

: COMPUTER SCIENCE + EDUCATION: SECONDARY EDUCATION, BS

In Workflow

1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1613 Committee Chair (ggonzlz@illinois.edu)
3. 1613 Head (mccarthe@illinois.edu; acjones3@illinois.edu)
4. 1434 Head (namato@illinois.edu; vmahesh@illinois.edu; egunter@illinois.edu)
5. KP Committee Chair (bsnewell@illinois.edu; kcp@illinois.edu; jmakela@illinois.edu)
6. KP Dean (candyd@illinois.edu)
7. KN Committee Chair (kstalter@illinois.edu; harvey1@illinois.edu)
8. KN Dean (cspan@illinois.edu; mccarthe@illinois.edu; kstalter@illinois.edu; harvey1@illinois.edu)
9. University Librarian (jpwilkin@illinois.edu)
10. COTE Programs (nilatha@illinois.edu; bmclvngr@illinois.edu)
11. Provost (kmartens@illinois.edu)
12. Senate EPC (bjlehman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
13. Senate (jtempel@illinois.edu)
14. U Senate Conf (none)
15. Board of Trustees (none)
16. IBHE (none)
17. HLC (kmartens@illinois.edu)
18. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

Approval Path

1. Thu, 25 Feb 2021 19:18:28 GMT
Deb Forgacs (dforgacs): Approved for U Program Review
2. Thu, 25 Feb 2021 19:23:47 GMT
Gloriana Gonzalez (ggonzlz): Approved for 1613 Committee Chair
3. Thu, 25 Feb 2021 19:47:48 GMT
Sarah McCarthy (mccarthe): Approved for 1613 Head
4. Thu, 25 Feb 2021 21:41:57 GMT
Elsa Gunter (egunter): Approved for 1434 Head
5. Tue, 02 Mar 2021 20:03:46 GMT
Brooke Newell (bsnewell): Approved for KP Committee Chair
6. Tue, 02 Mar 2021 20:15:56 GMT
Candy Deaville (candyd): Approved for KP Dean
7. Wed, 03 Mar 2021 20:34:40 GMT
K Peter Kuchinke (kuchinke): Approved for KN Committee Chair
8. Wed, 03 Mar 2021 20:47:57 GMT
Lisa Monda-Amaya (lmonda): Approved for KN Dean
9. Wed, 03 Mar 2021 20:48:38 GMT
John Wilkin (jpwilkin): Approved for University Librarian
10. Thu, 18 Mar 2021 22:34:21 GMT
Brenda Clevenger (bmclvngr): Rollback to 1613 Head for COTE Programs
11. Fri, 19 Mar 2021 22:03:03 GMT
Sarah McCarthy (mccarthe): Approved for 1613 Head
12. Tue, 23 Mar 2021 21:09:10 GMT
Elsa Gunter (egunter): Approved for 1434 Head
13. Wed, 24 Mar 2021 13:14:29 GMT
Brooke Newell (bsnewell): Approved for KP Committee Chair
14. Wed, 24 Mar 2021 13:29:08 GMT
Candy Deaville (candyd): Approved for KP Dean
15. Wed, 24 Mar 2021 13:53:21 GMT

K Peter Kuchinke (kuchinke): Approved for KN Committee Chair

16. Wed, 24 Mar 2021 15:16:11 GMT

Christopher Span (cspan): Approved for KN Dean

17. Wed, 24 Mar 2021 15:48:52 GMT

John Wilkin (jpwilkin): Approved for University Librarian

18. Wed, 21 Apr 2021 21:10:23 GMT

Brenda Clevenger (bmclvng): Approved for COTE Programs

19. Wed, 21 Apr 2021 21:12:51 GMT

Kathy Martensen (kmartens): Approved for Provost

New Proposal

Date Submitted: Thu, 25 Feb 2021 18:00:40 GMT

Viewing:: Computer Science + Education: Secondary Education, BS

Changes proposed by: Robb Lindgren

Proposal Type

Proposal Type:

Concentration (ex. Dietetics)

Proposal Title:

If this proposal is one piece of a multi-element change please include the other impacted programs here. *example: A BS revision with multiple concentration revisions*

Proposal to Establish the Secondary Education concentration for the Bachelor of Science in Computer Science + Education within the College of Education.

