Bioengineering Curriculum Flowchart (120 credits)

Catalog Years 2017-18 and 2018-19
Classes of 2021 and 2022

Freshman
Fall
16 credits

EGR 111
Intro. Eng & Computing
[3] (Fall)

MTH 153 (or 151)
Calculus App. Sci & Eng I
[4] (Fall/Spring)

CHM 153
Prin. Mod. Chem for Engr
[3] (Fall)

ENL 101
Intro to Bioengineering
[3] (Fall/Spring)

ENL 102
Crit Writing and Reading I
[3] (Fall/Spring)

EGR 241
Eng Mechanics I Statics
[3] (Fall/Spring)

MTH 154 (or 152)
Calculus App. Sci & Eng II
[4] (Spring/Fall)

PHY 111 (or 113)
Physics for Sci. and Eng. I
[4] (Spring/Fall)

University Studies
3A Elective
[3] (Spring/Fall)

ENL 266
Technical Communications
[3] (Spring/Fall)

Sophomore
Fall
17 credits

ECE 201
Circuit Theory I
[3.5] (Spring/Fall)

MTH 212
Diff. Equations Engineers
[3] (Spring/Fall)

EGR 411
Statistics for Bioengineer
[3] (Fall)

University Studies
3B Elective
[3] (Fall/Spring)

BNG 232
Fund Engineer Biology Lab
[1] (Spring)

EGR 241
Eng Mechanics I Statics
[3] (Fall/Spring)

MTH 213 (or 211)
Calculus App. Sci & Eng. III
[4] (Fall/Spring)

PHY 112 (or 114)
Physics for Sci. and Eng II
[4] (Fall/Spring)

University Studies
4A Elective
[3] (Spring/Fall)

PHY 111 (or 113)
Physics for Sci. and Eng. I
[4] (Spring/Fall)

CHM 152 & 162
Princi. Mod Chemistry II
[3/1] (Spring/Fall)

University Studies
4C Elective
[3] (Spring/Fall)

Junior
Fall
17 credits

BNG 320
Biomeasurement Lab
[1] (Fall)

BNG 318
Biomeasurement & Control
[3] (Fall)

BNG 322
Biosys Analysis & Design
[3.5] (Spring)

Specialization
[3] (Fall/Spring)

BNG 311
Statistics for Bioengineer
[3] (Fall)

BNG 321 & 322
Quan. Physiology & Lab
[3/1] (Fall)

BNG 319
Chem Methods in Bioeng
[3] (Fall)

Senior
Fall
14 credits

Specialization
[3] (Fall/Spring)

BNG 315
Biomechanics
[3] (Spring)

BNG 317
Biomechanics Lab
[1] (Spring)

Specialization
[3] (Fall/Spring)

EGR 497
Capstone Design I
[2] (Fall)

BNG 323 & 324
Biomaterials
[3] (Spring)

Specialization
[3] (Spring/Fall)

EGR 498
Capstone Design II
[2] (Spring)

BNG 411
Bioengineering Lab
[3] (Fall)

Specialization
[3] (Spring/Fall)

BNG 423
Biosy Analysis & Design
[3.5] (Spring)

Senior
Spring
14.5 credits

Specialization
[3] (Spring/Fall)

EGR 497
Capstone Design I
[2] (Fall)

BNG 411
Bioengineering Lab
[3] (Fall)

Specialization
[3] (Spring/Fall)

BNG 423
Biosy Analysis & Design
[3.5] (Spring)

Specialization
[3] (Spring/Fall)

 Revised 3/27/2019/jm