Jeremy:

The proposal from the College of Arts and Sciences to revise the Undergraduate Minor in Computer (and Information) Science was approved by the Council on Academic Affairs at its meeting on July 15, 2024. Thank you for attending the meeting to respond to questions/comments.

No additional level of internal review/approval is necessary. This action will be included in the Council's next Annual Activities Report to the University Senate (July 2024).

The Office of the University Registrar will work with you on any implementation issues.

Please keep a copy of this message for your file on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any questions please contact the Chair of the Council, Professor Fábio Leite (.11), or me.

I wish you success with this important program development.

Randy

THE OHIO STATE UNIVERSITY

W. Randy Smith, Ph.D.
Vice Provost for Academic Programs
Office of Academic Affairs
University Square South, 15 E. 15th Avenue, Columbus, OH 43201
614-292-5881 Office
smith.70@osu.edu
Assisted by:
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Executive Assistant
(614) 292-5672
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From: Vankeerbergen, Bernadette
To: Smith, Randy; Reed, Katie
Cc: Martin, Andrew W.; Jenkins, Mary Ellen; Ottesen, Jennifer; Steele, Rachel
Subject: Revision to the Undergraduate Minor in Computer (and Information) Science
Date: Friday, April 12, 2024 1:18:16 PM
Attachments: image001.png
CIS Minor Revision 3-25-24.pdf
Revision Minor CIS Letter of Motion.pdf

Dear Randy and Katie,

Please find attached a proposal to revise the Undergraduate Minor in Computer (and Information) Science. The revision was approved on Friday, April 5, 2024, via an e-vote of the ASC Curriculum Committee (ASCC).

We are now advancing the proposal for review by CAA. The attached documents are: (1) the actual proposal including a cover letter by Professor Jeremy Morris (in the Dept of Computer Science and Engineering) and (2) the Natural and Mathematical Sciences Subcommittee cover letter to ASCC .

Please use this email as a cover letter indicating that the proposal has been duly reviewed and approved by the appropriate ASC curricular bodies (including the full ASC Curriculum Committee).

Please let me know if you have any questions.

Best regards,
Bernadette

THE OHIO STATE UNIVERSITY

Bernadette Vankeerbergen, Ph.D.
Assistant Dean, Curriculum
College of Arts and Sciences
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Ian M Hamilton
Department of Evolution, Ecology, and
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Department of Mathematics

318 W. 12th Ave.
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Chair, Arts and Sciences Curriculum Committee

April 5, 2024

Dear Chair and Members of the Arts and Sciences Curriculum Committee:
On February 28th, 2024, the Natural and Mathematical Sciences Subcommittee of the Arts and Sciences Curriculum Committee reviewed a request to change the Computer and Information Science (CIS) minor as follows: change the name of the minor to Computer Science (CS), remove the requirement for CSE 2501 from the list of required courses for the minor, and alter the list of recommended courses for minors to take as electives. These changes reflect the lack of information science courses applying to the minor and enrollment constraints in many computer science courses.

The NMS Subcommittee unanimously voted to approve the proposed changes to the CIS minor MS with one contingency. This contingency was satisfied in a revised submission and approved on March 25, 2024. This proposal is likewise now advanced to the ASCC with a motion to approve.

Sincerely,

Ian Hamilton
Professor
Department of Evolution, Ecology, and Organismal Biology
Department of Mathematics
Chair, ASCC Natural and Mathematical Sciences Subcommittee

THE OHIO STATE UNIVERSITY

College of Engineering

Jeremy Morris
Assistant Professor of Practice
Dept. of Computer Science & Engineering

395 Dreese Labs
2015 Neil Avenue
Columbus, OH 43210-1277

614-688-5610 Phone
614-292-2911 Fax

morris.343@osu.edu

February 12, 2024

To: Arts & Sciences Curriculum Committee

Re: Changes to CIS Minor

We are requesting the following changes to the CIS Minor program, effective Summer 2024:
> Change the name of the minor to Computer Science (CS)
> Remove the requirement for CSE 2501 from the list of required courses for the minor
> Alter the list of recommended courses for minors to take as electives

The CSE faculty unanimously approved these changes.

