 380	Biomedical Imaging	
ECE 416	Biosensors	
ECE 444	IC Device Theory & Fabrication	
ECE 481	Nanotechnology	
ECE 490	Introduction to Optimization	
ME 400	Energy Conversion Systems	
ME 471	Finite Element Analysis	
ME 482	Musculoskel Tissue Mechanics	
ME 483	Mechanobiology	
ME 487	MEMS-NEMS Theory & Fabrication	
MSE 304	Electronic Properties of Matls	
MSE 307	Materials Laboratory I	
MSE 308	Materials Laboratory II	
MSE 401	Thermodynamics of Materials	
MSE 402	Kinetic Processes in Materials	
MSE 403	Synthesis of Materials	
MSE 406	Thermal-Mech Behavior of Matls	
MSE 420	Ceramic Materials & Properties	
MSE 441	Metals Processing	
MSE 450	Polymer Science & Engineering	
MSE 457	Polymer Chemistry	
MSE 458	Polymer Physics	
MSE 460	Electronic Materials I	
MSE 470	Design and Use of Biomaterials	
MSE 473	Biomolecular Materials Science	
MSE 474	Biomaterials and Nanomedicine	
MSE 480	Surfaces and Colloids	
113L 400	Sanaces and Conolds	

Code	Title	Hours
MSE 487	Materials for Nanotechnology	
MSE 489	Matl Select for Sustainability	
NPRE 201	Energy Systems	
NPRE 402	Nuclear Power Engineering	
NPRE 412	Nuclear Power Econ & Fuel Mgmt	
NPRE 441	Radiation Protection	
NPRE 442	Radioactive Waste Management	
NPRE 457	Safety Anlys Nucl Reactor Syst	
NPRE 461	Probabilistic Risk Assessment	
NPRE 470	Fuel Cells & Hydrogen Sources	
NPRE 475	Wind Power Systems	
NPRE 480	Energy and Security	
SE 411	Reliability Engineering	
TAM 211	Statics	
TAM 251	Introductory Solid Mechanics	
TAM 461	Cellular Biomechanics	
LIST 2		
ABE 425	Engrg Measurement Systems	
ABE 430	Project Management	
ABE 497	Independent Study	
ABE 498	Special Topics	
ANSC 445	Statistical Methods	
ANSC 450	Comparative Immunobiology	
ATMS 421	Earth Systems Modeling	
BADM 461	Tech, Eng, & Mgt Final Project	
BIOC 446	Physical Biochemistry	
CEE 407	Airport Design	
<u>CEE 497</u>	Independent Study	
CEE 498	Special Topics	
<u>CHEM 436</u>	Fundamental Organic Chem II	
<u>CHEM 437</u>	Organic Chemistry Lab	
<u>CHEM 444</u>	Physical Chemistry II	
<u>CHEM 445</u>	Physical Principles Lab I	
<u>CHEM 483</u>	Solid State Structural Anlys	
<u>CHEM 497</u>	<u>Individual Study Senior</u>	
<u>CPSC 414</u>	Forage Crops & Pasture Ecology	
CPSC 415	Bioenergy Crops	
<u>CPSC 418</u>	Crop Growth and Management	
<u>CPSC 419</u>	Midwest Agricultural Practices	
<u>CPSC 453</u>	Principles of Plant Breeding	
<u>FSHN 414</u>	Food Chemistry	
<u>FSHN 418</u>	Food Analysis	
<u>FSHN 426</u>	Biochemical Nutrition I	
<u>FSHN 428</u>	Community Nutrition	
<u>FSHN 460</u>	Food Processing Engineering	
<u>FSHN 465</u>	Principles of Food Technology	
<u>FSHN 471</u>	Food & Industrial Microbiology	

Code	Title	Hours
<u>FSHN 480</u>	Basic Toxicology	
<u>FSHN 481</u>	Food Processing Unit Operations I	
<u>FSHN 483</u>	Food Processing Unit Operations II	
GEOL 450	Investigating the Earth's Interior	
<u>GEOL 451</u>	Environmental Geophysics	
<u>GEOL 454</u>	Introduction to Seismology	
<u>GEOL 470</u>	Introduction to Hydrogeology	
<u>IB 451</u>	Conservation Biology	
<u>IS 467</u>	Ethics and Policy for Data Science	
MATH 402	Non Euclidean Geometry	
MATH 413	Intro to Combinatorics	
MATH 417	Intro to Abstract Algebra	
MATH 442	Intro Partial Diff Equations	
<u>MATH 446</u>	Applied Complex Variables	
MATH 461	<u>Probability Theory</u>	
MATH 487	Advanced Engineering Math	
MCB 408	<u>Immunology</u>	
MCB 424	Microbial Biochemistry	
MCB 436	Global Biosecurity	
MCB 450	Introductory Biochemistry	
MCB 462	Integrative Neuroscience	
MSE 497	Independent Study	
MSE 498	Special Topics	
<u>NPRE 483</u>	Seminar on Security	
<u>NPRE 498</u>	Special Topics	
NRES 488	Soil Fertility and Fertilizers	
PHYS 435	Electromagnetic Fields I	
PHYS 470	Subatomic Physics	
<u>SE 400</u>	Engineering Law	
STAT 400	Statistics and Probability I	
STAT 410	Statistics and Probability II	
STAT 420	Methods of Applied Statistics	
STAT 430	<u>Topics in Applied Statistics</u>	
STAT 440	Statistical Data Management	
<u>UP 406</u>	<u>Urban Ecology</u>	
<u>UP 430</u>	<u>Urban Transportation Planning</u>	
	g Social Sciences and Humanities The social sciences and humanities courses	
ensure that students have	ve exposure in breadth and depth to areas of intellectual activity that are ess	ential

ensure that students have exposure in breadth and depth to areas of intellectual activity that are essential to the general education of any college graduate.

Course List

Code Title Hours
General education courses to satisfy the university requirements for social & behavioral sciences,
humanities & the arts, and cultural studies (Non-Western, U.S. Minority, and Western Cultures).
Composition These courses teach fundamentals of expository writing.

Course List

CodeTitleHoursRHET 105Writing and Research4

Code Title Hours

Advanced Composition (satisfied by completing the sequence CHBE 430 and CHBE 431 in the Chemical Engineering Technical Core).

Total Hours 0

4

For students entering the curriculum after the freshman year, 1 additional hour of credit from the list of approved engineering technical electives may be substituted in place of CHBE 121.

2

Students who do not place into CHEM 202%7C, or who do not satisfy the mathematics prerequisite for CHEM 202%7C, may substitute the sequence CHEM 102%7C, CHEM 103%7C, CHEM 104%7C, CHEM 105%7C, CHEM 222%7C, and CHEM 223%7C for CHEM 202%7C, CHEM 203%7C, CHEM 204%7C, and CHEM 205%7C.

