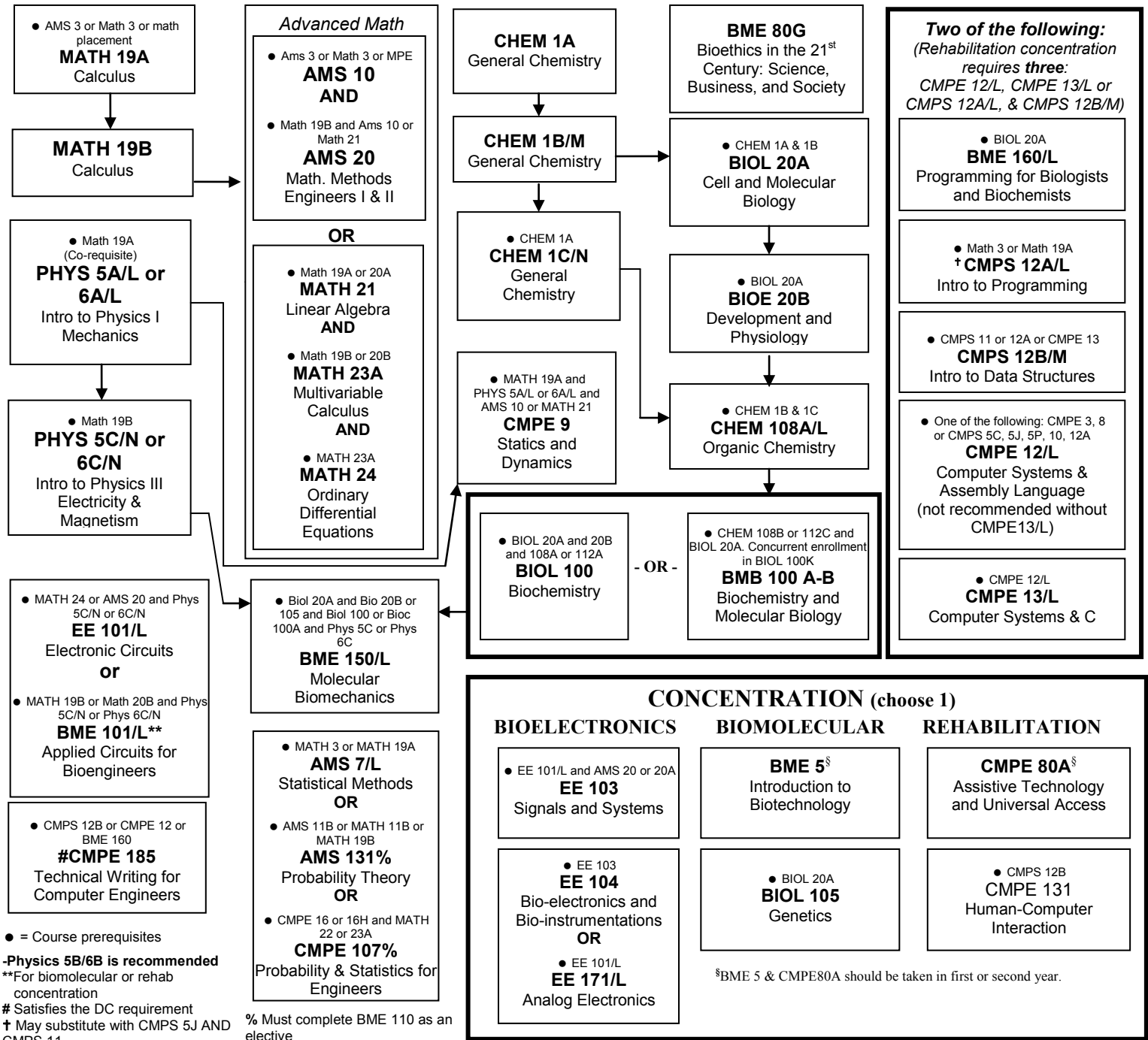


2013-14 BIOENGINEERING CURRICULUM CHART



Four Electives (pertinent to track) required (more information on back of this chart)

Faculty Approval _____

Design Elective

UD BSOE Elective or CMPS12B in Rehab Conc.

