

College of Engineering

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Date: 20 February 2015

To: Randy Smith

Vice Provost, Office of Academic Affairs (OAA)

From: Ed McCaull
Secretary College Committee on Academic Affairs (CCAA)

Subject: Computer and Information Science Minor

CCAA has reviewed and approved the attached Computer and Information

Science Minor on the 19th of February 2015. This minor is being submitted to
you as required by the university's new minor policy. If you have any questions
concerning this minor please let me know.



College of Engineering

Department of Computer Science and Engineering

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> 614-292-5813 Phone 614-292-2911 Fax http://www.cse.osu.edu

Date: February 13, 2015

To: Dr. Mark Ruegsegger, Chair, CCAARe: Computer and Information Science Minor

Dear Dr. Ruegsegger,

The CSE Department currently offers a Minor program in Computer and Information Science. Recently, our Undergraduate Studies Committee, which I chair, came up with a proposal for some changes in the program. The idea of these changes was to make the program more flexible, in particular, to allow students in the program to take elective courses in areas of computer science, such as databases and artificial intelligence, that they may have a special interest in. The proposal was sent to our entire faculty and approved electronically in early December.

I had sent you a previous version of this proposal in early January and we got some comments back from Dr. George Valco, chair of Subcommittee A. We have updated the proposal taking account of those comments. I am attaching the updated proposal.

I hope CCAA will approve the proposed minor at an early date and forward it to CAA for final approval. If there are any questions about the proposed minor or if additional information is needed, please contact me.

Sincerely,

Neelam Soundarajan

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Chair, Undergraduate Studies Committee

Dept. of Computer Science and Engineering

Computer & Information Science (CIS) Minor Requirements

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 who started in the existing minor program may complete either that program or the program described below.

A. Prerequisites for the Minor:

CSE 1222: Introduction to Computer Programming in C++ (3 credit hours); *or* CSE 1223: Introduction to Computer Programming in Java (3 credit hours)

B. Requirements for the Minor:

- 1. Credit hour minimum requirement: 17 credit hours
- 2. Required courses (11 credit hours):
 - a. Software:
 - i. CSE 2122, Data Structures Using C++, (3 credit hours); or
 - ii. CSE 2123, Data Structures Using Java (3 credit hours).
 - b. Foundations:

CSE 2321, Foundations I: Discrete Structures (3 credit hours)

c. Systems:

CSE 3430, Overview of Computer Systems For Non-Majors (4 credit hours)

d. Computing Ethics:

CSE 2501, Social, Ethical, and Professional Issues in Computing (1 credit hour)

- 3. Elective courses (minimum: 6 credit hours):
 - i. Must be chosen from CSE 2331, and CSE courses at the 3000-level or above;
 - ii. Not more than 2 credit hours of CSE 425X courses;
 - iii. The following tracks are recommended:
 - a. Graphics: CSE 3541, 3902
 - b. AI: CSE 3521; one of CSE 5522, 5523, 5524, 5525, 5526
 - c. Networking: CSE 3461; one of CSE 3901, 4471, 5462, 5472, 5473
 - d. Software Engineering: CSE 3231; one of 3232, 5234
 - e. Databases: CSE 3241, 5242
 - f. Programming languages: CSE 3341; one of 3231, 3901
 - g. Theory: CSE 2331; one of 3321, 5351, 5361
- 4. Note: Several of the courses listed under (3.iii) have additional prerequisites. These are currently being reconsidered and are expected to be revised to make them accessible to CIS minors. Note also that CSE 3430 is a new course, designed specifically for this minor, and is pending approval.