3

MATH 220%7C may be substituted, with four of the five credit hours applying toward the degree. MATH 220%7C is appropriate for students with no background in calculus.

4

MATH 441%7C may be substituted for MATH 285%7C. MATH 286%7C (4 hours) may be substituted for MATH 285%7C (3 hours).

5Students must register in one of the Chemical Engineering-specific CHEM 315%7C lab sections. **6** List of Approved Chemical Engineering Technical Electives. **7**

A maximum of 10 total hours of undergraduate research may be counted toward Technical Elective credit.

Corresponding

BS Bachelor of Science

Degree

Program Features

Academic Level Undergraduate

Does this major Yes

have transcripted

concentrations?

Will you admit to No

the concentration

directly?

Is a concentration No

required for

graduation?

What is the typical time to completion of this program?

4 years

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

129

CIP Code 140701 - Chemical Engineering.

Is This a Teacher Certification Program?

Nο

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 Spring 2025 Admissions Term

Is this revision a change to the admission status of the program?

No

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.

First-year applicants will continue to be evaluated holistically before a decision is made. Several factors such as courses taken in high school, grades, extracurricular activities, information submitted in essays, and test scores (if provided) are considered. Transfer applicants will continue to be evaluated based on the graded transferable college credit received from previous colleges and/or universities attended. Prerequisite coursework includes a non-accelerated (or accelerated) general chemistry sequence, a 3-semester calculus and analytic geometry sequence, and a 3-semester calculus-based physics sequence).

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.

No impact on enrollment will occur due to this revision.

Estimated Annual Number of Degrees Awarded

Year One Estimate 5th Year Estimate (or when

fully implemented)

What is the Fall matriculation term for this program?

Budget

Are there No

budgetary implications for

this revision?

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

What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)

Engineering Differential

Are you seeking a change in the tuition rate or differential for this program?

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.

There will be no impact on faculty resources for the creation and sustainability of this program/courses due to this revision.

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 proposal team consulted with Mary Schlemback, M.L.S, CAS and, based upon their input, determined that the Library's resources, collections, and services are sufficient to meet the needs of the program outlined in this proposal."

EP Documentation

EP Control

EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal requires HLC

No

inquiry

DMI Documentation

Attach Final <u>U Program Review Comments KEY 268 8 7 2024.docx</u>

Approval Notices <u>U Program Review Comments KEY 268 Chemical Engineering, BS</u>

9 16 2024.docx

Banner/Codebook

Name

BS:Chemical Engineering -UIUC

Program Code: 10KV0300BS

Minor Conc Degree BS Major Code Code Code Code

0300

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

Brooke Newell (bsnewell) (10/13/23 10:10 am): Rollback: Email sent to Kathy,

Brooke Newell (bsnewell) (11/15/23 9:14 am): Rollback: Email sent to Kathy,

Chris, Baron, Andrea and Stephen

Baron, Chris, Andrea and Stephen

Brooke Newell (bsnewell) (04/02/24 10:12 am): Rollback: Per Teams discussion

with Kathy

Brooke Newell (bsnewell) (04/10/24 11:30 am): Rollback: Email will be sent to Kathy

Brooke Newell (bsnewell) (07/09/24 4:01 pm): Rollback: Email sent to Kathy Brooke Newell (bsnewell) (07/24/24 2:57 pm): Rollback: Teams conversation with Kathy

Brooke Newell (bsnewell) (07/30/24 3:59 pm): Rollback: Per Kathy TS request Brooke Newell (bsnewell) (08/07/24 8:51 am): U Program Review comments are attached in the DMI Documentation section.

Stephen Downie (sdownie) (08/14/24 11:36 am): Rollback: Further revisions required. Explanatory email sent to K. Thomas-Stagg et al. on 08/14/24.

Brooke Newell (bsnewell) (09/16/24 2:28 pm): U Program Review Comments attached in DMI Documentation section

Brooke Newell (bsnewell) (09/16/24 2:34 pm): Rollback: Rolled back per request from Kathy

Brooke Newell (bsnewell) (09/20/24 9:16 am): Rollback: Per discussion with Kathy

Brooke Newell (bsnewell) (09/23/24 1:23 pm): Rollback: per discussion with Kathy

Brooke Newell (bsnewell) (09/25/24 12:47 pm): No U Program Review Comments

Key: 268

Date Submitted: 09/23/24 1:23 pm

Viewing: 10KV5029BS: Chemical

Engineering: Biomolecular Engineering, BS

Last approved: 04/29/19 1:58 pm

Last edit: 10/07/24 7:50 am
Changes proposed by: Kathy Thomas-Stagg

Chemical Engineering: Biomolecular Engineering, BS

Catalog Pages Using this Program

Proposal Type:

In Workflow

- 1. U Program Review
- 2. 1687 Head
- 3. SOCS Head
- 4. KV Dean
- 5. University Librarian
- 6. COTE Programs
- 7. Provost

8. Senate EPC

- 9. Senate
- 10. U Senate Conf
- 11. Board of Trustees
- 12. IBHE
- 13. HLC
- 14. DMI

Approval Path

- 1. 09/25/24 1:54 pm Donna Butler (dbutler): Approved for U Program Review
- 2. 09/25/24 2:21 pm Christopher Rao (cvrao): Approved for 1687 Head
- 3. 09/25/24 2:23 pm Paul Kenis (kenis): Approved for SOCS Head
- 4. 10/01/24 2:57 pm Stephen Downie (sdownie): Approved for KV Dean
- 5. 10/01/24 4:41 pm
 Claire Stewart
 (clairest):
 Approved for
 University
 Librarian

- 6. 10/01/24 5:44 pm Suzanne Lee (suzannel): Approved for COTE Programs
- 7. 10/02/24 2:53 pm
 Brooke Newell
 (bsnewell):
 Approved for
 Provost

History

1. Apr 29, 2019 by Deb Forgacs (dforgacs)

Concentration (ex. Dietetics)

This proposal is

for a:

Revision

Administration Details

Official Program

Chemical Engineering: Biomolecular Engineering, BS

Name

Diploma Title

Sponsor College Liberal Arts & Sciences

Sponsor

Chemical and Biomolecular Engineering

Department

Sponsor Name <u>Chris Rao</u>

Sponsor Email <u>cvrao@illinois.edu</u>

College Contact Stephen R. Downie College Contact

Email

sdownie@illinois.edu

College Budget

Michael Wellens

Officer

College Budget

Officer Email

wellens@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.

<u>Baron Peters - DUS head - baronp@illinois.edu</u> Kathy Thomas-Stagg - CHBE Undergraduate Coordinator - chbe-

ugprogramoffice@illinois.edu

Does this program have inter-departmental administration?

No

Proposal Title

Effective Catalog

Spring 2025

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)

Revise the Concentration in Biomolecular Engineering in the Bachelor of Science in Chemical Engineering in the College of Liberal Arts and Sciences

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)."

