Bioinformatics BS Degree
Curriculum Chart
2010-2011

Math
- CMPE 16
  Applied Discrete Math
- MATH 19A
  Calculus
- MATH 20A
  Honors Calc.
- MATH 19B
  Calculus
- MATH 20B
  Honors Calc.
- MATH 23A
  Multivariable Calculus
- CMPE 107
  Stochastic
- AMS 131
  Probability Theory
- AMS 132
  Statistical Inference
- AMS 206
  Bayesian Statistics

Bioinformatics
- BME 80G
  Bioethics
- PHIL 145
  Genetics
- BME 110
  Computational Biology Tools
- BME 205
  Bioinformatics Models and Algorithms

One of the following:
- BME 211
  Computational Systems Biology
- BME 220/L
  Protein Bioinformatics
- BME 230/L
  Computational Genomics
- BME 195
  Senior Thesis

Science
- CHEM 1A
  General Chemistry
- CHEM 1B/M
  General Chemistry
- CHEM 1C/N
  General Chemistry
- CHEM 108A/L
  Organic Chemistry
- CHEM 112A/L
  Org. Chem.
- CHEM 112B/M
  Org. Chem.

Engineering
- CMPS 5J
  Intro to Program. Java
- CMPS 12/L
  Comp. System and Assembly Language
- CMPS 12A/L
  Intro to Programming
- CMPS 12B/M
  Data Structures
- CMPS 11
  Intermediate Program.
- CMPS 13/L
  Comp. System. And C Prog.
- CMPS 101
  Abstract Data Type
- CMPS 109
  Advanced Programming
- CMPS 180
  Database Systems
- CMPS 182
  Intro to Database Management Systems
- CMPS 185
  Technical Writing

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

AMS: 132, 203, 205, 207, 215
BIOC: 100B, 100C, 110
BME: 102, 109, 130, 210, 220, 230
CHEM: 103, 108B/M, 112C/N, 200A, 200B, 200C
ISM: 206, 250

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 of CHEM 108B/M or CHEM 112C/N waived if grade in prior course is B or above
**BINF Electives Approval Form**

Student Name ___________________________________________
Student ID _____________________________________________

Elective 1 _____________________________________________
Elective 2 _____________________________________________

Explanation of choice of electives:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Faculty Advisor’s Approval: _______________________________   Date: ___________

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