Date Submitted: 01/13/20 10:58 am

Viewing: **10KV5679BSLA : Computer Science & Philosophy, BSLAS**

Last approved: 03/22/19 6:38 pm
Last edit: 01/21/20 10:58 am
Changes proposed by: Kelly Ritter

<table>
<thead>
<tr>
<th>Catalog Pages</th>
<th>Computer Science &amp; Philosophy, BSLAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using this</td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td></td>
</tr>
</tbody>
</table>

### Approval Path

1. **01/13/20 11:00 am**
   Deb Forgacs (dforgacs):
   Approved for U Program Review

2. **01/13/20 11:18 am**
   Kirk Sanders (ksanders):
   Approved for 1715 Head

3. **01/13/20 11:21 am**
   Kelly Ritter (ritterk):
   Approved for KV Dean

4. **01/13/20 11:41 am**
   John Wilkin (jpwilkin):
   Approved for University Librarian

---

https://nextcourses.illinois.edu/programadmin/
Proposal Type

Proposal Type: Major (ex. Special Education)

This proposal is for a:

Revision

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

Revisions to the BSLAS in Computer Science & Philosophy, Department of Philosophy migration

EP Control Number EP.20.77_original

Official Program Name Computer Science & Philosophy, BSLAS

Effective Catalog Term Fall 2020

Sponsor College Liberal Arts & Sciences

Sponsor Department Philosophy

Sponsor Name Kirk Sanders

Sponsor Email ksanders@illinois.edu

College Contact Kelly Ritter

ritterk@illinois.edu
Program Description and Justification

Justification for proposal change:

This revision proposes the following changes to the PHIL courses required for the CS+ PHIL major: (1) The creation of two new 200-level courses (PHIL 222 Philosophical Foundations of Computer Science and PHIL 223 Minds & Machines) intended to introduce students to philosophical issues at the intersection of CS and philosophy. Jointly, these courses will replace PHIL 203 Ancient Philosophy and PHIL 206 Early Modern Philosophy as required courses for the BSLAS in CS+PHIL. (PHIL 203 and PHIL 206 will remain requirements for the standard BALAS in Philosophy.) (2) Replace 3 elective credit hours with a requirement to take one of four specific PHIL courses: PHIL 425 Philosophy of Mind, PHIL 438 Philosophy of Language, PHIL 439 Philosophy of Math, or PHIL 477 Philosophy of Psychology. (3) Reduce total hours required in PHIL coursework from 32 to 30, secondary to PHIL 222 and 223 being 3 credit courses, whereas 203 and 206 are 4 credit courses.

The revised requirements are intended to bring greater unity and coherence to the PHIL coursework in the BSLAS CS+PHIL degree. With the recent addition of two new faculty, Assistant Professors Guillermo Del Pinal and Kohei Kishida, hired specifically to help anchor this degree program from the Philosophy side, we are in a much better position to realize the focused and genuinely interdisciplinary program of study originally envisioned for the CS+PHIL degree. Profs. Del Pinal and Kishida were tasked with jointly designing the two new introductory courses, PHIL 222 and 223, which are at the heart of the proposed revisions. The only other proposed change is to substitute an additional, required course on the “formal” side of Philosophy (one of a set of four disjuncts) in place of three elective credit hours. Given the highly formal nature of much of the subject matter for this particular joint degree program, it seems reasonable and desirable to ensure that all of its graduates have taken not only one of PHIL 426 Metaphysics or PHIL 430 Theory of Knowledge (a current requirement of both the BALAS in Philosophy and the BSLAS in CS+PHIL) but also one of PHIL 425 Philosophy of Mind, PHIL 438 Philosophy of Language, PHIL 439 Philosophy of Math, or PHIL 477 Philosophy of Psychology.

Is this program interdisciplinary?

No

Academic Level Undergraduate
Will you admit to the concentration directly?

Is a concentration required for graduation?

CIP Code 110199 - Computer and Information Sciences, Other.

Is This a Teacher Certification Program?

No

Will specialized accreditation be sought for this program?

No

**Admission Requirements**

Desired Admissions Term

Fall 2020

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.