This concentration proposal (key 734) is related to the Chemical Engineering, BS proposal (key 268).

Program Justification

Provide a brief description of what changes are being made to the program.

- 1) Updated ENG 100 to the appropriate 1 credit hour. Due to this increase, we are decreasing Technical Electives by 1 credit hour.
- 2) Adding MATH 257 as alternative course choice for MATH 415.
- 3) Adding CHBE 411 and STAT 400 as alternative course options to IE 300.
- 4) Removing the additional 4 hours of Humanities/Social Science elective to be in line with campus standards.
- 5) Adding list of courses to the technical electives and removing the link to an external department website with the course listings.
- 6) Modifying the formatting of the POS and additional text (e.g., graduation requirements, university requirements, and general education requirements) to adhere to the campus General Education Template. Removed RHET 105 as being a

requirement in the POS.

- 7) Updated the header names to more clearly indicate what is major vs. concentration coursework.
- 8) Removed footnotes and moved relevant material from footnotes into the POS table.
- 9) The previous requirement of "Two Courses from Category B" has been updated to state, "Two Additional Courses from Category A or Category B".
- 10) Changed the wording from "Any 400 level course from List" to "One additional 400-level course from List 1 and List 2."
- 11) Edited text that previously read, "These courses stress the rigorous analysis and design principles practiced in the major subdisciplines of chemical engineering embodied in the chemical engineering and biomolecular engineering concentrations." to now read, "These courses stress the rigorous analysis and design principles practiced in the major subdisciplines of chemical engineering, embodied in the standard chemical engineering program and in the biomolecular engineering concentration."
- 12) Edited the list of 548 tech elective options offered to ChBE students down to a list of 138 tech elective options.
- 13) Attached a letter the ChBE department sent out to those departments whose tech electives we are using or have removed from our initial list of approved tech electives when we started the CIM-P revision process.

Did the program content change 25% or more in relation to the total credit hours, since the 2020-2021 catalog. (http://catalog.illinois.edu/archivedacademiccatalogs/2020-2021/)

<u>No</u>

Why are these changes necessary?

- 1) A few years ago, ENG 100 was increased from 0 to 1 credit hours. In order for us to account for that change, we have decreased our Chemical Engineering Technical Electives requirement from 19 to 18 hours. Thus, the credit hours for this degree program remain unchanged.
- 2) Math recommends MATH 257 for engineering students because it combines numerical examples and algorithm implementation via Python programming making it more relevant for modern engineering students and applicable to data science needs.
- 3) All three courses include an introduction to the foundations of probability and statistics with applications -- random variables, distribution function models, hypothesis testing, confidence intervals, regression techniques, analysis of variance, and error propagation. CHBE 411 adds specific applications for chemistry, chemical engineering, and biomolecular engineering. CHBE 411 is now the preferred course for the Chemical and Biomolecular Engineering degree with IE 300 and STAT 400 as acceptable substitutes.
- 4) This change makes CHBE consistent with other programs across campus, improves accessibility for students, and improves cross campus transparency. The additional 4 hours of required Social Sciences or Humanities was based on historical requirements from accreditation agencies, which have long since been removed.
- 5) Required by the Office of the Provost to conform with CIM-P process and this increases transparency and accessibility to course lists.
- 6) Per Office of the Provost General Education initiative for transparency and accessibility. Removed RHET 105 requirement because students should follow the campus guidelines for Composition I placement.
- 7) Header names updated to more accurately convey the standard ChemE with Biomolecular Engineering concentration which requires the Biomolecular Engineering technical core classes in order for students to complete the program.
- 8) Removed footnotes and moved relevant material from footnotes into the POS table.
- 9) There is no change in the course requirements for students. Wording changed for transparency given the limited abilities for CIM-P display of information. Previous format included a footnote that all courses in Category A were automatically included in Category B. To duplicate the effect of this footnote, new CIM-P data display limitations would require the duplicate addition of nearly 300 courses from Category A.
- 10) Updated text/reworded text in Technical Elective heading for clarity and transparency and following the request and followed the suggestion made by the Office of the Provost.
- 11) There is no change in the course requirements for students. The previous language was confusing. There is the standard program in ChemE and one concentration in Biomolecular Engineering.

12 - 13) At the beginning of this revision process, we had 548 tech electives, and each owning departments were contacted for approval of the use of their course in the ChBE POS and approval letters from those departments were collected for the CIM-P revisions. Upon further review, because of the large amount of tech electives, the department researched what electives were only being taken by the ChBE department's students over the past 5 years. Those classes/tech electives that had 1 or fewer students taking the course were deleted from the tech elective list and the corresponding/owning departments were notified of their deletion from the ChBE Tech Elective list. This created a new/updated list of 138 tech electives, which significantly improves the focus of the ChBE Tech Elective lists for ChBE students with negligible impact on any other department.

List of Upper Division Courses (Note: 200-level courses having two or more prerequisites also constitute upper-division (upper-level) courses and are not indicated in the list below.):

```
2 hrs CHEM 315: Instrumental Chem Systems Lab
```

2 hrs CHEM 420: Instrumental Characterization

3 hrs MCB 450: Introductory Biochemistry

4 hrs CHEM 442: Physical Chemistry I

4 hrs CHBE 321: Thermodynamics

3 hrs CHBE 411 Probability and Statistics

4 hrs CHBE 421: Momentum and Heat Transfer

4 hrs CHBE 422: Mass Transfer Operations

3 hrs CHBE 424: Chemical Reaction Engineering

4 hrs CHBE 430: Unit Operations Laboratory

4 hrs CHBE 431: Process Design

3 hrs CHBE 440: Process Control and Dynamics

9 hrs Technical Elective (Category A)

6 hrs Technical Elective (Category A or B)

3 hrs Technical Elective (List 1 or 2, 400 level)

- -58 hrs of Upper-Level Course
- -NOTE: Total credit hours of program remain unchanged with this revision.

