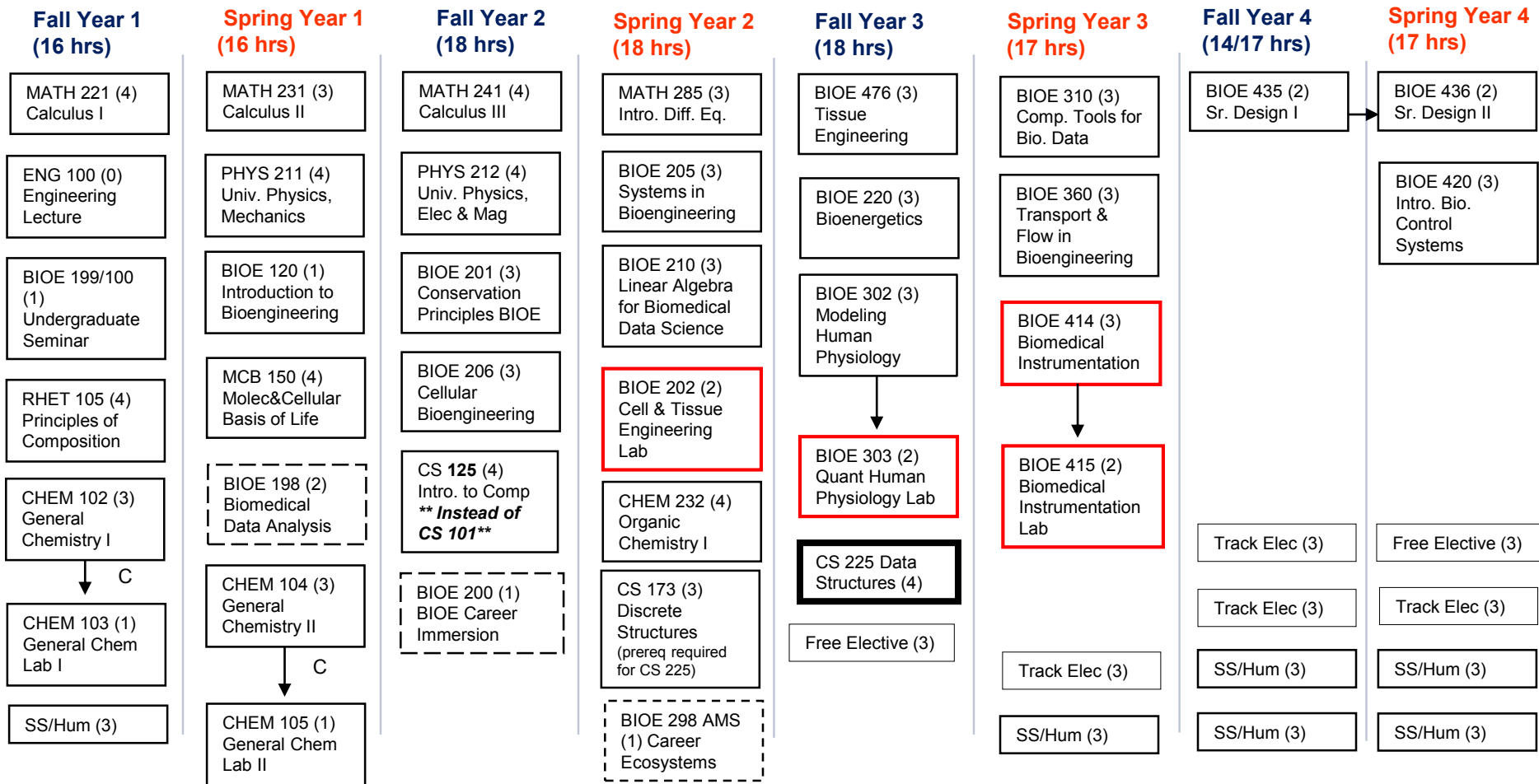


Computation & Systems Biology Track

Curriculum Map



Computation & Systems Biology Track Electives:

- BIOE 424 – Systems Bioengineering (3 hr)
- BIOE 430 – Intro. Synthetic Biology (3 hr)
- BIOE 498 JI – Finite Element Mthds in Biomed (3 hr)
- ABE 440 – Applied Statistical Methods I (4 hr)
- ECE 490 – Introduction to Optimization (3 hr)
- SE 423 – Mechatronics (3 hr)
- IE 310 – Deterministic Models in Optimization (3 hr)
- IE 370 – Stochastic Processes and Applications (3 hr)
- NPRE 498 PRA – Advanced Risk Analysis (3 hr)

- TMGT 461 Sections TMD/TME – Tech, Eng, and Mngmt Final Project (4 hr)
- CS 225 – Data Structures (4 hr)
- CS 398 DL – Deep Learning (3 hr)
- CS 411 – Database Systems (3 hr)
- CS 412 – Introduction to Data Mining (3 hr)
- CS 440 – Artificial Intelligence (3 hr)
- CS 465 – User Interface Design (3 hr)
- CS 466 – Introduction to Bioinformatics (3 hr)

** Note – not taking courses as advised may result in a delayed graduation date. Students are responsible for any impact resulting from not following departmental advising.

** If outlined in RED then the BIOE course is offered both Fall & Spring Semesters

**Courses with dashed line borders are not currently required as part of the Core BIOE Curriculum

Other Requirements

General Education Requirements

- 6 hours in Humanities
- 6 hours in Social/Behavioral Sciences
- 6 hours in Liberal Education
- 1 Advanced Composition Course
- 1 Western Comparative Cultures Course
- 1 Non-Western Comparative Cultures Course
- 1 US Minority Cultures Course (FA 2018 admits and beyond only)
- 3rd Level of a Foreign Language

Premed Requirements

- Meet with Engineering Career Services Premed advisor
- Common Courses *(additional requirements may apply depending on school)*:
 - MCB 450/354 (BioChem)
 - CHEM 233 (Orgo 1 lab)
 - Social/Behavioral Science Sequence (3 courses)