

Degree Requirements for Students Engering F06 – S07

* Note that due to printing schedules, this set of degree requirements never appeared in a printed catalog.

<p>Choose one from the following: 3 BioE 205 - Bioengineering Thermodynamics (3) CHE 201 - Introduction to Thermodynamics (3) ME 205 - Introduction to Thermodynamics (3)</p> <p>Choose one from the following: 3 BIOE 455 - Introduction to Cell and Tissue Engineering (3) BIOE 475 - Neural Engineering I (3) BIOE 480 - Introduction to Bioinformatics (3)</p> <p>Choose one from the following: 2 BioE 456 – Cell and Tissue Engr Lab (2) BioE 476 – Neural Engineering I Lab (2) BioE 481 – Bioinformatics Lab (2)</p> <p>Total Hours – Selective Engineering Courses 20-23 ^a ENGR 100 and 189 are one-semester-hour courses, but the hour does not count toward the total hours required for graduation.</p> <p>Bioengineering Concentration Area Electives Courses Hours 12 These courses are to be selected in consultation with the advisor and must relate to each other in such a way as to define an area of concentration; subject to the following restrictions:</p> <p>A minimum of 3 hours must be upper division (300- or 400-level) bioengineering or other engineering courses.</p> <p>Nonengineering courses may be used only if they can be justified and prior approval is obtained from the advisor.</p> <p>A maximum of 3 hours of BioE 398 may be applied as concentration area elective hours.</p> <p>A maximum of 4 hours from the following courses may be applied as concentration area elective hours: BioE 402, BioE 406, BioE 408, ENGR 400, ENGR 404, ENGR 420</p> <p>The following web-based courses may not be applied as concentration area electives: ENGR 401, ENGR 402, ENGR 403, ENGR 410.</p> <p>Electives outside the Major Rubric 0-2</p> <p><i>For information on admission, additional graduation requirements, and academic regulations in the college, see College of Engineering.</i></p>	<p>FIRST YEAR FIRST SEMESTER BioE 101 - Intro to Bioengineering (2 hrs) Math 180- Calculus I (5 hrs) Engl 160- English Composition I (3 hrs) BioS 100- Biology of Cells and Organisms (5 hrs) Total: (16 hrs)</p> <p>SECOND SEMESTER Math 181- Calculus II (5 hrs) Phys 141- General Physics I (Mechanics) (4 hrs) Chem 112- General College Chemistry I (5 hrs) Engl 161- English Composition II (3 hrs) Engr 100- Orientation (0 hrs) <i>Engr 100 awards no credit towards graduation.</i> Total: (17 hrs)</p> <p>SECOND YEAR FIRST SEMESTER BioE 240 - Models of Physiological Data and Systems (3 hrs) Math 210- Calculus III (3 hrs) Phys 142- General Physics II (Electricity and Magnetism) (4 hrs) Chem 114- General College Chemistry II (5 hrs) BioS 286 - Biology of the Brain (3 hrs) Total: (18 hrs)</p> <p>SECOND SEMESTER BioE 250 - Clinical Problems in BioE (3 hrs) Math 220 - Introduction to Differential Equations (3 hrs) ECE 210 - Electrical Circuit Analysis (3 hrs) CS 108 - Fortran Programming for Engineers (3 hrs) CME 260 - Properties of Materials (3 hrs) Total: (15 hrs)</p> <p>THIRD YEAR FIRST SEMESTER BioE 339 - Biostatistics I (3 hrs) BioE 325 - Biotransport (3 hrs) BioE 310 – Biological Systems Analysis (3 hrs) Phys 244 - General Physics III (Modern Physics) (3 hrs) BioS 484 – Neuroscience I (3 hrs) Total: (15 hrs)</p>
--	---

Degree Requirements for Students Engering F06 – S07

* Note that due to printing schedules, this set of degree requirements never appeared in a printed catalog.

SECOND SEMESTER

BioE 430- Bioinstrumentation I (3 hrs)
BioE 431- Bioinstrumentation I Lab (2 hrs)
BioE 205 – Bioengineering Thermodynamics (3 hrs)
Concentration Area Electives (6 hrs)
Humanities-Social Sciences Elective (3 hrs)
Total: (17 hrs)

FOURTH YEAR

FIRST SEMESTER

BioE 396- Senior Design I (3 hrs)
BioE 460- Materials in Bioengineering (3 hrs)
Concentration Area Electives (3 hrs)
Humanities-Social Sciences Elective (6 hrs)
Total: (15 hrs)

SECOND SEMESTER

BioE 397- Senior Design II (3 hrs)
BioE 475- Neural Engineering I (3 hrs)
BioE 476 - Neural Engineering Lab (2 hrs)
Concentration Area Electives (3 hrs)
Humanities-social-science electives (3 hrs)
Elective outside of the major rubric (2 hrs)
Total: (16 hrs)