CMSC MAJOR WORKSHEET

Student: _____ ID# _____

I. Required computer science courses

CMSC 201 Computer Science I **Grade of B required** ....4___
202 Computer Science II **Grade of B required** ....4___
203 Discrete Structures...3___
304 Ethical Issues in Information Technology...3___
313 Computer Organization and Assembly Language Programming ....3___
331 Principles of Programming Languages ....3___
341 Data Structures ....3___
345 Software Design and Development...3___
411 Computer Architecture ....3___
421 Principles of Operating Systems ....3___
441 Algorithms..3___

II. Required math courses

MATH 151 Calculus I ....4___
MATH 152 Calculus II..4___
MATH 221 Introduction to Linear Algebra ....3___

III. Required statistics course

STAT 355 Applied Statistics I..4___

IV. Required science course - One of the following sequences:

BIOL 141 Concepts of Biology ....4___
BIOL 142 Ecology and Evolution..4___
OR
CHEM 101 Principles of Chemistry I ....4___
CHEM 102 Principles of Chemistry II ....4___
OR
PHYS 121 Introductory Physics I ....4___
PHYS 122 Introductory Physics II...4___

AND additional science course(s) to add up to a total of 12 credits. Select from: BIOL 251,251L,
252,252L,275,275L,302,302L,303,303L,304,304L,305,305L,CHEM 102L,GES 110,111,120,PHYS 122L,224,304.
Science course ....____
Science course...____

Note that at least one science course must include a laboratory component, CHEM 102L or PHYS 122L would fulfill the lab requirement. The lab requirement is a University requirement for graduation, not a Computer Science requirement. The lab credit will count towards the 12 credit requirement for the major.

If you have completed three science classes and have not earned 12 credits you may count MATH 225,251 or 301as a fourth course to meet the 12 credit requirement.

V. Two computer science electives chosen from the following:

CMSC 426 Principles of Computer Security…………………………………………………………..3____
          431 Compiler Design Principles ....3____
          435 Computer Graphics...3____
          445 Software Engineering ....3____
          451 Automata Theory and Formal Languages ....3____
          455 Numerical Computations ....3____
          456 Symbolic Computation ....3____
          461 Database Management Systems ....3____
          471 Artificial Intelligence ....3____
          481 Computer Networks...3____
          483 Parallel and Distributed Processing ....3____

VI. Three computer science electives chosen from the following or from V above:
      Any three 3-credit CMSC 400-level courses except CMSC 404 and CMSC 495-499.

CMSC 400 level course ....3____
CMSC 400 level course ....3____
CMSC 400 level course ....3____

Students may choose electives in this category from computer engineering courses with special permission from the CSEE department. Up to two of these courses also may be chosen from the following list of mathematics courses. MATH430,441,452, 475, 481, 483.

TOTAL: 77 credits required

VII. Electives - The following do not satisfy requirements for the major, but they will contribute to your professional growth and to the total credits for graduation:

CMSC 299 Independent Study .... varied credits
          498 Independent Study - Co-op/Internship ....3____
          499 Independent Study .... varied credits
ENGL 393 Technical Writing ....3____

Please refer to your degree audit to review general education requirements.