*The proposed revisions do not in any way alter the existing admissions requirements or procedures for BSLAS degree in CS+PHIL, nor should they alter previous estimates for enrollments and degrees to be awarded.*

Describe how critical academic functions such as admissions and student advising are managed.

Profs. Guillermo Del Pinal and Kohei Kishida will assist the department’s Director of Undergraduate Studies in advising students in the CS+PHIL program. *(The revisions will not have any effect on the way admissions are currently handled.)*

**Enrollment**

Describe how this revision will impact enrollment and degrees awarded.

*We do not expect the revisions to have any direct impact on enrollments or degrees awarded. *(That said, the greater unity and coherence in the required plan of study resulting from the proposed changes may serve to make the major more attractive generally.)*

Estimated Annual Number of Degrees Awarded

Year One Estimate

https://nextcourses.illinois.edu/programadmin/
5th Year Estimate (or when fully implemented)

What is the matriculation term for this program?
Fall

Delivery Method

Is this program available on campus and online? No
This program is available:
On Campus

Budget

Are there budgetary implications for this revision? No
Will the program or revision require staffing (faculty, advisors, etc.) beyond what is currently available? No

Additional Budget Information

Attach File(s)

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

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.

Two new assistant professors were added to the Department of Philosophy this year, with the goal of helping anchor the PHIL side of the CS+PHIL equation and any proposed revisions to the PHIL curriculum within it. As previously stated, these new faculty, Assistant Professors Guillermo Del Pinal and Kohei Kishida, will assist the department’s Director of Undergraduate Studies in advising students in the CS+PHIL program. The new Humanities Professional Resource Center will also provide invaluable support with respect to career advising and placement.

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 proposed revisions should not have any effect on University Library resources.

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 impacted by the creation/revision of this program?

No

Financial Resources

How does the unit intend to financially support this proposal?

No new financial resources are required for implementation of the proposed changes.
Will the unit need to seek campus or other external resources?

No

Attach letters of support

Gunter email.pdf

Will an existing tuition rate be used or continue to be used for this program?

Yes

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).

The proposed revisions do not affect any changes in existing assessment plans or metrics.

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

No

Program of Study

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

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

Revised programs

Computer Science and Philosophy

BSLAS Side by Side Comparison.docx

Computer Science and Philosophy

BSLAS Academic Catalog.docx

Attach a side-by-side comparison with the existing program AND, if the revision references or adds “chose-from” lists of courses students can select from to fulfill requirements, a listing of these courses, including the course rubric, number, title, and number of credit hours.
Statement for Programs of Study Catalog

**General education:** Students must complete the [Campus General Education](#) requirements including the campus general education language requirement.

**Minimum required major and supporting course work:** Normally equates to **71-73 66** hours. Twelve hours of 300- and 400-level **Philosophy Anthropology** courses must be taken on this campus.

**Minimum hours required for graduation:** 120 hours

---

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Required Computer Science Courses:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>32-33</strong></td>
<td><strong>Required Computer Science Courses (32-33 hours):</strong></td>
<td></td>
</tr>
<tr>
<td>CS 100</td>
<td>Freshman Orientation (recommended) 1</td>
<td>1</td>
</tr>
<tr>
<td>CS 125</td>
<td>Intro to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>CS 126</td>
<td>Software Design Studio</td>
<td>3</td>
</tr>
<tr>
<td>CS 173</td>
<td>Discrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>CS 225</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CS 233</td>
<td>Computer Architecture</td>
<td>4</td>
</tr>
<tr>
<td>CS 241</td>
<td>System Programming</td>
<td>4</td>
</tr>
<tr>
<td>STAT 200</td>
<td>Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 212</td>
<td>Biostatistics</td>
<td></td>
</tr>
<tr>
<td>CS 361</td>
<td>Probability &amp; Statistics for Computer Science</td>
<td></td>
</tr>
<tr>
<td>CS 374</td>
<td>Introduction to Algorithms &amp; Models of Computation</td>
<td>4</td>
</tr>
<tr>
<td>CS 421</td>
<td>Programming Languages &amp; Compilers</td>
<td>3</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Calculus</td>
<td>4-5</td>
</tr>
<tr>
<td>or MATH 221</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 225</td>
<td>Introductory Matrix Theory</td>
<td>2</td>
</tr>
<tr>
<td>MATH 231</td>
<td>Calculus II</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 203</td>
<td>Ancient Philosophy</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 206</td>
<td>Early Modern Philosophy</td>
<td>4</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>Hours</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PHIL 222</td>
<td>Philosophical Foundations of Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 223</td>
<td>Minds &amp; Machines</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 421</td>
<td>Ethical Theories</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one of the following: 
- PHIL 426 Metaphysics
- PHIL 430 Theory of Knowledge