Rationale for the name change: The Computer & Information Science minor (CIS) as currently constructed does not contain any actual Information Science within it. All of the required coursework is pure Computer Science. To better serve students enrolling in the minor, and those who read their transcripts, a decision was made to change the name of the minor to be the Computer Science minor, which more accurately reflects its contents.
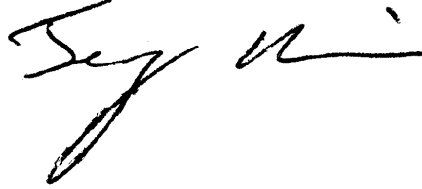
Rationale for the removal of CSE 2501: Our minor is a comparatively large one with a requirement of 17 credit hours for students. One of the current required courses is a 1 credit hour ethics course that fulfils a role as a professional ethics course for our major students. This is a class designed to be taught in small sections to CIS & CSE majors who will become practitioners in various computing fields. In recent years enrollments in our major have grown quite large and the capacity of these courses has been strained. Because of our enrollment issues, and the need for majors to take this course, we have been waiving this requirement for minors due to their inability to actually enroll in any sections of this course. We would like to make this change permanent for all minors as we feel that the 16 hour minor is sufficient to give students the breadth of coverage we want to see in a minor. For students in the minor who are interested in the topics of this course we suggest PHIL 2338 as an alternative.

Rationale for the changes to our suggested elective courses: We previously listed a number of "tracks" that our minors could take. Unfortunately these tracks often contained courses that had pre-requisite requirements that our minor students could not attain without additional coursework that took them well beyond the coursework for a minor. Additionally, due to enrollment pressures as discussed above many of these pre-requisite courses were courses that minor students were consistently shut out of. In place of the tracks we now prefer to recommend a selection of courses that we can guarantee that students pursuing the minor will be able to enroll in. Minor students can still enroll in any CSE course for which they meet the pre-requisites, but the courses listed as recommended present a broad coverage of Computer Science topics, but also are courses that we can make guarantees that minors will be able to enroll in.

I have included both the new and current curriculum sheets for our minor with changes tracked.

If you have any further questions, please contact me at morris.343@osu.edu.

Sincerely,

Jeremy Morris
Assistant Professor of Practice
Computer Science & Engineering
CSE Undergraduate Studies Committee Chair

Computer and Information Science (CPTRINF-MN)

Department of Computer Science & Engineering,
395 Dreese Laboratories, 2015 Neil Avenue
Columbus, OH 43210-1277; 614-292-1900
http://cse.osu.edu

Students interested in applying computing principles and practices in another discipline (in   which they may be completing a major degree program) should consider completing the Computer & Information Science (CIS) Minor program. The program described below applies to students who begin the minor courses in Spring 2015 or later.

Students pursuing the minor do not have priority enrollment in CSE courses.

A. Prerequisites for the Minor:
CSE 1222: Introduction to Computer Programming in C++ (3 cr hrs); *or*
CSE 1223: Introduction to Computer Programming in Java (3 cr hrs)

B. Requirements for the Minor (min 17 cr hrs):
1. Required courses (11 credit hours):
   a. Software:
      CSE 2122, Data Structures Using C++, (3 cr hrs); *or*
      CSE 2123, Data Structures Using Java (3 cr hrs).
   b. Foundations:
      CSE 2321, Foundations I: Discrete Structures (3 cr hrs)
   c. Systems:
      CSE 3430, Overview of Computer Systems For Non-Majors (4 cr hrs)
   d. Computing Ethics:
      CSE 2501, Social, Ethical, and Professional Issues in Computing (1 cr hr)
2. Elective courses (minimum: 6 cr hrs):
   i. Must be chosen from CSE 2331, and CSE courses at the 3000-level or above;
   ii. Not more than 2 cr hrs of CSE 425X courses;
   iii. The following tracks are recommended:
      - Graphics: CSE 3541, 3902
      - AI: CSE 3521; one of CSE 5522, 5523, 5524, 5525, 5526
      - Networking: CSE 3461; one of CSE 3901, 4471, 5462, 5472, 5473
      - Software Engineering: CSE 3231; one of 3232, 5234
      - Databases: CSE 3241, 5242
      - Programming languages: CSE 3341; one of 3231, 3901
      - Theory: CSE 2331; one of 3321, 5351, 5361

   Several of the courses listed under (2.iii) have additional prerequisites.

