

Name: _____

UID#: _____

BIOENGINEERING

CORE GENERAL EDUCATION PROGRAM

Fundamental Studies (6 credits)

Academic Writing - ENGL 101 _____	3
Technical Writing - ENGL 393 _____	3

Distributive Studies (18 credits) Lower level courses

Humanities and the Arts (9 credits)

Literature (HL) _____	3
Arts (HA) _____	3
Other Humanities (HA, HL, HO, IE*) _____	3

Social and Behavioral Sciences (9 credits)

Social/Political History (SH) _____	3
Behavior/Social Science (SB) _____	3
Behavior/Social Science (SB, IE*) _____	3

*Only one Interdisciplinary & Emerging Issues (IE) course can be taken in place of a third humanities or behavior/social science course.

Advanced Studies (6 credits) Upper level courses

Must be courses outside of your major department or may include an approved Capstone course in your major

3XX/4XX Biological Science Elective _____	0
BIOE 486 - Capstone II _____	0

Diversity (3 credits)

One course from approved list (D) _____	0/3
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MAJOR REQUIREMENTS

Basic Sciences

CHEM 135 - Chem for Eng _____	3
CHEM 136 - Chemistry Lab for Eng _____	1
CHEM 231 & 232 - Organic Chemistry I & Lab _____	4
PHYS 161 - General Physics I _____	3
PHYS 260 & 261 - Gen Physics II & Lab _____	4
MATH 140 - Calculus I _____	4
MATH 141 - Calculus II _____	4
MATH 241 - Calculus III _____	4
MATH 246 - Differential Equations _____	3

Engineering Sciences

ENES 100 - Intro to Eng Design _____	3
ENES 102 - Mechanics I _____	3
ENES 220 - Mechanics II _____	3

Major Requirements

BIOE 120 - Biology for Eng _____	3
BIOE 121 - Biology for Eng Lab _____	1
BIOE 232 - Bioengineering Thermodynamics _____	3
BIOE 241 - Biocomputational Methods _____	3
BIOE 331 - Biofluids _____	3
BIOE 332- Transport Process Design _____	3
BIOE 340 - Modeling Physiological Systems and Lab _____	4
BIOE 371 - Bioengineering Math & Statistics _____	3
BIOE 404 - Biomechanics _____	3
BIOE 420 - Bioimaging _____	3
BIOE 453 - Biomaterials _____	3
BIOE 457 - Biomedical Electronics & Instruments _____	3
BIOE 485 - Capstone I / Reg Issues & Ethics _____	3
BIOE 486 - Capstone II _____	3

Technical Requirements

BSCI 330 - Cell Biology & Physiology _____	4
Biological Science Elective ** _____	3
Biological Science Elective ** _____	3
ENGR Science Elective *** _____	3
ENGR Science Elective *** _____	3
Unrestricted Elective ** _____	3

** Biological Science Electives

www.bioe.umd.edu/undergrad/ug-bio-electives.html and

***ENGR Electives

www.bioe.umd.edu/undergrad/ug-scitech-electives.html

Students interested in medical/veterinary schools should speak with the Pre-Health advisor for additional course requirements. Start by checking out the following:

www.prehealth.umd.edu/

NOTES

All engineering and technical courses must be completed with a grade of 2.0 or better.

All degree courses must be taken for a regular grade.

A minimum of **120 credits** and completion of all degree requirements is required for graduation.

The responsibility for meeting all graduation requirements rests with the student.

Track your degree progress using Degree Navigator

www.testudo.umd.edu/dnentry.html