This is related to the Computer Science + Education, BS key = 1027 and the concentration in Learning Sciences for the Computer Science + Education, BS key 1028.

EP Control Number

EP.21.134

Official Program Name

Computer Science + Education: Secondary Education, BS

Effective Catalog Term

Fall 2021

Sponsor College

Education

Sponsor Department

Curriculum and Instruction

Sponsor Name

Sarah McCarthy

Sponsor Email

mccarthe@illinois.edu

College Contact

Kathy Stalter, Luc Paquette

College Contact Email

kstalter@illinois.edu; lpaq@illinois.edu

Program Description and Justification

Provide *abrief* description and justification of the program, including highlights of the program objectives, and the careers, occupations, or further educational opportunities for which the program will prepare graduates, when appropriate.

The Secondary Education concentration of the CS+Ed program will prepare students to teach foundational computation skills at the K-12 level. There is an increasing recognition of the importance of computational thinking and computer science education in K-12. Skills learned while studying computation and computer science, such as general problem-solving, are useful beyond the context of CS education. In addition, computing occupations are one of the most important sources of new wages in the United States. Training teachers who are well qualified to teaching CS in K-12 will contribute to reducing inequalities by increasing access to CS courses and CS related jobs.

The Secondary Education concentration of the CS+Ed program is motivated by the importance of computational thinking and computer science both economically and as a general skill for students to learn. Computing occupations are the number one source of new wages in the United States and 58% of new STEM jobs are in computing. According to the Illinois Task Force on Computer Science Education, "21,627 open computing jobs exist in Illinois alone (four times the annual demand rate for jobs in Illinois)". Beyond computing jobs, skills learned in CS courses are invaluable across the modern workforce. Teaching students computational thinking skills provides a new way to approach problem solving. Students are taught how to break down problems into sub-problems and then formulate creative solutions. These skills are not just useful for those who would go on to jobs in STEM fields, but give students the opportunity to analyze problems and their solutions across many fields in a new way.

Is this program interdisciplinary?

Yes

Interdisciplinary Colleges and Departments (list other colleges/departments which are involved other than the sponsor chose above)

Computer Science Department; This program will adopt the governance structure of existing CS+X programs where both units have input on course requirements, advising, etc.

College

Grainger College of Engineering

Department

Computer Science

Do you need to add an additional interdisciplinary relationship?

No

Corresponding Program(s):

Corresponding Program(s)

Computer Science + Education, BS

Academic Level

Undergraduate

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

CS will provide advising to CS+Education students on all matters of CS and some general matters throughout the program. Each student will be assigned a specific CS advisor for monitoring of progress and advice. As students complete their foundational CS coursework they will also consult with advisers in the College of Education in selection of their education core courses. This additional advising will not be a burden to the College of Education advising staff, nor will they need additional training. The students in this major will be enrolling in the same core curriculum as other education majors.

Applications will be submitted to the College of Education, consistent with other CS+X programs. A committee of faculty/representatives from Education will determine whether students are admitted to the program, though input may be sought from advisors in Computer Science. Transfer applications will be handled in the same way, two times per academic year. We recommend that students with fewer than two years remaining towards their degree not be allowed to transfer into the major, unless they are currently Education or Computer Science majors.

Is This a Teacher Certification Program?

Yes

Will specialized accreditation be sought for this program?

Yes

Describe the plans for seeking specialized accreditation:

We will seek accreditation from the Illinois State Board of Education (ISBE) for the licensure track.

Enrollment

Number of Students in Program (estimate)

Year One Estimate

5

5th Year Estimate (or when fully implemented)

15

What is the typical time to completion of this program?

4

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

120

Delivery Method

This program is available:

On Campus

Budget

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

Yes

Please explain/describe:

The Secondary Education concentration will require the hiring of new Faculty with expertise in Computer Science teacher education. They will be responsible for the development and teaching of the content relevant to computer science teaching method in CI 401, CI 403, and CI 404).

Resource Implications

Facilities

Will the program require new or additional facilities or significant improvements to already existing facilities?

No

Technology

Will the program need additional technology beyond what is currently available for the unit?

No

Non-Technical Resources

Will the program require additional supplies, services or equipment (non-technical)?

