Bioinformatics B.S. Degree
Curriculum Chart: 2013-2014

Math

CMPE 16
Applied Discrete Math

MATH 19A Calculus **OR** **MATH 20A** Honors Calc.

MATH 19B Calculus **OR** **MATH 20B** Honors Calc.

MATH 23A
Multivariable Calculus

CMPE 107 Stochastic Math Methods **OR** **AMS 131** Probability Theory

AMS 132 Statistical Inference **OR** **AMS 206** Bayesian Statistics

Bioinformatics

BME 80G
Bioethics

BME 110
Computational Biology Tools

BME 205
Bioinformatics Models and Algorithms

ONE of the following:

BME 211
Computational Systems Biology

BME 230/L
Computational Genomics

BME 195
Senior Thesis

Engineering

CMPS 12A/L Intro to Programming **OR**

CMPS 5J Intro to Program. Java **AND** **CMPS 11** Intermediate Program.

OR

CMPE 12/L Comp. System and Assembly Language **AND** **CMPE 13/L** Comp Systems And C Prog.

CMPS 12B/M
Data Structures

CMPS 101
Abstract Data Types

CMPS 109
Advanced Programming

CMPS 180 Database Systems **OR** **CMPS 182** Intro to Database Management Systems

CMPE 185** Technical Writing

Notes:
Shaded boxes represent foundation courses
* Additional prerequisite courses required
** Satisfies the DC requirement

Please mark each class on this page accordingly before meeting with faculty:
T: Credit for class received through AP credit/transfer credit
Quarter/Year: The quarter & year you anticipate taking the class and/or have taken it

Science

CHEM 1A
General Chemistry

CHEM 1B/M
General Chemistry

CHEM 1C/N
General Chemistry

CHEM 108A/L Org. Chem AND **CHEM 108B/M** Org. Chem **OR** **CHEM 112A/L** AND **CHEM 112B/M** AND **CHEM 112C/N**

BIOL 20A
Cell & Molecular Biology

BIOL 105
Genetics

BIOC 100A
Biochemistry

ONE of the following:

BIOL 110
Cell Biology

BIOL 115
Eukaryotic Molecular Biology

BIOL 119
Microbiology

BME 155
Biotechnology and Drug Development

Electives

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

AMS: 132, 203, 205, 207, 215
BIOC: 100B, 100C, 110
BIOL: 100L*, 105L, 105M, 109L, 110, 115, 115L*, 117A*, 117B, 119, 119L*, 187L*, 200A, 200B
BME: 102, 109, 130, 230
CHEM: 103, 108B/M, 112C/N, 200A, 200B, 200C
CMPE: 108, 177
CMPS: 101, 104A, 105, 115, 116*, 130, 140*, 142, 160/L
TIM: 206, 250

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

Bioinformatics B.S. Degree
Curriculum Chart: 2013-2014

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: _____