Choose one of the following: 
- PHIL 425 Philosophy of Mind
- PHIL 438 Philosophy of Language
- PHIL 439 Philosophy of Mathematics
- PHIL 477 Philosophy of Psychology
- PHIL 454 Advanced Symbolic Logic
- PHIL 499 Capstone Seminar

In consultation with an advisor, choose at least 9 additional hours of coursework in philosophy, with at least 6 of those hours being at the 300- or 400-level.

In consultation with an advisor, choose 12 hours of philosophy courses, not more than one of which may be at the 100 level and at least two of which must be at the 300–or 400 level.

Total Hours 71-73

1 CS 100 is an orientation course aimed at first-year students, so students who declare the major after the freshman year are not required to complete it.

---

**EP Documentation**

Attach Rollback/Approval Notices

**DMI Documentation**

Attach Final Approval Notices

**Banner/Codebook**

Name
- BSLAS: Comp Sci & Phil - UIUC

Program Code: 10KV5679BSLA

<table>
<thead>
<tr>
<th>Minor Code</th>
<th>Conc Code</th>
<th>Degree Code</th>
<th>BSLAS Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>5679</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Senate Approval Date

[https://nextcourses.illinois.edu/programadmin/](https://nextcourses.illinois.edu/programadmin/)
| Senate Conference Approval Date |
| BOT Approval Date |
| IBHE Approval Date |
| Effective Date: |