UD BSOE Elective

BSOE or PBSci Elective

Senior Design Project:

BME/CE/EE 123A Engineering Design Project I
- and -

BME/CE/EE 123B Engineering Design Project II

Students completing a thesis must seek department approval of their project one year before graduation

BME/CE/EE 195 Senior Thesis
(Must enroll in 3 quarters of BME 195)
- and -

BME 123T Senior Thesis Presentation
(Must concurrently enroll during last quarter of Thesis work)

Prior to graduation (see beng.soe.ucsc.edu) you must:

1. Submit a Portfolio
2. Complete an Exit Survey
3. Attend an Exit Interview

**BIOENGINEERING BS
DEGREE CURRICULUM**

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Approved List of Upper Division Electives – Courses used to satisfy a concentration cannot be used to also satisfy electives

AMS 147-Computational Methods and Applications
 BIOC 100C -Biochemistry
 BIOL 105-Genetics
 BIOL 110-Cell Biology
 BIOL 114-Cancer Cell Biology
 BIOL 115-Eukaryotic Molecular Biology
 METX 119-Microbiology
 BIOL 125-Introduction To Neuroscience
 BIOL 130/L-Human Physiology/Lab
 BIOE 131/L-Animal Physiology/Lab
 BME 110-Computational Biology Tools ♦
 BME 128-Protein Engineering \$ ♦
 BME 130-Genomes ♦
 BME 140-Bioinstrumentation ♦
 BME 155-Biotechnology & Drug Develop. ♦
 BME 170-Frontiers in Drug Action and Discovery
 BME 177-Engineering Stem Cells \$
 BME 178-Stem Cell Biology ♦
 BME 205-Bioinformatics Models and Algorithms \$ ♦
 BME 211-Computational Systems Biology
 BME 215-Applied Gene Technology
 BME 230/L-Computational Genomics

CHEM 108B/M-Organic Chemistry/Lab
 CMPE 100/L-Logic Design/Lab \$ ♪
 CMPE 110-Computer Architecture
 CMPE 118/L-Mechatronics/Lab ♪
 CMPE 121/L-Microprocessor System Design/Lab
 CMPE 131-Human-Computer Interaction
 CMPE 167/L-Sensing and Sensor Technology/Lab ♪
 CMPE 202-Computer Architecture
 CMPE 215-Models of Robotic Manipulation
 CMPE 233-Human Factors ♪
 CMPE 235-User Evaluation of Technology
 CMPS 101-Algorithms and Abstract Data Types
 CMPS 109-Advanced Programming ♪
 CMPS 115-Software Methodology
 CMPS 116-Software Design Project
 CMPS 180-Database Systems I
 CMPS 181-Database Systems II
 CMPS 182-Introduction to Database Management Syst....

EE 103-Signals and Systems
 EE 104-Bio-electronics and Bio-instrumentations ♣
 EE 115-Intro. to MEMS Design ♣
 EE 130/L-Intro. to Optoelectronics and Photonics/Lab ♣
 EE 145/L-Properties of Materials/Lab ♣
 EE 154-Feedback Control Systems ♣
 EE 171/L-Analog Electronics/Lab ♣
 EE 172-Advanced Analog Circuits \$ ♣
 EE 212-Introduction to BioMEMS ♣
 EE 216-Nanomaterials and Nanometer-scale Device ♣
 EE 230-Optical Fiber Communication ♣
 EE 270-Neural Implant Engineering ♣
 EE 293-Advanced Topics in Electrical Engineering ♣

\$-Counts towards Design Elective ♦-Recommended for Biomolecular ♣-Recommended for Bioelectronics ♪-Recommended for Rehabilitation

Student Name _____
 Faculty Advisor: _____
 Staff Advisor: _____

Student ID _____
 Date: _____
 Date: _____