

Computer Science, B.S.

303-556-3208 Science Building 1022

Catalog 12-13

This sheet applies to the 2012-13 catalog *only*. It does not replace the full catalog or departmental advising sheets as official statements of requirements. Students with declared majors *must* work with a faculty advisor on course selection and sequencing to ensure a timely graduation.

General Studies
Major courses
Required Math minor
Required ancillary courses
Electives

36-38
50
21-23
10
0-3

Students who have reached junior standing (60 hrs) should request a CAPP (graduation compliance report) and review it with a faculty advisor.

***TO BE COMPLETED WITHIN FIRST 30 COLLEGE-LEVEL CREDIT HOURS**

Written Communication

- ENG 1010 (3 hrs.) Freshman English: The Essay*
- or** ENG 1008/1009 (6 hrs.) Freshman Comp: The Essay Part I & II*
- ENG 1020 (3 hrs.) Freshman English: Anal., Rsrch. & Docum.
(must be completed within 45 credit hours)

Quantitative Literacy*

- MTH 1110 (4 hrs.) College Algebra or higher level math

Oral Communication*

- SPE 1010 Public Speaking (3 hrs.)

Arts and Humanities

- (3 hrs.)
- (3 hrs.)

Historical

- (3 hrs.)

Natural and Physical Sciences

Labs are required for General Studies credit

- BIO 1080 (4hrs.) General Biology I & BIO 1090-1 Lab
- or** BIO 1081 (4hrs.) General Biology II & BIO 1091-1 Lab
- or** CHE 1800 (4hrs.) General Chemistry I
- and** CHE 1810 (4hrs.) General Chemistry II & CHE 1850-2 LAB
- or** PHY 2311 (4hrs.) General Physics I & PHY2321-2 Lab
- or** PHY 2331 (4hrs.) General Physics II & PHY2341-2 Lab

Social and Behavioral Sciences I

- (3 hrs.)

Social and Behavioral Sciences II

- (3 hrs.)

Global Diversity

MAJOR COURSES (Please see a Faculty Advisor)

NOTE: All CS and MTH courses must be completed with a "C" or higher.

- CS 1050 (4hrs.) Computer Science 1 (This course is part of MTH minor)
- CS 2050 (4hrs.) Computer Science 2
- CS 2400 (4hrs.) Computer Organization & Assembly Language
- CS 3210 (4hrs.) Principles of Programming Languages
- CS 3240 (2hrs.) Intro. to the Theory of Computation
- CS 3600 (4hrs.) Operating Systems
- CS 4050 (4hrs.) Algorithms & Algorithm Analysis
- CS 4250 (4hrs.) Software Engineering Principles
- CS 4260 (4hrs.) Software Engineering Practices (Senior Experience)

Computer Science Electives – A minimum of 16 additional credit hours selected from upper division CS courses and/or MTH4480-6 in consultation with a faculty advisor:

- CS 16 hours
- or** CS 12 hours and MTH 4480-4 Numerical Analysis I

Required Ancillary Courses

- COM 2610 (3hrs.) Introduction to Technical Writing
- EET 2310 (4hrs.) Digital Circuits I **
- PHI 3370 (3hrs.) Computers, Ethics, and Society

MATH MINOR COURSES (see department for substitutions)

- MTH 1410 (4hrs.) Calculus I
- MTH 2140 (2hrs.) Computational Matrix Algebra
- MTH 2410 (4hrs.) Calculus II
- MTH 3170 (4hrs.) Discrete Mathematics for Computer Science
- MTH 3210 (4hrs.) Probability & Statistics (Calculus-based)

Multicultural Requirement

(may be satisfied within General Studies, major, minor, or as an elective)

ELECTIVES

**SEE DEPARTMENT ABOUT CHANGES TO THIS REQUIREMENT