**Attached Document**

**Justification for this request**

**Program Reviewer Comments**

Key: 287
Appendix A:
Comparative Table of Proposed Changes

Computer Science & Philosophy, BALAS
Philosophy coursework only

<table>
<thead>
<tr>
<th>Current Requirements</th>
<th>Current Hours</th>
<th>Proposed Requirements</th>
<th>Proposed Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Computer Science Requirements</strong></td>
<td>32-33</td>
<td><strong>Computer Science Requirements</strong></td>
<td>32-33</td>
</tr>
<tr>
<td>CS 100 (recommended)</td>
<td>1</td>
<td>CS 100 (recommended)</td>
<td>1</td>
</tr>
<tr>
<td>CS 125</td>
<td>4</td>
<td>CS 125</td>
<td>4</td>
</tr>
<tr>
<td>CS 126</td>
<td>3</td>
<td>CS 126</td>
<td>3</td>
</tr>
<tr>
<td>CS 173</td>
<td>3</td>
<td>CS 173</td>
<td>3</td>
</tr>
<tr>
<td>CS 225</td>
<td>4</td>
<td>CS 225</td>
<td>4</td>
</tr>
<tr>
<td>CS 233</td>
<td>4</td>
<td>CS 233</td>
<td>4</td>
</tr>
<tr>
<td>CS 241</td>
<td>4</td>
<td>CS 241</td>
<td>4</td>
</tr>
<tr>
<td>Choose one of the following: STAT 200, STAT 212, or CS 361</td>
<td>3</td>
<td>Choose one of the following: STAT 200, STAT 212, or CS 361</td>
<td>3</td>
</tr>
<tr>
<td>CS 374</td>
<td>4</td>
<td>CS 374</td>
<td>4</td>
</tr>
<tr>
<td>CS 421</td>
<td>3</td>
<td>CS 421</td>
<td>3</td>
</tr>
<tr>
<td><strong>Mathematics Requirements</strong></td>
<td>9-10</td>
<td><strong>Mathematics Requirements</strong></td>
<td>9-10</td>
</tr>
<tr>
<td>MATH 220 or 221</td>
<td>5</td>
<td>MATH 220 or 221</td>
<td>5</td>
</tr>
<tr>
<td>MATH 225</td>
<td>2</td>
<td>MATH 225</td>
<td>2</td>
</tr>
<tr>
<td>MATH 231</td>
<td>3</td>
<td>MATH 231</td>
<td>3</td>
</tr>
<tr>
<td><strong>Philosophy Requirements</strong></td>
<td>32</td>
<td><strong>Philosophy Requirements</strong></td>
<td>30</td>
</tr>
<tr>
<td>PHIL 203: Ancient Philosophy</td>
<td>4</td>
<td>PHIL 222: Philosophical Foundations of CS</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 206: Early Modern</td>
<td>3</td>
<td>PHIL 223: Minds &amp; Machines</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 421</td>
<td>3</td>
<td>PHIL 421</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 426 or PHIL 430</td>
<td>3</td>
<td>PHIL 426 or PHIL 430</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 454</td>
<td>3</td>
<td>PHIL 454</td>
<td>3</td>
</tr>
<tr>
<td>At least 12 additional hours of coursework in philosophy, with 9 of those hours being above the 100-level (including at least two 300- or 400-level courses).</td>
<td>12</td>
<td>One of the following: PHIL 425 Philosophy of Mind PHIL 438 Philosophy of Language PHIL 439 Philosophy of Math</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Grade</td>
<td>Course</td>
<td>Grade</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------</td>
<td>-----------------</td>
<td>-------</td>
</tr>
<tr>
<td>PHIL 477</td>
<td></td>
<td>PHIL 477</td>
<td>3</td>
</tr>
<tr>
<td>Philosophy of</td>
<td></td>
<td>Philosophy of</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td></td>
<td>Psychology</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>At least 9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>additional hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>of coursework</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>in philosophy,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with at least</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 of those</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>hours being at</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>the 300- or 400-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>level.</td>
<td></td>
</tr>
<tr>
<td>PHIL 499</td>
<td>3</td>
<td>PHIL 499</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>73-75</td>
<td>TOTAL</td>
<td>71-73</td>
</tr>
</tbody>
</table>
Computer Science & Philosophy, BSLAS

for the degree of Bachelor of Arts in Liberal Arts & Sciences Major in Computer Science & Philosophy

Please see the computer science advisor as well as the philosophy advisor.

A Major Plan of Study Form must be completed and submitted to the LAS Student Affairs Office by the beginning of the fifth semester (60-75 hours).

General education: Students must complete the Campus General Education requirements including the campus general education language requirement.

Minimum required major and supporting course work: Normally equates to 71-73 hours. Twelve hours of 300- and 400-level Philosophy courses must be taken on this campus.

Minimum hours required for graduation: 120 hours

Required Philosophy coursework

PHIL 222  Philosophical Foundations of Computer Science
PHIL 223  Minds & Machines

PHIL 421  Ethical Theories

Choose one of the following:
PHIL 426  Metaphysics
PHIL 430  Theory of Knowledge

Choose one of the following:
PHIL 425  Philosophy of Mind
PHIL 438  Philosophy of Language
PHIL 439  Philosophy of Math
PHIL 477  Philosophy of Psychology

PHIL 454  Advanced Symbolic Logic

PHIL 499  Capstone Seminar

At least 9 additional hours of coursework in philosophy, with at least 6 of those hours being at the 300- or 400-level.
Re: Proposed revisions to the PHIL side of CS+PHIL

Gunter, Elsa
Sun 11/3/2019 6:22 PM
To: Sanders, Kirk <ksanders@illinois.edu>
Cc: Foster, Christy Ann <foste@illinois.edu>

Dear Kirk,

I have reviewed and approve the proposed revision to the Philosophy of the CS+Philosophy BSLAS degree program.

---Elsa

--
Elsa L Gunter
Research Professor
Director of Undergraduate Programs
Department of Computer Science
University of Illinois at Urbana - Champaign