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? Yes

Courses outside

of the sponsoring

department/

interdisciplinary

departments

- ABE 436 Renewable Energy Systems
- ABE 483 Engr Props Food Materials
- ABE 488 Bioprocessing Biomass for Fuel
- ABE 497 Independent Study
- ABE 498 Special Topics
- ANSC 450 Comparative Immunobiology
- ATMS 420 Atmospheric Chemistry
- ATMS 421 Earth Systems Modeling
- BIOC 446 Physical Biochemistry
- BIOE 476 Tissue Engineering
- CEE 320 Construction Engineering
- CEE 330 Environmental Engineering
- CEE 350 Water Resources Engineering
- CEE 421 Construction Planning
- CEE 422 Construction Cost Analysis
- CEE 432 Stream Ecology
- CEE 437 Water Quality Engineering
- CEE 440 Fate Cleanup Environ Pollutant
- CEE 442 Env Eng Principles, Physical
- CEE 450 Surface Hydrology
- CEE 452 Hydraulic Analysis and Design
- CEE 497 Independent Study
- CEE 498 Special Topics
- CHEM 436 Fundamental Organic Chem II
- CHEM 437 Organic Chemistry Lab
- CHEM 444 Physical Chemistry II
- CHEM 445 Physical Principles Lab I
- CHEM 497 Individual Study Senior
- CPSC 414 Forage Crops & Pasture Ecology
- CPSC 415 Bioenergy Crops
- CPSC 418 Crop Growth and Management
- CPSC 419 Midwest Agricultural Practices
- CPSC 453 Principles of Plant Breeding
- CS 357 Numerical Methods I
- CS 411 Database Systems
- CS 427 Software Engineering I
- CS 440 Artificial Intelligence
- CS 446 Machine Learning
- CS 450 Numerical Analysis
- CS 498 Special Topics
- ECE 304 Photonic Devices

ECE 313 - Probability with Engrg Applic
ECE 333 - Green Electric Energy
ECE 380 - Biomedical Imaging
ECE 416 - Biosensors
ECE 444 - IC Device Theory & Fabrication
ECE 481 - Nanotechnology
ECE 490 - Introduction to Optimization
FSHN 414 - Food Chemistry
FSHN 418 - Food Analysis
FSHN 426 - Biochemical Nutrition I
FSHN 428 - Community Nutrition
FSHN 460 - Food Processing Engineering
FSHN 465 - Principles of Food Technology
FSHN 471 - Food & Industrial Microbiology
FSHN 480 - Basic Toxicology
FSHN 481 - Food Processing Unit Ops I
FSHN 483 - Food Processing Unit Ops II
GEOL 450 - Investigating Earth's Interior
GEOL 451 - Environmental Geophysics
GEOL 454 - Introduction to Seismology
GEOL 470 - Introduction to Hydrogeology
IB 451 - Conservation Biology
MATH 402 - Non Euclidean Geometry
MATH 413 - Intro to Combinatorics
MATH 417 - Intro to Abstract Algebra
MATH 442 - Intro Partial Diff Equations
MATH 446 - Applied Complex Variables
MATH 461 - Probability Theory
MATH 487 - Advanced Engineering Math
MCB 408 - Immunology
MCB 424 - Microbial Biochemistry
MCB 436 - Global Biosecurity
MCB 450 - Introductory Biochemistry
MCB 462 - Integrative Neuroscience
ME 400 - Energy Conversion Systems
ME 471 - Finite Element Analysis
ME 482 - Musculoskel Tissue Mechanics
ME 483 - Mechanobiology
ME 487 - MEMS-NEMS Theory & Fabrication
MSE 304 - Electronic Properties of Matls
MSE 307 - Materials Laboratory I
MSE 308 - Materials Laboratory II MSE 401 - Thormodynamics of Materials
MSE 401 - Thermodynamics of Materials
MSE 402 - Kinetic Processes in Materials
MSE 403 - Synthesis of Materials
MSE 406 - Thermal-Mech Behavior of Matls
MSE 420 - Ceramic Materials & Properties
MSE 441 - Metals Processing

MSE 450 - Polymer Science & Engineering
MSE 457 - Polymer Chemistry
MSE 458 - Polymer Physics
MSE 460 - Electronic Materials I
MSE 470 - Design and Use of Biomaterials
MSE 473 - Biomolecular Materials Science
MSE 474 - Biomaterials and Nanomedicine
MSE 480 - Surfaces and Colloids
MSE 487 - Materials for Nanotechnology
MSE 489 - Matl Select for Sustainability
MSE 497 - Independent Study
MSE 498 - Special Topics
NPRE 201 - Energy Systems
NPRE 402 - Nuclear Power Engineering
NPRE 412 - Nuclear Power Econ & Fuel Mgmt
NPRE 441 - Radiation Protection
NPRE 442 - Radioactive Waste Management
NPRE 457 - Safety Anlys Nucl Reactor Syst
NPRE 461 - Probabilistic Risk Assessment
NPRE 470 - Fuel Cells & Hydrogen Sources
NPRE 475 - Wind Power Systems
NPRE 480 - Energy and Security
NPRE 483 - Seminar on Security
NPRE 498 - Special Topics
NRES 488 - Soil Fertility and Fertilizers
PHYS 435 - Electromagnetic Fields I
PHYS 470 - Subatomic Physics
SE 400 - Engineering Law
STAT 400 - Statistics and Probability I
STAT 410 - Statistics and Probability II
STAT 420 - Methods of Applied Statistics
STAT 430 - Topics in Applied Statistics
STAT 440 - Statistical Data Management
TAM 211 - Statics
TAM 251 - Introductory Solid Mechanics
TAM 461 - Cellular Biomechanics
RHET 105 - Writing and Research
MATH 257 - Linear Algebra w Computat Appl
ABE 425 - Engrg Measurement Systems
ABE 430 - Project Management
ANSC 445 - Statistical Methods
BADM 461 - Tech, Eng, & Mgt Final Project
CEE 407 - Airport Design
CEE 443 - Env Eng Principles, Chemical
CHEM 483 - Solid State Structural Anlys
IS 467 - Ethics & Policy for Data Scien
SE 411 - Reliability Engineering
IE 300 - Analysis of Data
,, 0: Data

<u>UP 406</u> - <u>Urban Ecology</u> UP 430 - Urban Transportation Planning ECE 467 - Biophotonics ECE 480 - Magnetic Resonance Imaging Letter of Acknowledgement IE 300.pdf Please attach any letters of support/ Letter of Removal CHBE Tech Electives.pdf acknowledgement Letter of Support UP.pdf for any Letter of Support_TAM.pdf Instructional Letter of Support STAT.pdf Resources Letter of Support SE.pdf

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

Letter of Support NRES.pdf
Letter of Support NPRE.pdf
Letter of Support MSE.pdf
Letter of Support MSE.pdf
Letter of Support ME.pdf
Letter of Support MCR pdf

Letter of Support MCB.pdf
Letter of Support MATH.pdf
Letter of Support IS.pdf
Letter of Support IB.pdf
Letter of Support GEOL.pdf
Letter of Support FSHN.pdf
Letter of Support ECE.pdf
Letter of Support ECE 2.pdf
Letter of Support CS-CSE.pdf
Letter of Support CPSC.pdf
Letter of Support CHEM.pdf
Letter of Support CHEM.pdf
Letter of Support CHBE.pdf
Letter of Support CHBE.pdf
Letter of Support CEE.pdf

Letter of Support_BIOE.pdf
Letter of Support_BIOC.pdf
Letter of Support_BADM.pdf
Letter of Support_ATMS.pdf
Letter of Support_ANSC.pdf
Letter of Support_ANSC.pdf
Letter of Support_ANSC 2.pdf
Letter of Support_ABE.pdf

Letter of Acknowledgement_RHET 105.pdf

Letter of Support MATH 257.pdf Letter of Support STAT 400.pdf

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.