C. Recommended Sequence of Classes:

Autumn: CSE 1222/1223

Autumn: CSE 2321, 2501

Autumn: First elective

Spring: CSE 2122/2123

Spring: CSE 3430

Spring: Second elective

Computer & Information Science Minor Program Form

Undergraduate Minor Program Policy College Of Engineering

(Approved by CCAA, November 1999;

Revised: February '05, Feb. '08, March '10, May '12, November '12, April '14)

Minor Programs at The Ohio State University:

An undergraduate minor consists of a coherent curricular program designed to allow students to pursue academic interests that go beyond their major. Students pursue minors to complement their major's area of specialization, to better define themselves academically and to employers, to gain credit for classes previously taken that do not count towards a major degree, or merely to pursue other interests. In addition, some academic units require their students to obtain a minor. Students may take any minor in any college provided that they follow the curricular guidelines set by the college or unit that administers the minor.

Actions Required Of Students

Minors pursued by students with Majors in the College of Engineering are administered as follows:

- 1. Approval of many minors is managed entirely through the Degree Audit Reporting System (DARS).
- 2. Minor Program Forms will only be required if a student's DARS does not certify the courses for the minor as prescribed by the college or unit that administers the minor.
 - a. Minor Program Forms must be signed by an advisor in the college or unit that administers the minor and by the student's advisor in their Major Program prior to the student being accepted into the Minor program. Copies of this form will be retained by the college or unit that administers the minor and the Major Program.
 - b. Students typically file Minor Program Forms with the College of Engineering when they file applications to graduate. Students are advised to check with the college or unit that administers the minor in advance of the deadline for filing applications to graduate.
 - c. To change a Minor after submitting a Minor Program Form, a student must re-file a new Minor Program Form with all the appropriate signatures.

Overlap With Majors Offered By The College Of Engineering

- 1. For the purposes of determining overlap between majors in the College of Engineering and 12 hour minimum for a minor, the major is defined as all specifically required courses.
 - a. Approved substitutions for required courses are considered part of the major.
 - b. Requirements for which the student must take one of two courses are considered part of the major.
- 2. Elective courses may overlap with the minor.

Computer and Information Science Minor Program Form

| Student Name: |
|---|
| Student Identification Number: |
| Major: |
| E-Mail Address: |
| Name of Undergraduate Minor: Computer and Information Science |

| Dept | Course # | Course Title | Credit Hours | Grade |
|------|-----------|--|-----------------|-------|
| CSE | 1222/1223 | Intro to programming in C++/Java | *** | |
| CSE | 2122/2123 | Data structures using C++/Java | 3 | |
| CSE | 2321 | Foundations I: Discrete Structures | 3 | |
| CSE | 2501 | Soc., Ethical, Prof. Issues in Computing | 1 | |
| CSE | 3430 | Overview of Comp Sys.For Non-Majors | 4 | |

CSE Electives (minimum: 6 cr hrs):

Choose from CSE 2331 and CSE courses at 3000-level and above;

no more than 2 cr hrs of CSE 425X.

Recommended tracks:

Graphics (CSE 3541, 3902); Databases (CSE 3241, 5242);

AI (CSE 3521; one of: 5522, 5523, 5524, 5525, 5526);

Networking (CSE 3461; one of 3901, 4471, 5462, 5472, 5473);

Prog. languages (CSE 3341; one of 3231, 3901); Theory (CSE 2331; one of 3321, 5351, 5361)

| Elective Courses: | Course # | Course Title | Credit Hours | Grade |
|----------------------|-----------------------|-------------------|--------------|-------|
| | | | | |
| | | | | |
| _ | Total Credit hours (r | minimum: 17 hrs): | | |

^{***}Prerequisite for the minor; hours *not* included in the total for the minor.

Notes:

- Students pursuing the minor do not have priority enrollment in CSE courses.
- No more than 6 credit hours of transfer credit and/or credit by examination may be counted for the minor;
- Minimum C- for a course to be included in the minor;
- Minimum 2.00 cumulative point-hour-ratio required in the minor course work;
- Course work graded Pass/Non-Pass cannot count on the minor;
- This form must be filed by the time the graduation application is filed; no other approval is needed.