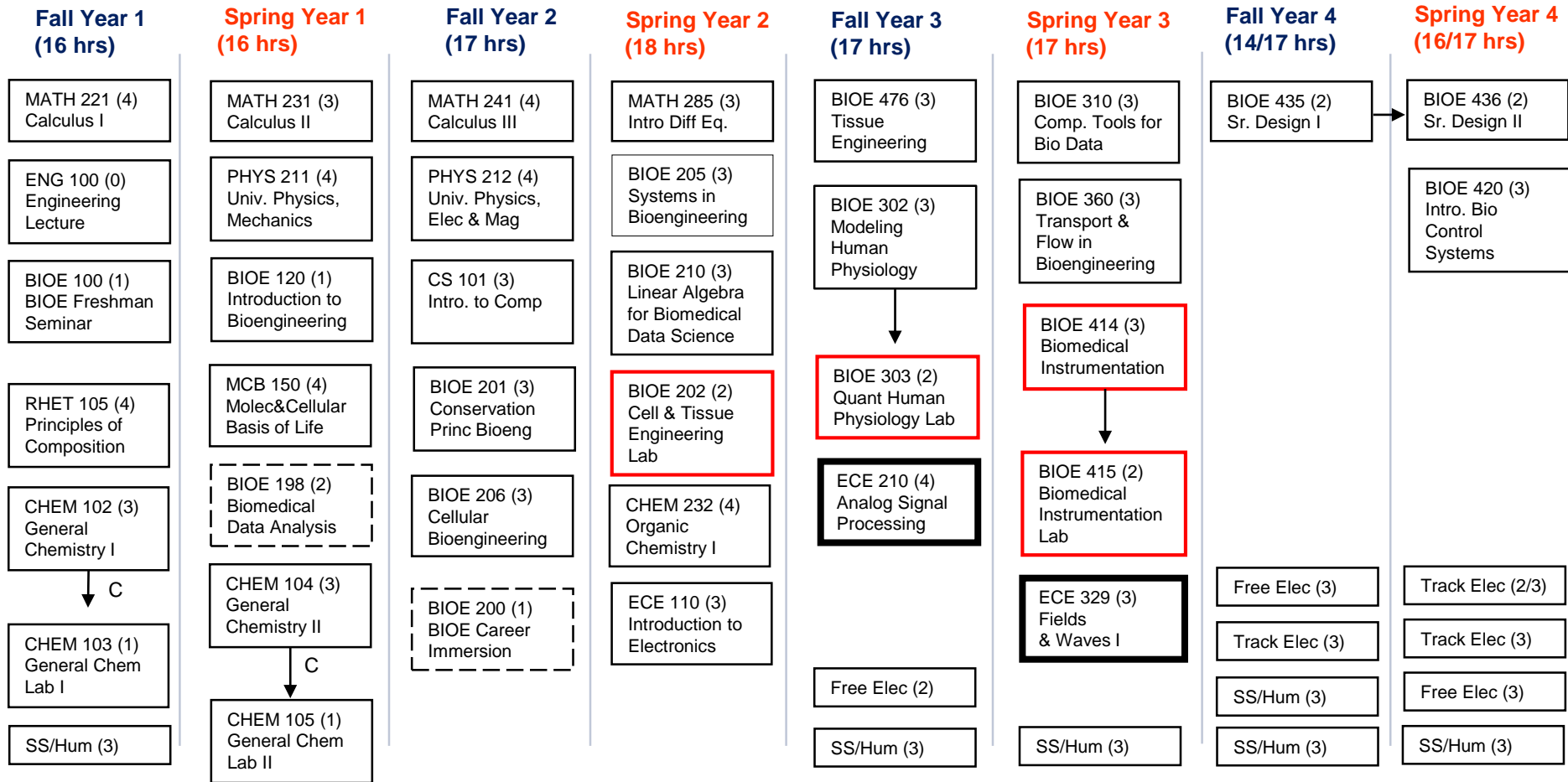


Imaging & Sensing Track Curriculum Map



** 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

Imaging/Sensing Track Electives

- BIOE 483 – Biomedical Computed Imaging Systems (3 hr)
- BIOE 485 – Computational Mathematics for Machine Learning and Imaging (4 hr)
- BIOE 498 NIE – Surgical Technologies (3 hr)
- BIOE 498 WD – Preclinical Molecular Imaging (3 hr)
- BIOE 498 AL – Immunoengineering (3 hr)
- BIOE 498 TL – Intro to Systems Bio (3 hr)
- BIOE 498 PJ – Exp. Design in Auto (3 hr)
- BIOE 498 LEC – Technologies for Cancer Diagnosis & Therapy (3 hr)
- BIOE 498 RI – Regulatory Safety Issues In Bioengineering (3 hr)
- ECE 310 – Digital Signal Processing (3 hr)
- ECE 311 – Digital Signal Processing Lab (1 hr)
- ECE 365 – Data Science & Instrumentation (3 hr)
- ECE 380 – Biomedical Imaging (3 hr)
- ECE 401 – Signal & Image Analysis (4 hrs)
- ECE 416 – BioSensors (3 hr)
- ECE 417 – Multimedia Signal Processing (4 hr)
- ECE 418 – Image & Video Processing (4 hr)
- ECE 437 – Sensors & Instrumentation (3 hr)
- ECE 460 – Optical Imaging (4 hr)
- ECE 467 – Biophotonics (3 hr)
- ECE 472 – Biomedical Ultrasound Imaging (3 hr)
- ECE 473 – Fundamentals of Engineering Acoustics (3 hr)
- ECE 480 – Magnetic Resonance Imaging (3 hr)
- SE 423 – Mechatronics (3 hr)
- ME 487 – MEMS-NEMS Theory & Fabrication (4 hr)
- NPRE 498 PRA – Advanced Risk Analysis (3 hr)
- TMGT 461 – Sections TMD/TME Tech, Eng, and Mngmt Final Project (4 hr)

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
- Language Other Than English

PreMed Requirements

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