<u>Student learning outcomes are based on learning outcomes in line with the</u>
Accreditation Board for Engineering and Technology (ABET) accreditation process.

Upon completing this program, students are expected to be able to:

- 1) Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- 2) Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- 3) Communicate effectively with a range of audiences.
- 4) Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- 5) Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- 6) Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- 7) Acquire and apply new knowledge as needed, using appropriate learning strategies.
- 8) An ability to analyze the chemistry and metabolism of macromolecules in biological processes and their relation to the regulation and processes of organisms, cells, and subcellular components.

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

Describe here:

Course and Student Outcomes are directly and quantitatively measured in undergraduate core chemical engineering courses each semester. Adjustments and changes to lectures, problem sets, course projects and course emphasis are based on student performance on specific outcomes. The assessment process was applied to the core courses and quantitative and qualitative assessment of student performance, based on specific outcomes, have significantly shaped course improvement and instruction.

At the individual course level, course outcomes are developed by the faculty teaching that course with input from the entire faculty and are described within the individual course syllabi. Each of the course outcomes are matched with relevant student outcomes. Our approach for evaluating student achievement of outcomes involves instructors completing spreadsheets each semester for core courses. In their entirety, the documentation contained within the outcomes assessment spreadsheets directly and quantitatively demonstrates the achievement of student outcomes and tracks course improvement. Our spreadsheet-based process for documenting and measuring the achievement of our outcomes involves several steps:

- 1. Each instructor or teaching team develops and documents their course outcomes, with input from the faculty.
- <u>2. Each instructor designs assessment tools (exams, quizzes, projects, homework assignments, etc.) for each course outcome.</u> <u>These course outcomes are then mapped to student outcomes.</u>
- 3. Each instructor determines the acceptable level of achievement for each outcome for which students as a whole will be assessed. These attainment levels typically range from 60% to 75% depending upon the type and difficulty of the assessment tool and course material.
- <u>4.</u> Each instructor, with the help of a TA, compiles overall student achievement levels for each assessment tool and compares this average to the predetermined minimum achievement level.
- 5. If any outcome is not achieved, instructors suggest changes or possible reasons for the achievement level below the minimum acceptable level. These course improvements can also be prompted by lower than expected student performance on specific assessment instruments, instructor observations of the course, or best practices in engineering education.
- 6. In subsequent semesters, the instructors or teaching team close the loop and implement their suggested changes. Individual instructors adjust lectures, problem sets and course deliverables in response to course assessments. Once a change has been implemented, it is evaluated for efficacy. If an outcome is still not being achieved, further modifications are considered. These suggestions for modification can be instructor-derived, or solicited from other faculty, from a faculty, subcommittee, annual Curriculum Assessment and Review meeting, or from one of the various teaching support resources available to faculty outlined in Criterion 8. This process of iterative

continuous improvement is performed each time the course is offered.

7. Faculty members submit spreadsheets documenting items 1 through 6 as well as graded samples of all assessment tools which directly measure the achievement of one or more course outcomes tied to one or more student outcomes. This documentation is reviewed for completeness and archived by the Assessment Committee.

Extensive quantitative assessment of student outcomes is reviewed every six years.

Additional qualitative assessment are performed based on instructor observation, which prompt additional course improvements. Individual course spreadsheets, along with course improvement suggestions, samples of graded student work, and annual curriculum meeting minutes are collected and archived by the Assessment Committee every semester and can be made available if desired.

Graduating Student Survey

Senior students are surveyed starting 1-2 months before graduation to collect feedback on outcomes achievement and overall perception of the program. The graduating senior survey is kept open and available for completion for 1-2 months after graduation. This survey is conducted twice a year to allow every student an opportunity to provide feedback, as some students graduate in December. One important aspect of this survey is collecting feedback on the students' own perceived level of achievement of the student outcomes. Though these data are self-reflective, it is an important aspect of assessment since it helps us gauge the students' perceived level of preparedness, achievement and confidence at the time of graduation.

Students are asked to rate on a 1-5 scale their perceived level of achievement of the student outcomes.

For all surveys, any qualitative suggestions are documented and grouped based on topic. The quantitative and qualitative results of the Graduating Senior Survey are compiled, documented, and presented to the faculty once a year. Faculty discussion and resulting action items are documented in the Faculty Curriculum meeting minutes. Often action items are delegated to a sub group of faculty, such as the Undergraduate Curriculum Committee, for further analysis and suggested action if warranted.

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.

Additional qualitative assessment are performed based on instructor observation, which prompt additional course improvements. Individual course spreadsheets, along with course improvement suggestions, samples of graded student work, and annual curriculum meeting minutes are collected and archived by the Assessment Committee every semester and can be made available if desired.

Graduating Student Survey

Senior students are surveyed starting 1-2 months before graduation to collect feedback

on outcomes achievement and overall perception of the program. The graduating Explain the process that will be implemented to ensure that assessment results are used to improve student

learning.

graduation. This survey is conducted twice a year to allow every student an opportunity Annually CHBE faculty hold a Curriculum Assessment and Review meeting. Within this <u>meeting, a representative from each core CHBE course reports, assessment information,</u> overall perceptions of student strengths, and areas in peed of improvement. This meeting is an opportunity to discuss the curriculum, as a whole and the propagation of student skills throughout the program. Facilitating amouth transitions from a prerequisite class to a higher level course are discussed and improvements to strengthen the prerequisite course or its structure are evaluated specifically of the evaluations of overall student strengths and areas in need of improvement are conducted by the faculty teaching the capstone courses, design (CHBE 431) and unit eperations, (CHBE, 430), who continuously, evaluate and improve the curriculum through a holistic approach, If the results of this annual Curriculum Assessment and Review meeting suggest the need for significant changes in course structure of coverage on these concerns are referred to the Undergraduate Curriculum Committee for minutes.

Program

Description and

Requirements Attach Documents Indirect Assessments/Informal Data Sources

To augment Alumni and Employer Surveys which often have very low response rates, Is the career/profession for graduates of this program regulated by the State of Illinois? iters/employers, as Many are alumni, when they visit campus. Representatives from industry visit faculty

Greation tems are delegated to a sub group of faculty, such as the Undergraduate

Curriculum Committee, for further analysis and suggested action if warranted.

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.

Revised programs (LAS) Sample Sequence Chemical

_Engineering_Biomolecular_Engineering,

BS v 9-17-2024.docx

Side by Side - Chemical Engineering w

Biomolecular Concentration v

9-20-2024.xlsx

Attach a revised Sample Sequence (for undergraduate program) or college-level forms.

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.

