PHARMACOENGINEERING

BMME 485
Biotechnology

BMME 490
Data Science + Machine Learning in Medicine

BMME 495
Undergraduate Research in Biomedical Engineering

BMME 511
Genetic Engineering

BMME 516
Advanced Drug Delivery

BMME 523
Biomolecular Engineering

BMME 524
Biomolecular Sensing Technologies

BMME 527
Engineering Principles in Targeted Photomedicine

BMME 570
Immunoeengineering

REGENERATIVE MEDICINE

BIT 466
Animal Cell Culture and
BMME 483
Tissue Engr. Tech.

BMME 420
Intro to Synthetic Biology

BMME 429
Cellular Engineering

BMME 435
Biological Physics

BMME 448
Functional Tissue Engineering

BMME 470
Analysis of Tissue Engr. Tech.

BMME 484
Fund. of Tissue Engineering

BMME 490
Data Science + Machine Learning in Medicine

BMME 495
Undergraduate Research in Biomedical Engineering

BMME 511
Genetic Engineering

BMME 590
Advanced Computational Modeling

TE 463
Polymer Engineering

Fluids:
MAE 282
Hydraulics
or MAE 308
Fluid Mechanics
or BMME 455
Biofluid Mechanics

Thermo:
MAE 201
Engr. Thermo I
or MSE 301
Intro to Thermo
or BMME 441
Thermal Physics

REHABILITATION ENG

BMME 405
Biomechanics of Movement

BMME 418
Wearable Biosensors

BMME 425
Bioelectricity

BMME 438
Bone Mechanobiology

BMME 444
Orthopedic Biomechanics

BMME 456
Rehabilitation Robotics

BMME 490
Data Science + Machine Learning in Medicine

BMME 490
Neural Engineering

BMME 495
Undergraduate Research in Biomedical Engineering

BMME 498
Undergraduate Research in Biomedical Engineering

BIOSIGNALS AND IMAGING

BMME 412
Biomedical Signal Processing

BMME 418
Wearable Biosensors

BMME 425
Bioelectricity

BMME 461
Intro to Medical Imaging

BMME 463
Biomedical Optics and Lasers

BMME 464
Microscopy

BMME 490
Data Science + Machine Learning in Medicine

BMME 495
Undergraduate Research in Biomedical Engineering

BMME 498
Undergraduate Research in Biomedical Engineering

BMME 575
Machine Learning

BMME/COMP 576
Mathematics for Image Computing

ECE 455
Industrial Robotic Systems

ECE 456
Mechatronics

ECE 505
Neural Interface Engineering

MA 501
Advanced Math. for Engineers and Scientists I

MATH 528
Math. Methods for Physical Scientists and Engineers

MEDICAL MICRODEVICES

BMME 412
Biomedical Signal Processing

BMME 418
Wearable Biosensors

BMME 490
Data Science + Machine Learning in Medicine

BMME 495
Undergraduate Research in Biomedical Engineering

BMME 498
Undergraduate Research in Biomedical Engineering

BMME 522
Medical Instrumentation

BMME 575
Machine Learning

E 304
Intro to Nano Science and Tech.

ECE 436
Digital Control Systems

ECE 505
Neural Interface Engineering

Fluids:
MAE 201
Engr. Thermo I
or MSE 301
Intro to Thermo
or BMME 441
Thermal Physics

Thermo:
MAE 201
Engr. Thermo I
or MSE 301
Intro to Thermo
or BMME 441
Thermal Physics

UNC BIOMEDICAL ENGINEERING UNDERGRADUATE PROGRAM - SPECIALTY ELECTIVES

BME students take 4 Specialty Electives from one or two areas during their Senior year.