No

Resources

For each of these items, be sure to include in the response if the proposed new program or change will result in replacement of another program(s). If so, which program(s), what is the anticipated impact on faculty, students, and instructional resources? Please attach any letters of support/acknowledgement from faculty, students, and/or other impacted units as appropriate.

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.

The CS and Education courses required for majors have capacity or can be expanded through the use of differential tuition. The College of Engineering does not believe that there would be a challenge to CS advising resources assuming 20-25 majors/year. We think that the major will be limited to approximately this many students but if demand far exceeds this, we plan to re-evaluate the admission and advising process. If this is the case, there will be more tuition revenue to support additional course sections and advising loads.

New sections of the teaching methods courses will be staffed through the hiring of Faculty with expertise in Computer Science Teacher Education.

CS will provide advising to CS+Education students on all matters of CS and some general matters throughout the program. Each student will be assigned a specific CS advisor for monitoring of progress and advice. As students complete their foundational CS coursework they will also consult with advisers in the College of Education in selection of their education core courses. This additional advising will not be a burden to the College of Education advising staff, nor will they need additional training. The students in this major will be enrolling in the same core curriculum as other education majors.

Applications will be submitted to the College of Education, consistent with other CS+X programs. A committee of faculty/representatives from Education will determine whether students are admitted to the program, though input may be sought from advisors in Computer Science. Transfer applications will be handled in the same way, two times per academic year. We recommend that students with fewer than two years remaining towards their degree not be allowed to transfer into the major, unless they are currently Education or Computer Science majors.

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.

As both CS and Education degrees already exist, there should be no additional resources needed for the library.

Instructional Resources

Will there be any reduction in other course offerings, programs or concentrations by your department as a result of this new program/proposed change?

No

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

Yes

Required courses

EDUC 201 - Identity and Difference in Edu
EDUC 202 - Social Justice Sch & Society
EPSY 201 - Educational Psychology
EPSY 485 - Assessing Student Performance

SPED 405 - Gen Educator's Role in SPED
EDPR 442 - Ed Prac in Secondary Ed

Explain how the inclusion or removal of the courses/subjects listed above impacts the offering departments.

These courses are already offered to our secondary minor students. The students will be easily integrated into them.

Attach letters of support from other departments.

LS_SE EPSY.pdf
SPED.pdf
CoTE.pdf
CS+ED letter of support.pdf

Financial Resources

How does the unit intend to financially support this proposal?

Any additional needs will be financed through tuition differentials that Engineering students incur. Students in the CS+Education major will follow the current arrangement for CS+X: students will be coded under ENG for tuition assessment. Education and ENG have agreed to evenly split the tuition for CS+Educ. Both Education and CS will use funds from the differential tuition to accommodate any increase in advising or teaching loads and they have agreed to split both the tuition differentials and the major fees that is reimbursed on a per-major basis for CS+Education students.

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

No

Attach letters of support

College Budgetary Letter.pdf

Program Regulation and Assessment

Briefly describe the plan to assess and improve student learning, including the program's learning objectives; when, how, and where these learning objectives will be assessed; what metrics will be used to signify student's achievement of the stated learning objectives; and the process to ensure assessment results are used to improve student learning. (Describe how the program is aligned with or meets licensure, certification, and/or entitlement requirements, if applicable).

Our identified learning outcomes will be measured through the following assessments:

1. Learning Outcome 1: Students will acquire deep knowledge of computer science as it relates to the field of Education
- Student lesson plans, observations of student teaching, written and oral assignments in university courses.
2. Learning Outcome 2: Students will effectively plan and implement relevant, responsive instruction for high school students.
- Student lesson plans, observations of student teaching.
3. Learning Outcome 3: Students will use assessment data to drive decisions and solve problems in and out of the classroom.
- Student lesson plans, written and oral assignments in university courses.
4. Learning Outcome 4: 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).
- Student lesson plans, observations of student teaching.

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

Yes

If yes, please describe.

Teacher licensure is regulated by the Illinois State Board of Education (ISBE)

Program of Study

"Baccalaureate degree requires at least 120 semester credit hours or 180 quarter credit hours and at least 40 semester credit hours (60 quarter credit hours) in upper division courses" (source: <https://www.ibhe.org/assets/files/PrivateAdminRules2017.pdf>). For proposals for new bachelor's degrees, if this minimum is not explicitly met by specifically-required 300- and/or 400-level courses, please provide information on how the upper-division hours requirement will be satisfied.