For those students who are pursuing a B.S. Degree in Chemical Engineering, students can choose to earn a concentration in Biomolecular Engineering, as well. This concentration builds upon the traditional principles of chemical engineering but specializes in biological and biotechnological systems to better prepare students who are interested in or plan to seek employment in the food, pharmaceutical, and biotechnology industries.

Statement for

Programs of Study Catalog

Graduation Requirements

Minimum hours required for graduation: 129 hours

Generaleducation: Students must complete the Campus General Education requirements including the campus general education languagerequirement. Minimum required major and supporting coursework: A grade point average of 2.5 or higher in all courses required for the major earned on the UIUC campus is required in order to be accepted by the department as juniors and seniors.

University Requirements

Minimum of 40 hours of upper-division coursework, generally at the 300- or 400-level. These hours can be drawn from all elements of the degree. Students should consult their academic advisor for additional guidance in fulfilling this requirement.

The university and residency requirements can be found in the Student Code (§ 3-801) and in the Academic Catalog.

General Education Requirements

<u>Follows the campus General Education (Gen Ed) requirements.</u> <u>Some Gen Ed requirements may be met by courses required and/or electives in the program.</u>

Course List
Code Title Hours
Composition I 4-6
Advanced Composition 3

fulfilled by CHBE 431

Humanities & the Arts (6 hours)

Natural Sciences & Technology (6 hours)

6

fulfilled by CHEM 202 and CHEM 204, or CHEM 102 and CHEM 104; and PHYS 211, PHYS 212

Social & Behavioral Sciences (6 hours) 6

 Cultural Studies: Non-Western Cultures (1 course)
 3

 Cultural Studies: US Minority Cultures (1 course)
 3

Cultural Studies: Western/Comparative Cultures (1 course)

Quantitative Reasoning (2 courses, at least one course must be Quantitative Reasoning I) 6-10

fulfilled by MATH 220 or MATH 221 and MATH 231, MATH 241, MATH 285, PHYS 211, PHYS 212,

<u>CS 101</u>

Language Requirement (Completion of the third semester or equivalent of a language other than

English is required)

Minimum hours required forgraduation: The curriculum requires 129 hours for graduation and is organized as shownbelow. Orientation and Professional <u>Development</u>

0-15

DevelopmentThese courses introduce opportunities and resources the college, department, and curriculum

offers students.

Code

<u>These courses introduce opportunities and resources the college, department, and curriculum offers</u> <u>students.</u> They also provide background on the Chemical Engineering curriculum, what chemical engineers do, and the skills to work effectively and successfully in the engineering profession.

Course List

Code	Title	Hours
CHBE 121	CHBE Profession	1
For non-first	-year students, CHBE 121 can be replaced with 1 hour of cred	dit from Technical Elective
List 1 or List	2. (Ref List 1 and List 2 below.)	
ENG 100	Grainger Engineering Orientation Seminar	1
Total Hours		2

Foundational Mathematics and Science

Title

Foundational Mathematics and Science

These courses stress the basic mathematical and scientific principles upon which the engineering discipline is based.

Course List

Hours

Couc	ride	110013
Select one group of	of courses (Accelerated or General Chemistry)	<u>10-12</u>
<u>CHEM 202</u>	Accelerated Chemistry I	
& <u>CHEM 203</u>	and Accelerated Chemistry Lab I	
& <u>CHEM 204</u>	and Accelerated Chemistry II	
& <u>CHEM 205</u>	and Accelerated Chemistry Lab II	
CHEM 203	Accelerated Chemistry Lab I	2
CHEM 204	Accelerated Chemistry II	3
CHEM 205	Accelerated Chemistry Lab II	2
<u>OR</u>		
<u>CHEM 102</u>	General Chemistry I	
<u>& CHEM 103</u>	and General Chemistry Lab I	
<u>& CHEM 104</u>	and General Chemistry II	
<u>& CHEM 105</u>	and General Chemistry Lab II	
<u>& CHEM 222</u>	and Quantitative Analysis Lecture	
<u>& CHEM 223</u>	and Quantitative Analysis Lab	
<u>MATH 221</u>	Calculus I (MATH 220 may be substituted. MATH 220 is appropriate for students	4
	with no background in calculus. 4 or 5 credit hours count towards the degree.)	
MATH 231	Calculus II	3
MATH 241	Calculus III	4
MATH 257	<u>Linear Algebra with Computational Applications</u>	<u>3</u>
or MATH 415	Applied Linear Algebra	
<u>MATH 285</u>	Intro Differential Equations	3
or <u>MATH 441</u>	Differential Equations	
MATH 415	Applied Linear Algebra	3
PHYS 211	University Physics: Mechanics	4
PHYS 212	University Physics: Elec & Mag	4
PHYS 214	Univ Physics: Quantum Physics	2
Total Hours		37-39

Chemical Engineering Technical Core

Chemical and Biomolecular Engineering Technical Core

These courses stress fundamental concepts and basic laboratory techniques that comprise the common intellectual understanding of chemical engineering and chemical science.

Course List

Code	Title	Hours
CHBE 221	Principles of CHE	3
<u>CHBE 321</u>	Thermodynamics	4
<u>CHBE 421</u>	Momentum and Heat Transfer	4
<u>CHBE 422</u>	Mass Transfer Operations	4
<u>CHBE 424</u>	Chemical Reaction Engineering	3
<u>CHBE 430</u>	Unit Operations Laboratory	4
<u>CHBE 431</u>	Process Design	4
<u>CHBE 440</u>	Process Control and Dynamics	3
<u>CHEM 236</u>	Fundamental Organic Chem I	4
<u>CHEM 237</u>	Structure and Synthesis	2
<u>CHEM 315</u>	Instrumental Chem Systems Lab	2
Students must regist	er in one of the Chemical Engineering-specific CHEM 315 lab sections	<u>5.</u>
<u>CHEM 420</u>	Instrumental Characterization	2
<u>CHEM 442</u>	Physical Chemistry I	4
<u>CS 101</u>	Intro Computing: Engrg & Sci	3
IE 300	Analysis of Data	3
<u>CHBE 411</u>	Probability and Statistics for ChBE	<u>3-4</u>
<u>or IE 300</u>	Analysis of Data	
or STAT 400	Statistics and Probability I	
<u>Total Hours</u>		<u>49-50</u>

Biomolecular Engineering Concentration Technical Core

Course List

CodeTitleHoursMCB 450Introductory Biochemistry3Total Hours for Chemical Engineering with Biomolecular Concentration Technical Core52-53

