Cell & Tissue 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

Cell & Tissue Track Electives

 BIOE 306 – Biofabrication Lab (3 hr) BIOE 498 AL – Immunoengineering (3 hr) BIOE 498 QP – Quantitative Pharmacology (3 hr) BIOE 416 – Biosensors (3 hr) BIOE 430 – Intro to Synthetic Biology (3 hr) MSE 404 – LabStudies in MatSE (Biomaterials) (1.5 hr each) ٠ BIOE 460– Gene Editing Lab (3 hr) MSE 470 – Design and Use of Biomaterial (3 hr) ٠ MSE 474 – Biomaterials and Nanomedicine (3 hr) BIOE 461 – Cellular Biomechanics (4 hr) BIOE 487 – Stem Cell Bioengineering (3 hr) • CHBE 471 – Biochemical Engineering (3 hr) • CHBE 472 – Techniques in Biomolecular Engineering (3 hr) • BIOE 498 WD – Preclinical Molecular Imaging (3 hr) • BIOE 498 TL – Intro to Systems Bio (3 hr) IE 330 – Industrial Quality Control (3 hr) BIOE 498 PJ – Experimental Design in Automation (3 hr) TMGT 461 Sections TMD/TME – Tech, Eng, and Mngmt BIOE 498 RI – Regulatory Safety Issues In Bioengineering (3 hr) Final Project (4 hr) ME 483 – Mechanobiology (4 hr) NE 330 – Neuroscience for Engineers (3 hr)

General Education Requirements

- □ 6 hours in Humanities
- □ 6 hours in Social/Behavioral Sciences
- 6 hours in Liberal Education
- I Advanced Composition Course
- 1 Western Comparative Cultures Course
- I Non-Western Comparative Cultures Course
- I 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)