

## Computer Science Major—B.S. 81-83 credits

Suggested Plan of Study

### Computer Science Department

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#### Program Advisors

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First Semester	Second Semester
<b>ENGL 191</b> -Intro to Rhetorical and Analytical Writing (4 cr.)* <b>MATH 115</b> <sup>1,2</sup> – Precalculus (5 cr.) Democratic Citizenship (3 cr.) Humanities & Fine Arts ( Elective) (3 cr.)	<b>CSCI 201</b> <sup>3</sup> -Fundamentals of Computer Science (4 cr.) <b>MATH 221</b> <sup>3</sup> -Calculus & Analytical Geometry I (5 cr.) <b>CMST 192</b> -Introduction to Speech Communication (3 cr.) Social Science (Elective) (3 cr.)
Third Semester	Fourth Semester
<b>CSCI 301</b> <sup>3</sup> -Introduction to Algorithms and Data Structures (4 cr.) <b>MATH 222</b> <sup>3</sup> – Calculus & Analytical Geometry II (4 cr.) <b>MATH 273</b> <sup>3,6</sup> -Discrete Mathematics I (3 cr.) First Half of Required Science Sequence (4-5 cr.)	<b>CSCI 220</b> <sup>3</sup> -Computer Architecture I (4 cr.) <b>PHIL 194</b> -Critical Reasoning (3 cred.) <b>ENGL 332</b> or <b>CMST 341</b> (3 cr.) <b>MATH 373</b> <sup>3</sup> -Discrete Mathematics II (3 cr.) Second half of required Science Sequence (4-5 cr.)
Fifth Semester	Sixth Semester
<b>CSCI 320</b> <sup>3</sup> -Computer Architecture II (4 cr.) <b>CSCI 331</b> <sup>5</sup> -Software Systems (3 cr.) <b>STAT</b> (Elective) (3 cr.) Social Science-Elective (3 cr.)	<b>CSCI 310</b> <sup>3</sup> -Introduction to Operating Systems (3 cr.) <b>CSCI 330</b> <sup>4</sup> -Programming Language Concepts (3 cr.) <b>CSCI 4xx</b> <sup>7</sup> (Elective) (3 cr.) Science-Elective (3-5 cr.) Social Science (Elective) (3 cr.)
Seventh Semester	Eighth Semester
<b>CSCI 311</b> <sup>3</sup> – Systems Programming (2 cr.) <b>CSCI 4xx</b> <sup>7</sup> (Elective) (3 cr.) <b>CSCI 4xx</b> <sup>7</sup> (Elective) (3 cr.) General Ed (Elective) (3 cr.) Physical Education Elective (1 cr.) Humanities & Fine Arts (Elective) (3 cr.)	<b>CSCI 332</b> <sup>4</sup> -Computing Ethics (3 cr.) <b>CSCI 4xx</b> <sup>7</sup> (Elective) (3 cr.) <b>CSCI 4xx</b> <sup>7</sup> (Elective) (3 cr.) <b>MATH</b> (Elective) (3 cr.) University Elective (3 cr.)

<sup>1</sup>Math 115 may be replaced by Math 112 and Math 113. In that case, Math 112 must be completed before taking CSCI 201 and Math 113 taken along with CSCI 201.

<sup>2</sup>Students who are ready to take Math 221 are not required to take this class.

<sup>3</sup>These course are offered in both semesters.

<sup>4</sup>Offered in spring semester only.

<sup>5</sup>Offered in fall semester only.

<sup>6</sup>Students normally apply for admission to the major after completing CSCI 201, Math 221 and Math 273.

<sup>7</sup>Senior-level electives must include courses in at least three different subject areas.

**Notes:**

- (a) Not all electives are offered every semester. See schedule for offerings.
- (b) ENGL 191 may be taken in the second semester of the freshman year if CMST 192 is taken in the first semester.
- (c) Students must successfully complete 120 credits to graduate, at least 45 credits at the 300-400 level.
- (d) At least one-half of the 300- and 400-level computer science courses in this major program must be taken from our department.
- (e) Transfer students must see a transfer advisor to find out where they are in the program and also to get permission to register for “major only” courses.