Bioinformatics B.S. Degree
2014-2015 Curriculum Chart

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
AMS 131
Probability Theory
AMS 132
Statistical Inference

Bioinformatics
BME 80G
Bioethics
BME 110
Computational Biology Tools
BME 130
Genomes
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 5J
Intro to Program. Java
CMPS 12/L
Comp. System and Assembly Language
CMPS 12A/L
Intro to Programming
OR
AND
CMPS 11
Intermediate Program.
CMPS 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
CMPS 185**
Technical Writing

Science
CHEM 1A
General Chemistry
CHEM 1B/M
General Chemistry
CHEM 1C/N
General Chemistry
CHEM 108A/L
Organic Chemistry
CHEM 108B/M
Organic Chemistry
BIOE 20B
Cell & Molecular Biology
BIOE 20B
Development & Physiology
BIOE 20B
Development & Physiology
BIOE 20B
Development & Physiology
BIOE 20B
Development & Physiology

Electives
One course, approved by faculty advisor, consider the following:

AMS: 162
BIOC: 100B, 100C, 110
BME: 101/L, 102, 109, 128, 140, 150/L, 155, 177, 178, 211, 230

CMPE: 108, 177
CMPS: 104A, 105, 115, 116*, 130, 140, 142, 160/L
METX: 119, 119L
TIM: 105, 206

Students must justify their choice in writing and be approved by their faculty advisor.

Notes:
*Additional prerequisite course required
**Satisfies the DC requirement

Admission Requirements to Bioinformatics: Students must complete 50 units from the following list by the end of the fifth quarter (60 by the 7th, 70 by the 8th, or 80 by the 9th quarter) and have a GPA of 2.8 or better in all attempts: BIOL 20A, BIOC 20B, BME 80G, CHEM 1A, CHEM 1B/M, CHEM 1C/N, CMPE 16, CMPS 12A/L (or CMPS 5J and 11 or CMPS 12/L and 13/L), CMPS 12B/M, MATH 19A, MATH 19B, MATH 23A, AMS 131, CHEM 108A/L, CHEM 108B/M, and CMPS 101.
# Bioinformatics B.S. Degree
## 2014-2015 Curriculum Chart

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## BINF Electives Approval Form

Student Name ___________________________________________
Student ID ______________________________________________
Elective 1 ______________________________________________
Explanation of elective choice:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Faculty Advisor’s Approval: _______________________________   Date: ___________