Biomolecular Engineering Concentration Technical Electives

For Biomolecular Engineering

Course List

CodeTitleHoursTechnical Core49MCB 450Introductory Biochemistry3Total Hours0

Technical Electives

These courses stress the rigorous analysis and design principles practiced in the major subdisciplines of chemical <u>engineering</u>, <u>engineering</u> embodied in the <u>standard</u> chemical engineering <u>major</u> and biomolecular

engineering concentration. concentrations.		
	Course List	
Code	Title	Hours
	gory A, Category B, List 1 and List 2, with specific requirements listed	
below.		
Three Courses from Categ		9
	om Category A or Category B	<u>9</u> <u>6</u> <u>3</u>
One additional 400-level c		<u>3</u>
	urs of UG research credit in CHBE 497 or CHBE 499 may be applied to the	
	elective credit with only 3 of those hours allowed use for Category A	
	h your advisor to make sure that your research contains sufficient	
biomolecular content to co		4.0
	ar Engineering Concentration Technical Electives	<u>18</u>
CATEGORY A		
<u>CHBE 471</u>	Biochemical Engineering	
<u>CHBE 472</u>	Techniques in Biomolecular Eng	
<u>CHBE 473</u>	Biomolecular Engineering	
<u>CHBE 474</u>	Metabolic Engineering	
<u>CHBE 475</u>	<u>Tissue Engineering</u>	
<u>CHBE 476</u>	<u>Biotransport</u>	
<u>CHBE 478</u>	Bioenergy Technology	
<u>CHBE 497</u>	Individual Study for Seniors	
<u>CHBE 499</u>	Senior Thesis	
<u>CATEGORY B</u>		
<u>ABE 436</u>	Renewable Energy Systems	
<u>ABE 483</u>	Engineering Properties of Food Materials	
<u>ABE 488</u>	Bioprocessing Biomass for Fuel	
BIOE 476	<u>Tissue Engineering</u>	
ECE 467	Biophotonics	
ECE 480	Magnetic Resonance Imaging	
MSE 470	Design and Use of Biomaterials	
MSE 473	Biomolecular Materials Science	
MSE 474	Biomaterials and Nanomedicine	
<u>TAM 461</u>	Cellular Biomechanics	
LIST 1		
Any 400-level CHBE cou	urses, excluding ChBE core courses CHBE 421, CHBE 422, CHBE 424,	
CHBE 430, CHBE 431, 8	<u>R CHBE 440.</u>	
ABE 436	Renewable Energy Systems	
ABE 483	Engineering Properties of Food Materials	
ABE 488	Bioprocessing Biomass for Fuel	
ATMS 420	Atmospheric Chemistry	
BIOE 476	Tissue Engineering	
CEE 320	Construction Engineering	
<u>CEE 330</u>	Environmental Engineering	
<u>CEE 350</u>	Water Resources Engineering	
<u>CEE 421</u>	Construction Planning	
CEE 422	Construction Cost Analysis	
CEE 432	Stream Ecology	

Code	Title	Hours
CEE 437	Water Quality Engineering	
<u>CEE 440</u>	Fate Cleanup Environ Pollutant	
CEE 442	Environmental Engineering Principles, Physical	
CEE 443	Env Eng Principles, Chemical	
CEE 450	Surface Hydrology	
<u>CEE 452</u>	Hydraulic Analysis and Design	
CHBE 297	Individual Study Sophomores	
<u>CHBE 397</u>	Individual Study for Juniors	
<u>CS 357</u>	Numerical Methods I	
<u>CS 411</u>	Database Systems	
CS 427	Software Engineering I	
CS 440	Artificial Intelligence	
<u>CS 446</u>	Machine Learning	
<u>CS 450</u>	Numerical Analysis	
<u>CS 498</u>	Special Topics	
ECE 304	Photonic Devices	
ECE 313	Probability with Engrg Applic	
ECE 333	Green Electric Energy	
ECE 380	Biomedical Imaging	
ECE 416	Biosensors	
ECE 444	IC Device Theory & Fabrication	
ECE 481	Nanotechnology	
ECE 490	Introduction to Optimization	
ME 400	Energy Conversion Systems	
ME 471	Finite Element Analysis	
ME 482	Musculoskel Tissue Mechanics	
ME 483	Mechanobiology	
ME 487	MEMS-NEMS Theory & Fabrication	
MSE 304	Electronic Properties of Matls	
MSE 307	Materials Laboratory I	
MSE 308	Materials Laboratory II	
MSE 401	Thermodynamics of Materials	
MSE 402	Kinetic Processes in Materials	
MSE 403	Synthesis of Materials	
MSE 406	Thermal-Mech Behavior of Matls	
MSE 420	Ceramic Materials & Properties	
MSE 441	Metals Processing	
MSE 450	Polymer Science & Engineering	
MSE 457	Polymer Chemistry	
MSE 458	Polymer Physics	
MSE 460	Electronic Materials I	
MSE 470	Design and Use of Biomaterials	
MSE 473	Biomolecular Materials Science	
MSE 474	Biomaterials and Nanomedicine	
MSE 480	Surfaces and Colloids	
MSE 487	Materials for Nanotechnology	
MSE 489	Matl Select for Sustainability	

Code	Title	Hours
NPRE 201	Energy Systems	
NPRE 402	Nuclear Power Engineering	
NPRE 412	Nuclear Power Econ & Fuel Mgmt	
NPRE 441	Radiation Protection	
NPRE 442	Radioactive Waste Management	
NPRE 457	Safety Anlys Nucl Reactor Syst	
NPRE 461	Probabilistic Risk Assessment	
NPRE 470	Fuel Cells & Hydrogen Sources	
NPRE 475	Wind Power Systems	
NPRE 480	Energy and Security	
SE 411	Reliability Engineering	
TAM 211	<u>Statics</u>	
<u>TAM 251</u>	Introductory Solid Mechanics	
TAM 461	Cellular Biomechanics	
LIST 2		
ABE 425	Engrg Measurement Systems	
ABE 430	Project Management	
ABE 497	Independent Study	
<u>ABE 498</u>	Special Topics	
ANSC 445	Statistical Methods	
ANSC 450	Comparative Immunobiology	
<u>ATMS 421</u>	Earth Systems Modeling	
BADM 461	Tech, Eng, & Mgt Final Project	
BIOC 446	Physical Biochemistry	
<u>CEE 407</u>	Airport Design	
CEE 497	Independent Study	
<u>CEE 498</u>	Special Topics	
CHEM 436	Fundamental Organic Chem II	
<u>CHEM 437</u>	Organic Chemistry Lab	
<u>CHEM 444</u>	Physical Chemistry II	
<u>CHEM 445</u>	Physical Principles Lab I	
<u>CHEM 483</u>	Solid State Structural Anlys	
CHEM 497	Individual Study Senior	
<u>CPSC 414</u>	Forage Crops & Pasture Ecology	
<u>CPSC 415</u>	Bioenergy Crops	
<u>CPSC 418</u>	Crop Growth and Management	
<u>CPSC 419</u>	Midwest Agricultural Practices	
<u>CPSC 453</u>	<u>Principles of Plant Breeding</u>	
<u>FSHN 414</u>	Food Chemistry	
FSHN 418	<u>Food Analysis</u>	
<u>FSHN 426</u>	Biochemical Nutrition I	
<u>FSHN 428</u>	<u>Community Nutrition</u>	
<u>FSHN 460</u>	<u>Food Processing Engineering</u>	
<u>FSHN 465</u>	<u>Principles of Food Technology</u>	
<u>FSHN 471</u>	Food & Industrial Microbiology	
<u>FSHN 480</u>	Basic Toxicology	
<u>FSHN 481</u>	<u>Food Processing Unit Operations I</u>	

