

**UCSC Baskin School of Engineering
Bioinformatics BS Degree
Curriculum Chart
2006-2007**

Math

CMPE 16 or 16H
Discrete Math

MATH 19A or 20A
Calculus Honors Calc.

MATH 19B or 20B
Calculus Honors Calc.

MATH 23A
Multivariable Calculus

CMPE 107 or AMS 131
Stochastic Probability Theory

AMS 206
Bayesian Statistics

Engineering

CMPS 13H
Programming
(Honors)

OR

CMPS 12A/L
Programming

CMPS 12B/M
Data Structures

CMPS 101
Abstract Data Types

CMPS 180
Database Systems

CMPE 185
Technical Writing

Choose One

BME 109 Resource-Efficient Programming

CMPE 177 Graph/Algorithms

CMPS 104A* Compiler Design I

CMPS 109 Advanced Programming

CMPS 115* Software Methodology

Science

CHEM 1B/M
General Chemistry

CHEM 1C/N
General Chemistry

CHEM 112A/L
Org. Chem.

CHEM 108A/L
Organic Chemistry

OR

CHEM 112B/M
Org. Chem.

(with the grade B or above)

BIOL 20A or BIOL 21A
Cell & Molecular Biology

BIOL 20B or BIOL 21B
Development & Physiology

BIOC 100A[†]
Biochemistry

Bioinformatics

BME 80G
Bioethics
OR

PHIL 145*
Genetics Ethics

BME 110
Computational Biology Tools

BME 205
Bioinformatics

BME 210
Application and Analysis of
Microarrays
OR

BME 220/L
Protein Bioinformatics
OR

BME 230/L
Computational Genomics
OR

BME 195
Senior Thesis

Electives

Two courses; approved by faculty advisor; consider the following:

AMS: 147, 156, 162, 174, 203, 205, 207, 215

BIOC: 100B, 100C*, 110*

BIOL: 102L, 105, 106, 105L*, 105M,

109L*, 110, 115*, 115L, 117A*,
119, 119L, 187L*, 200A, 200B, 210

BME: 102, 109, 110, 130, 210, 220, 230

CHEM: 108B/M, 112C/N

CMPE: 108, 177

CMPS: 104A*, 104B*, 105, 109, 115*,
116*, 130, 140, 160

**Choices must form a coherent program and be approved by a
faculty advisor for bioinformatics.**

Shaded boxes represent foundation courses which must be completed before applying to the major.

* Additional prerequisite courses required

† Additional prerequisite of CHEM 108B/M or CHEM 112C/N waived if grade in prior course is B or above.

UCSC BASKIN SCHOOL OF ENGINEERING
 BIOINFORMATICS BS
 DEGREE CURRICULUM
 2006-2007

Fall	Winter	Spring	Summer

Fall	Winter	Spring	Summer

Fall	Winter	Spring	Summer

Fall	Winter	Spring	Summer

BINF Electives Approval Form

Student Name _____

Student ID _____

Elective 1 _____

Elective 2 _____

Explanation of choice of electives:

Faculty Advisor's Approval: _____ Date: _____