



John G. Rangos, Sr.
School of Health Sciences

ENGINEERING

Biomedical Engineering – Bachelor of Science – 133 Credits

In most cases, courses listed in bold must be taken in the exact semester indicated; all other courses are interchangeable.

Fall of 1st Year – 17 Credits

BMED-100 Intro to Biomed Engineering (3 cr.)
CHEM-121/L/R Gen Chemistry I/Lab (4/1 cr.)
MATH-115 Calculus I (4 cr.)
**PHYS-211/L/R General Analytical Physics I
/Lab/Recitation (3/1 cr.)**
UCOR-103 IPE Health Research Skills (1 cr.)

Fall of 2nd Year – 17 Credits

BIOL-111/L Biology I/Lab (4/0 cr.)
BMED-201 Biomed Electronics & Instr I (3 cr.)
BMED-210 Thermodynamics (3 cr.)
MATH-215 Calculus III (4 cr.)
UCOR-101 Thinking & Writing Across the Curric (3 cr.)

Fall of 3rd Year (18 Credits)

BIOL-207 Anatomy and Physiology (3 cr.)
BMED-310 Biomedical Signals and Systems (3 cr.)
BMED-430 Engineering Computation (3 cr.)
MATH-301 Intro Probability & Stat I (3 cr.)
Ethics Core (3 cr.)
Social Justice Theme Area (3 cr.)

Fall of 4th Year (14 Credits)

BMED-440W Biomedical Eng Capstone I (5 cr.)
BMED Elective (3 cr.)
Creative Arts Theme Area (3 cr.)
Theology Core (3 cr.)

Spring of 1st Year – 16 Credits

BMED-110 Intro to Programming for Engin (3 cr.)
CHEM-122/L/R Gen Chemistry II/Lab (4/1 cr.)
MATH-116 Calculus II (4 cr.)
**PHYS-212/L/R General Analytical Physics II
/Lab/Recitation (3/1 cr.)**

Spring of 2nd Year – 16 Credits

BIOL-112/L Biology II/Lab (4/0 cr.)
BMED-202 Biomed Electronics & Instrumentation II (3 cr.)
BMED-220 Introduction to Biomaterials (3 cr.)
MATH-314 Differential Equations (3 cr.)
UCOR-102 Imaginative Literature & Critical Writing (3 cr.)

Spring of 3rd Year – 18 Credits

BMED-320 Biofluid Mechanics (3 cr.)
BMED-490 Research in Biomedical Engr (3 cr.)
BMED Elective (3 cr.)
MATH-302W Intro Probability & Stat II (3 cr.)
Math or Science Elective (3 cr.)
UCOR-132 Basic Philosophical Questions (3 cr.)

Spring of 4th Year – 17 Credits

BMED-441W Biomed Engineering Capstone II (5 cr.)
BMED Elective (3 cr.)
BMED Elective (3 cr.)
Faith and Reason Theme Area (3 cr.)
Global Diversity Theme Area (3 cr.)

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