THE UNIVERSITY
*of* NORTH CAROLINA
*at* CHAPEL HILL

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**KEVIN JEFFAY**
*Gillian Cell Distinguished Professor and Chair*

October 13, 2014

Nick Siedentop
Curriculum Director for Undergraduate Curricula, - \
Office of Undergraduate Education
3010 Steele, CB #3504,
Carolina Campus

Dear Nick,

With this letter, the Department of Computer Science is proposing changes to the current degree requirements for the minor in computer science. These changes will ensure that students who complete a minor are exposed to the same core sequence of material that is required of our BS and BA majors (namely, the sequence COMP 401, COMP 410, and COMP 411) and that any plan of study used to fulfill the minor is appropriately focused on courses within the department. In particular, these changes will close an unintended loophole that currently allows a student to achieve the minor having taken only 3 courses in the department.

In addition, at the suggestion of the College, we are deleting the restriction that no course be counted for both the computer science minor and any major. With the addition of a sixth course to the minor, any concerns the Department previously had concerning overlap with other science majors have been ameliorated.

**Current Minor (as described in the Undergraduate Bulletin):**
A student may minor in computer science by completing five courses within these restrictions:
- COMP 401
- COMP 410 or 411
- Any three additional COMP courses above COMP 400

Students with the appropriate prerequisites (for example, from a mathematics major) may include COMP 283; MATH 381, 566; and STOR 215 in their selection of courses. A grade of C or better is required in at least 12 hours of the minor courses. Including "topics" courses such as COMP 590 requires approval of the undergraduate studies committee in the computer science department. Alternatives to these requirements must be approved by the undergraduate studies committee. No course may be counted for both the computer science minor and any major.

**New Minor and New Proposed Bulletin Text:**

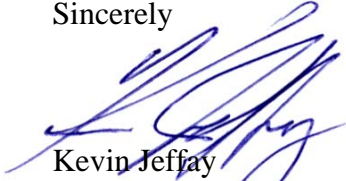A student may minor in computer science by completing six courses as follows:

- COMP 401, COMP 410, and COMP 411
- Any three additional 400 or 500 level COMP courses excluding COMP 590, mentored research (COMP 495), internships (COMP 493 and 593), and independent study (COMP 496). Students may substitute COMP 283, MATH 381, MATH 566 or STOR 215 for one of these three. Including COMP 590 requires approval of the undergraduate studies committee in the computer science department

A grade of C or better is required in at least 12 hours of the minor courses. Alternatives to these requirements must be approved by the director of undergraduate studies.

Your assistance in processing this request is most appreciated.

Sincerely

Kevin Jeffay
Gillian Cell Professor and Chair

# Computer Science Minor – Revised Requirements

| Course | Title | Credit | Pre- and co-requisites |
|---|---|---|---|
| COMP 401 | Foundation of Programming | 4 | Required preparation, COMP 110 or 116 |
| COMP 410 | Data Structures | 3 | Prereq, COMP 401; pre- or coreq, COMP 283 or MATH 381 |
| COMP 411 | Computer Organization | 4 | COMP 401 |
| COMP 400- or 500-level* | Elective course 1 | 3-4 | |
| COMP 400- or 500-level* | Elective course 2 | 3-4 | |
| COMP 400- or 500-level* | Elective course 3 | 3-4 | |
| | **TOTAL:** | 20-23 | |

*excluding COMP 590, 495, 493, 593, 496; student may substitute <u>one</u> of COMP 283, MATH 381, 566, or STOR 215.

**Prerequisite Information**

| Course | Title | Credit | Prerequisite |
|---|---|---|---|
| COMP 283 | Discrete Structures | 3 | MATH 231 or 241 |
| MATH 231 | Calculus of Functions of One Variable I | 3 | MATH 110 and 130 |
| MATH 232 | Calculus of Functions of One Variable II | 3 | MATH 231 or 241 |
| MATH 241 | BioCalculus I | 3 | MATH 130 |
| MATH 283 | BioCalculus II | 3 | MATH 231 or 241 |
| MATH 381 | Discrete Mathematics | 3 | MATH 232 or 283 |
| MATH 566 | Introduction to Numerical Analysis | 3 | MATH 383 |
| STOR 215 | Introduction to Decision Sciences | 3 | MATH 110 |

**Sample Schedule**

| Year 1 | | Year 2 | |
|---|---|---|---|
| **Fall Semester** | **Spring Semester** | **Fall Semester** | **Spring Semester** |
| MATH 130 | MATH 231 | COMP 116 | COMP 401<br>COMP 283 (serves as an elective) |
| **Year 3** | | **Year 4** | |
| **Fall Semester** | **Spring Semester** | **Fall Semester** | **Spring Semester** |
| COMP 410 | COMP 411 | COMP elective | COMP elective |
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