Code	Title	Hours
<u>FSHN 483</u>	Food Processing Unit Operations II	
GEOL 450	Investigating the Earth's Interior	
<u>GEOL 451</u>	Environmental Geophysics	
GEOL 454	Introduction to Seismology	
GEOL 470	Introduction to Hydrogeology	
<u>IB 451</u>	Conservation Biology	
<u>IS 467</u>	Ethics and Policy for Data Science	
MATH 402	Non Euclidean Geometry	
MATH 413	Intro to Combinatorics	
MATH 417	Intro to Abstract Algebra	
MATH 442	Intro Partial Diff Equations	
MATH 446	Applied Complex Variables	
MATH 461	Probability Theory	
MATH 487	Advanced Engineering Math	
MCB 408	Immunology	
MCB 424	Microbial Biochemistry	
MCB 436	Global Biosecurity	
MCB 450	Introductory Biochemistry	
MCB 462	Integrative Neuroscience	
MSE 497	Independent Study	
MSE 498	Special Topics	
NPRE 483	Seminar on Security	
NPRE 498	Special Topics	
NRES 488	Soil Fertility and Fertilizers	
PHYS 435	Electromagnetic Fields I	
PHYS 470	Subatomic Physics	
<u>SE 400</u>	Engineering Law	
STAT 400	Statistics and Probability I	
STAT 410	Statistics and Probability II	
STAT 420	Methods of Applied Statistics	
STAT 430	Topics in Applied Statistics	
STAT 440	Statistical Data Management	
<u>UP 406</u>	<u>Urban Ecology</u>	
<u>UP 430</u>	<u>Urban Transportation Planning</u>	
For Biomolecular Engineeri	ng	
	Course List	
Code	Title	Hours
Selected from the departm	entally approved List of Approved Biomolecular Engineering Technical	

Electives Categories A and B, satisfying these distribution requirements: 6

Any courses from Category A 7, 8

Any courses from Category B 8

Any 400 level course from List 8

Total Hours

0

Social Sciences and Humanities The social sciences and humanities courses ensure that students have exposure in breadth and depth to areas of intellectual activity that are essential to the general education of

any college graduate.

Course List

Code

Title

Hours

General education courses to satisfy the university requirements for social & behavioral sciences,
humanities & the arts, and cultural studies (Non Western, U.S. Minority, and Western Cultures).

Composition These courses teach fundamentals of expository writing.

Course List

Code Title Hours

RHET 105 Writing and Research 4

Advanced Composition (satisfied by completing the sequence CHBE 430 and CHBE 431 in the Chemical Engineering Technical Core).

Total Hours 0

4

For students entering the curriculum after the freshman year, 1 additional hour of credit from the list of approved engineering technical electives may be substituted in place of CHBE 121.

2

Students who do not place into CHEM 202%7C, or who do not satisfy the mathematics prerequisite for CHEM 202%7C, may substitute the sequence CHEM 102%7C, CHEM 103%7C, CHEM 104%7C, CHEM 105%7C, CHEM 222%7C, and CHEM 223%7C for CHEM 202%7C, CHEM 203%7C, CHEM 204%7C, and CHEM 205%7C.

3

MATH 220%7C may be substituted, with four of the five credit hours applying toward the degree. MATH 220%7C is appropriate for students with no background in calculus.

4

MATH 441%7C may be substituted for MATH 285%7C. MATH 286%7C (4 hours) may be substituted for MATH 285%7C (3 hours).

5Students must register in one of the Chemical Engineering-specific CHEM 315%7C lab sections. **6** List of Approved Biomolecular Engineering Technical Electives Categories A and B**7**

A maximum of 3 hours from this Category may be undergraduate research credit.8

A maximum of 9 total hours of undergraduate research may be counted toward Technical Elective credit.

Program Relationships

Corresponding

Program(s):

Corresponding Program(s)

Chemical Engineering, BS

Program Features

Academic Level Undergraduate

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.

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.

This revision has no impact to the annual number of degrees awarded or enrollment.

Budget

Are there

No

budgetary

implications for

this revision?

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

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 program revision will have no impact on 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.

The proposal team consulted with Mary Schlemback, M.L.S, CAS and, based upon their input, determined that the Library's resources, collections, and services are sufficient to meet the needs of the program outlined in this proposal."

EP Documentation

EP Control

EP.25.014

Number

Attach Rollback/ Approval Notices

This proposal

No

requires HLC

inquiry

DMI Documentation

Attach Final <u>U Program Review Comments KEY 734 8 7 2024.docx</u>

Approval Notices <u>U Program Review Comments KEY 734 Chemical Engineering</u>

Biomolecular Engineering, BS 9_16_2024.docx

Banner/Codebook

BS:Chem E: Biomlcr Eng -UIUC

Name

Program Code: 10KV5029BS

Minor Conc 5029 Degree BS Major Code Code Code Code

0300

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

Brooke Newell (bsnewell) (10/13/23 10:18 am): Rollback: Email sent to Kathy, Baron, Chris, Andrea and Stephen

Brooke Newell (bsnewell) (04/02/24 10:12 am): Rollback: Per Teams discussion with Kathy

Brooke Newell (bsnewell) (04/10/24 11:30 am): Rollback: Email will be sent to Kathy

Brooke Newell (bsnewell) (07/09/24 4:01 pm): Rollback: Email sent to Kathy Brooke Newell (bsnewell) (07/25/24 11:41 am): Rollback: Email sent to Kathy, Baron, Chris, and Stephen

Brooke Newell (bsnewell) (07/30/24 3:59 pm): Rollback: Per Kathy TS request Brooke Newell (bsnewell) (08/07/24 8:51 am): U Program Review comments are attached in the DMI Documentation section

Stephen Downie (sdownie) (08/14/24 11:37 am): Rollback: Further revisions required. Explanatory email sent to K. Thomas-Stagg et al. on 08/14/24.

Brooke Newell (bsnewell) (09/16/24 2:28 pm): U Program Review comments attached in DMI Documentation section

Brooke Newell (bsnewell) (09/16/24 2:34 pm): Rollback: Rolled back per request from Kathy

Brooke Newell (bsnewell) (09/23/24 1:21 pm): Rollback: per discussion with Kathy

Brooke Newell (bsnewell) (09/25/24 12:48 pm): No U Program Review Comments

Kev: 734