All proposals must attach the new or revised version of the Academic Catalog program of study entry. Contact your college office if you have questions.

For new programs, attach Program of Study

CS+Educ SE Courses and Advising sjm 031921 .docx

Catalog Page Text

Catalog Page Text: Description of program for the catalog page. This is not official content, it is used to help build the catalog pages for the program. Can be edited in the catalog by the college or department.

The following courses are required for this concentration.

Statement for Programs of Study Catalog

Code	Title	Hours
CI 401	Introductory Teaching in a Diverse Society	3
CI 403	Teaching a Diverse High School Student Population	3
CI 404	Teaching and Assessing Secondary School Students	3
CI 473	Disciplinary Literacy	3
EDPR 442	Educational Practice in Secondary Education	12
EDUC 201	Identity and Difference in Education	3
EDUC 202	Social Justice, School and Society	3
EPSY 201	Educational Psychology ¹	3
EPSY 485	Assessing Student Performance	3
SPED 405	General Educator's Role in Special Education	3
Total Hours		39

¹ PSYC 100 is a prerequisite for EPSY 201.

EP Documentation

Attach Rollback/Approval Notices

Re_EP 21134 Computer Science + Education_ Secondary Education_ Questions.pdf

DMI Documentation

Program Reviewer Comments

Deb Forgacs (dforgacs) (Thu, 14 Jan 2021 22:55:05 GMT):Rollback: requested

Brenda Clevenger (bmclvng) (Thu, 18 Mar 2021 22:34:21 GMT):Rollback: Rolling back at Sarah's request.

Key: 1029



COLLEGE OF EDUCATION

Department of Educational Psychology
210 Education Building, MC-708
1310 S. Sixth St.
Champaign, IL 61820

January 15, 2021

Dear Members of the Graduate College and Education Policy Committee:

The Department of Educational Psychology is in support of the Department of Curriculum and Instruction's major in Computer Science + Education as well as its two concentrations in Learning Sciences and Secondary Education. We understand that we will offer the courses EPSY 201, EPSY 236, EPSY 400, EPSY 405, EPSY 407, EPSY 408, EPSY 485 and EPSY 490 as part of the program on a regular basis.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kiel Christianson', written over a light blue horizontal line.

Kiel Christianson, Ph.D.

Professor & Chair
Department of Educational Psychology

Professor
Departments of Psychology, Linguistics, & Beckman Institute

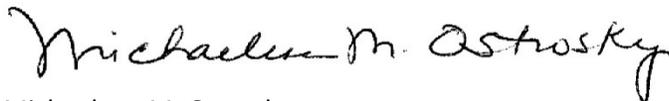
Office Tel: 217.265.6558
Email: <kiel@illinois.edu>

January 20, 2021

Dear Members of the Graduate College and Education Policy Committee:

The Department of Special Education is in support of the Department of Curriculum and Instruction's major in Computer Science + Education as well as its two concentrations in Learning Sciences and Secondary Education. We understand that students who enroll in these programs will need to take two of our courses SPED 117 and SPED 405. We offer SPED 405 for secondary education students once each year and will welcome these students into that course. On the other hand, SPED 117 is offered in both spring and fall semesters and these students are welcome to take this course in either semester. Let me know if you have any questions about our commitment to these students.

Sincerely,



Michaelene M. Ostrosky
Grayce Wicall Gauthier Professor of Education and Department Head
Department of Special Education
College of Education/University of Illinois
ostrosky@illinois.edu



COUNCIL ON TEACHER EDUCATION

130 Education Building, MC-708
1310 S. Sixth St.
Champaign, IL 61820

February 20, 2021

The Council on Teacher Education (CoTE) is aware of the proposed CS + Education program with two concentrations one in Learning Sciences and the Secondary Teaching. CoTE is further aware that students in this Secondary Teaching concentration will take the EDPR 442 for student teaching. Working together with the Department of Curriculum and Instruction, students in this program can be accommodated in EDPR 442.

A handwritten signature in black ink that reads 'Nancy Latham'.