Computer and Information Science minor program guidelines

Required for graduation No

Credit hours required A minimum of 17 cr hrs. 1000 level courses shall not be counted in the minor. At least 6 cr hrs need to be at the 3000 level or above.

Transfer and EM Credit Hours Allowed
A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination toward the minor.

Overlap with the GE   A student is permitted to overlap up to 6 cr hrs between the GE and the minor

Overlap with the Major and Additional Minor(s)
- The minor must be in a different subject than the major.
- The minor must contain a minimum of 12 hours distinct from the major and/or additional minors.

Grades Required
- Minimum C- for a course to be listed on the minor.
- Minimum 2.00 cumulative GPA for all minor course work
- Course work graded Pass/Non-Pass cannot count on the minor.
- No more than 3 cr hrs of course work graded Satisfactory/Unsatisfactory may count towards the minor.

X193 Credits No more than 3 cr hrs

Minor Approval Please meet with an academic advisor in the CSE Advising Office (374 Dreese).

Filing the Minor Program Form   Students are encouraged to have their major advisor or college/school counselor add the minor to their record as soon as they start taking courses toward the minor. The minor program form *must* be filed at least by the time the graduation application is submitted to a college/school counselor.

Changing the Minor Once the minor program is filed in the college office, any changes must be approved by the academic unit offering the minor.

The Ohio State University
College of Arts & Sciences and College of Engineering

Computer Science (COMPSCI-MN)

Department of Computer Science & Engineering,
395 Dreese Laboratories, 2015 Neil Avenue
Columbus, OH 43210-1277; 614-292-1900
https://cse.osu.edu
compsciadvising@osu.edu

Students interested in applying computing principles and practices in another discipline (in which they may be completing a major degree program) should consider completing the Computer Science (CS) Minor program. The program described below applies to students who begin the minor courses in Summer 2024 or later.

Students pursuing the minor do not have priority enrollment in CSE courses.

A. Prerequisites for the Minor:
  CSE 1222: Introduction to Computer Programming in C++ (3 cr hrs); *or*
  CSE 1223: Introduction to Computer Programming in Java (3 cr hrs)

B. Requirements for the Minor (min 16 cr hrs):
  1. Required courses (10 credit hours):
     a. Software:
       CSE 2122, Data Structures Using C++, (3 cr hrs); *or*
       CSE 2123, Data Structures Using Java (3 cr hrs).
     b. Foundations:
       CSE 2321, Foundations I: Discrete Structures (3 cr hrs)
     c. Systems:
       CSE 3430, Overview of Computer Systems For Non-Majors (4 cr hrs)
  2. Elective courses (minimum: 6 cr hrs):
     i. Must be chosen from CSE 2331, and CSE courses at the 3000-level or above;
     ii. Not more than 2 cr hrs of CSE 425X courses;
     iii. The following courses are recommended:
       - 2331 – Foundations II
       - 3241 - Introduction to Database Systems
       - 4471 – Information Security
       - 5052 – AI for non-majors
       Note that elective courses for this minor may have additional prerequisites.

Computer Science minor program guidelines

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Minor Approval Please email the CS Undergraduate Advising Office at compsciadvising@osu.edu to request a minor program form. Students with questions about the minor can contact the CS Undergraduate Advising Office at the above email and/or refer to the CSE website for more information: https://cse.osu.edu/

Filing the Minor Program Form Students are encouraged to have their major advisor or college/school advisor add the minor to their record after completion of MATH 1151 (Calculus 1) and either CSE 1222 or 1223. The minor program form *must* be filed at least by the time the graduation application is submitted to a college/school advisor.

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Department of Computer Science & Engineering,
395 Dreese Laboratories, 2015 Neil Avenue
Columbus, OH 43210-1277; 614-292-1900
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