



Curriculum

Technical Electives

Each student is required to choose one of four focus areas: biomechanics, biomaterials/tissue engineering, technology and devices, or pre-health. They must take the following appropriate technical electives.

Additionally, they take any 400- or 500-level engineering, mathematics, business, life science or physical sciences class, or other coursework approved by their adviser, to total 21 technical elective units. At least 12 technical elective units must be in engineering.

For a full list of BME courses, see the UA Catalog.

Biomechanics

Biomechanical Engineering - AME/BME 466 (3 units)

Microbiomechanics - AME 483 (3 units)

Numerical Methods - AME 302 (3 units)

Mechanical Behavior of Engineering Materials - AME 324A (3 units)

Biomaterials/Tissue Engineering

Biological Synthetic Materials - MSE 461 (3 units)

Biomaterial-Tissue Interaction - BME 486 (3 units)

Cell and Tissue Engineering - ABE 481B (3 units)

Organic Chemistry - CHEM 241A (3 units)

Organic Chemistry Lab - CHEM 243A (1 unit)

Technologies & Devices

Fabrication Techniques for Micro/Nanodevices - AME 489A (3 units)

Nanoscience and Nanotechnology for BME - BME 485 (3 units)

Micro/Nano Transducer Physics - AME 488 (3 units)

Biomaterial-Tissue Interaction - BME 486 (3 units)

Pre-Health

Lectures in Organic Chemistry and Lab - CHEM 241A/243A

Lectures in Organic Chemistry and Lab II - CHEM 241B/243B

Metabolic Chemistry - BIOC 385 (3 units)

Biomaterial-Tissue Interactions - BME 486 (3 units)

Cell and Tissue Engineering - BME 481B (3 units)

Biomedical Imaging - BME 416 (3 units)