Nancy Latham, Ed.D
Executive Director, Council on Teacher Education



Department of Computer Science
201 North Goodwin Avenue
Urbana, IL 61801-2302 USA

February 25, 2021

Professor Sarah J. McCarthey
Head, Curriculum and Instruction
University of Illinois

Dear Professor McCarthey,

I am pleased to let you know that the Computer Science faculty enthusiastically approved the CS + Education proposal that we have been jointly working on over the last several months, and is in full support of the new program. This approval included approval of each of its two program concentrations, one in Learning Sciences and the other in Secondary Education. This proposal was reviewed and approved by both the CS Undergraduate Studies Committee and the full CS faculty. We are looking forward to expanding the already existing synergy between the Department of Curriculum and Instruction, and more generally the College of Education, and the Department of Computer Science, and particularly with those in the research area Computers and Education. This should provide an excellent opportunity for students in each of the concentrations to learn core CS content to incorporate into their investigations on Education. We are also excited to be a partner in the first undergraduate program leading to a teaching licensure in CS in the state of Illinois. Based on the many overlaps outlined in the proposal we think that this is a very natural fit and an excellent opportunity for both departments, as well as for future students whose interests align with the program.

We have evaluated our current course offerings and how they might be affected by the influx of the anticipated CS+ED majors, and do not anticipate problems in ensuring that they will have access. Students in this program will be given access to the CS courses required by the CS+ED program on an equal basis with the students in the CS program in The Grainger College of Engineering, as well as all the other programs in the collection of blended CS degrees. We anticipate the impact on course enrollments should be minimal, as this new program will represent only a very small fraction relative to the current size of those courses. Finally, the CS Department added twenty-three new faculty (tenure track plus instructional) last year, and the addition of these faculty should allow us to grow our course offerings in the needed areas.

Sincerely,

A handwritten signature in green ink that reads 'Elsa L. Gunter'.

Elsa L. Gunter
Research Professor
Director of Undergraduate Programs
Department of Computer Science

University of Illinois at Urbana – Champaign

Phone: 217-265-6118

Email: egunter@illinois.edu



COLLEGE OF EDUCATION

Undergraduate Student Academic Affairs Office
110 Education Building, MC-708
1310 S. Sixth St.
Champaign, IL 61820

March 3, 2021

Ms. Kathy Martensen
Assistant Provost for Educational Programs
204 Swanlund Administration Building
MC-304

Dear Ms. Martensen:

The College of Education fully supports the Bachelor of Science (B.S.) in Computer Science+Education with Learning Science and Secondary Education concentrations. The College is committed to hiring Computer Science Education faculty to support this program by including position requests in our FY22-FY24 hiring plan submitted to campus.

Students enrolled in the CS + Education program will pay the same differential tuition as current College of Engineering Computer Science students. The College of Education and Computer Science Department have agreed to split tuition income, including differential tuition, for CS+Education per the IVCB model.

We do not anticipate a need for additional campus or external resources that cannot be met by the tuition paid by these students.

Thank you for your consideration of this request.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lisa Monda-Amaya', written in a cursive style.

Lisa Monda-Amaya
Associate Dean for Undergraduate Programs

Secondary Education Concentration Courses

39 hours	Teacher Education in Secondary School
	EDUC 201, Identity and Difference in Education (3 hours)
	EDUC 202, Social Justice, School and Society (3 hours)
	CI 401, Introductory Teaching in a Diverse Society (3 hours)
	CI 403, Teaching a Diverse High School Student Population (3 hours)
	CI 404, Teaching and Assessing Secondary School Students (3 hours)
	CI 473, Disciplinary Literacy (3 hours)
	EPSY 201, Educational Psychology (3 hours)
	EPSY 485, Assessing Student Performance (3 hours)
	SPED 405, General Educator's Role in Special Education (3 hours)
	EDPR 442, Educational Practice in Secondary Education (12 hours)

Example 4-year schedule (Secondary Education concentration)

Freshman Year	
Fall (16 hours)	Spring (15 hours)
EDUC 101, Education Seminar (1 hour)	Social and Behaviors Sciences requirement (PSYCH 100; 3 hours)
CS 100, Freshman Orientation (1 hour)	CS 128, Introduction to Computer Science II (3 hours)
CS 124, Introduction to Computer Science I (3 hours)	CS 173, Discrete Structures (3 hours)
EDUC 201, Identity and Difference in Education (3 hours) (US Minority)	MATH 231, Calculus II (3 hours)
MATH 221, Calculus I (4 hours)	Humanities and the Arts requirement (3 hours)

Composition requirement (4 hours)	
-----------------------------------	--

Sophomore Year	
Fall (16 hours)	Spring (16 hours)
CS 222, Software Design Lab (1 hour)	CS 233, Computer Architecture (4 hours)
CS 225, Data Structures (4 hours)	CS 361, Probability and Statistics for Computer Science (3 hours)
MATH 225, Introductory Matrix Theory (2 hours)	Natural Sciences and Technology requirement (3 hours)
EDUC 202, Social Justice, School and Society (3 hours) (Advanced Comp)	Western Culture(s) requirement (3 hours)
Humanities and the Arts requirement (3 hours)	Language requirement (3 credits)
EPSY 201, Educational Psychology (3 hours) (Beh Sci)	

Junior Year	
Fall (13 hours)	Spring (13 hours)
CS 241, System Programming (4 hours)	CS 374, Introduction to Algorithms & Models of Computation (4 hours)
Non-Western Culture(s) requirement (3 hours)	CI 401, Introductory Teaching in a Diverse Society (3 hours)
Nature Sciences and Technology requirement (3 hours)	CI 473, Disciplinary Literacy (3 hours)
Language requirement (3 hours)	Language requirement (3 hours)

Senior Year	
Fall (16 hours)	Spring (15 hours)
CS 421, Programming Languages and Compilers (3 hours)	CI 404, Teaching and Assessing Secondary School Students (3 hours)
CI 403, Teaching a Diverse High School Student Population (3 hours)	EDPR 442, Educational Practice in Secondary Education (12 hours)
EPSY 485, Assessing Student Performance (3 hours)	
SPED 405, General Educator's Role in Special Education (3 hours)	
Language requirement (3 hours)	

From: [McCarthy, Sarah Jane](#)
To: [Pahre, Jennifer N](#)
Cc: [Stalter, Kathy L](#); [Paquette, Luc](#); [Lee, Suzanne](#); [Lehman, Barbara J](#); [Martensen, Kathy](#)
Subject: Re: EP 21.134 Computer Science + Education: Secondary Education: Questions
Date: Wednesday, April 28, 2021 8:20:18 AM
Attachments: [image001.png](#)

Dear Jennifer,

Please see answers below to each question:

Sarah J. McCarthy
Professor & Department Head
Curriculum and Instruction
Acting Associate Dean for Undergraduate Programs and Teacher Education
College of Education
University of Illinois at Urbana-Champaign
1310 S Sixth Street
Champaign, IL 61820
(217) 244 1149
mccarthe@illinois.edu

From: Pahre, Jennifer N <jpahre@illinois.edu>
Date: Tuesday, April 27, 2021 at 12:18 PM
To: McCarthy, Sarah Jane <mccarthe@illinois.edu>
Cc: Stalter, Kathy L <kstalter@illinois.edu>, Paquette, Luc <lpaq@illinois.edu>, Lee, Suzanne <suzannel@illinois.edu>, Lehman, Barbara J <bjlehman@illinois.edu>, Martensen, Kathy <kmartens@illinois.edu>
Subject: EP 21.134 Computer Science + Education: Secondary Education: Questions

Dear Sarah,

Hello again! I hope that your family continues to keep well.

You may recall that I am the chair of subcommittee A of the Senate Educational Policy Committee. EP 21.134 Computer Science + Education: Secondary Education, your proposal from the Department of Curriculum and Instruction in the College of Education, came to my subcommittee for initial review. My subcommittee thinks that this proposal is very timely and will offer an important educational credential to our students. In short, we like it very much.

A few members of my subcommittee had questions, and as before, I am reaching out. It is my hope to clear up these questions before the proposal comes up for approval.

Here are the questions I received from my subcommittee:

1. The proposal contemplates hiring new faculty with expertise in computer science

teacher education. The proposal contemplates developing 3 courses: CI 401, 402 and 403. These courses are already being taught – so how will the new instructors fit in? *First, the courses were are proposing are CI 401, CI 403, and CI 404 (not CI 402 for Middle Grades). Currently, CI 401, CI 403 are 404 are being taught. Sections use the same course numbers; however, each course has its own section related to the discipline. For example, we have CI 401E, M, S, T (English, math, science, social studies); and we have CI 403E,M,S,T (English, math science, social studies). The structure for each of these courses is the same (with connections to school placements), but the content including readings and assignments are related to each discipline. That is, students in CI 403M (math) have different readings than students in CI 403S (science) as the preservice teachers are learning to apply content from their discipline into the pedagogy appropriate for their licensure area. Thus, there will be separate sections of CI 401CS, 403CS. Since we are developing the licensure area in computer science from scratch, we wanted to align our new computer science methods course sequence with our current successful model for preparing secondary teachers. We have experts in the Department of Curriculum and Instruction who teach the pedagogical courses according to their expertise. For example, we have professors who teach the math methods course who are different from professors who teach the science methods courses. In keeping with the need for expertise, we will need to hire a faculty member who has expertise in the pedagogy of teaching computer science in K-12 classrooms. Dean Anderson has put a priority in hiring a tenure-track faculty member in the next two years. Students will not begin the CI 401 sequence until their junior year so the timing of the hire in the next two years will be appropriate for students in the CS + Education program. One further note, the CS + Education licensure students will be taking the CI 404 with students pursuing a license to teach science. In this case, because the course is broader in scope—professional development, ethics, understanding roles of school personnel, we will combine computer science and science for the 404).*

2. The proposal also says there will be position requests in the FY22-24 hiring plan submitted to campus. However, there is no guarantee campus will approve these hires. Is there a back-up plan if the requests are not approved?

Our back up plan is to use a combination of adjunct faculty and teaching assistants from Computer Science and Education. However, we believe that this is such a cutting-edge program (first in the state) that we will get a position approved by campus. The Discovery Partnership Institute is very supportive of our program; they are partnering with us to support mutual efforts in workforce development. We believe this partnership will further the cause of computer science education in the state and that campus will support the hire.

3. In the list of classes in the statement for programs of study, CI 403 should be listed before CI 404 (as it is a prerequisite for CI 404). EPSY 201 has PSYC 100 as a prerequisite, but it is not in the list of required courses (or in the list for the major). Can these minor details be corrected?

Yes, these courses should be numerical order anyway so they will be corrected prior to entry

into the academic catalog, if not earlier. With regard to the prereq, I'm sure you can add PSYC 100 as an extra course (and extra hours) but Kathy Martensen has agreed that making it a footnote at the bottom of the page similar to Elementary Ed BS is fine too. [Copy/paste this link to see it in the Program of Study grid: <https://nextcourses.illinois.edu/programadmin/?key=105> . Kathy Stalter added this statement,"I've also added a screenshot of the statement."](#) but I am unable to embed the screenshot.

4. Most critically, the proposal notes that ISBE accreditation is not yet in place. Given that this program "will prepare students to teach foundational computational skills at the K-12 level," can this program move forward without accreditation? (I'm copying Suzanne Lee on this email, as this touches on her area of expertise.)

From Suzanne: [The proposed concentration has been reviewed and approved as meeting accreditation standards by both the Council on Teacher Executive Committee and our campus licensure officer. It has been forwarded on to the State Educator Licensure and Preparation Board for Illinois State Board of Education for final review and approval. The process of state approval cannot be initiated until the proposal has made its way to EPC. However, the state approval process is lengthier and can take several months. The timing creates a delicate balance between the state approval process and the campus approval process. The Council on Teacher Education strongly supports the concentration moving forward at the campus level and is confident that state accreditation and approval of the program as presented will follow. Should either ISBE or EPC require revisions to program requirements, the Council on Teacher Education will assume responsibility for ensuring proposals are revised accordingly and all requirements are met.](#)

Sarah McCarthey

Let me know if you need further clarification!

Thank you in advance for your assistance; I appreciate your help.

Kind regards,

Jennie Pahre

I ILLINOIS

College of Law

Jennifer N. Pahre

Director of Undergraduate Studies

Assistant Teaching Professor

University of Illinois College of Law

504 East Pennsylvania Avenue

Champaign, Illinois 61820

Pronouns: She/her/hers

Under the Illinois Freedom of Information Act (FOIA), any written communication to or from University employees regarding University business is a public record and may be subject to public disclosure.