Bioengineering Curriculum Flowchart (120 credits)

Catalog Year 2019-20 to present
Class of 2023 and beyond

Freshman
Fall 17 credits
- EGR 111 Intro. Eng & Computing [3] (Fall)
- MTH 153 (or 151) Calculus App Sci & Engr I [4] (Fall/Spring)
- CHM 151 (or 153) Prin. Mod. Chemistry I [3] (Fall/Spring)
- CHM 161 Intro to Appl. Chem I [1] (Fall/Spring)
- BNG 101 Intro to Bioengineering [3] (Fall)
- ENL 101 Crit Writing and Reading I [3] (Fall/Spring)
- EGR 241 Eng Mechanics I Statics [3] (Fall/Spring)

Fall 14 credits
- MTH 154 (or 152) Calculus App. Sci & Eng II [4] (Spring/Fall)
- PHY 113 (or 111) Classical Physics I [4] (Spring/Fall)
- CHM 152 Prin. Mod Chemistry II [3] (Spring/Fall)
- BNG 119 Chem Methods in Bioeng [3] (Fall)
- ENL 102 Crit Writing and Reading II [3] (Fall/Spring)

Sophomore
Fall 17 credits
- ECE 201 Circuit Theory I [3.5] (Spring/Fall)
- MTH 213 (or 211) Calculus App/ Sci & Eng. III [4] (Fall/Spring)
- PHY 114 (or 112) Classical Physics II [4] (Fall/Spring)
- BNG 219 Chem Methods in Bioeng [3] (Fall)
- ENL 266 Technical Communications [3] (Spring/Fall)

Spring 13.5 credits
- BNG 311 Statistics for Bioeng [3] (Fall)
- BNG 320 Biomeasurement Lab [1] (Fall)
- BNG 318 Biomeasurement & Control [3] (Fall)
- BNG 320 Biomeasurement Lab [1] (Fall)
- BNG 317 Biomechanics Lab [1] (Spring)
- BNG 320 Biomeasurement Lab [1] (Fall)
- BNG 317 Biomechanics Lab [1] (Spring)
- BNG 315 Biomechanics [3] (Spring)
- BNG 316 Biomechanics Lab [3] (Spring)
- BNG 315 Biomechanics [3] (Spring)
- BNG 316 Biomechanics Lab [3] (Spring)

Junior
Fall 17 credits
- BNG 220 Biochem Thermodynamics [3] (Spring)
- BNG 220 Biochem Thermodynamics [3] (Spring)
- BNG 311 Statistics for Bioeng [3] (Fall)
- BNG 320 Biomeasurement Lab [1] (Fall)
- BNG 317 Biomechanics Lab [1] (Spring)
- BNG 316 Biomechanics Lab [3] (Spring)
- BNG 311 Statistics for Bioeng [3] (Fall)
- BNG 320 Biomeasurement Lab [1] (Fall)
- BNG 317 Biomechanics Lab [1] (Spring)
- BNG 316 Biomechanics Lab [3] (Spring)

Spring 13 credits
- BNG 221 Statistics for Bioeng [3] (Spring)
- BNG 318 Biomeasurement & Control [3] (Fall)
- BNG 315 Biomechanics [3] (Spring)
- BNG 316 Biomechanics Lab [3] (Spring)
- BNG 311 Statistics for Bioeng [3] (Fall)
- BNG 320 Biomeasurement Lab [1] (Fall)
- BNG 317 Biomechanics Lab [1] (Spring)
- BNG 316 Biomechanics Lab [3] (Spring)

Senior
Fall 14 credits
- Specialization [3] (Fall/Spring)
- BNG 497 Capstone Design I [2] (Fall)
- BNG 498 Capstone Design II [2] (Spring)
- Specialization [3] (Spring/Fall)
- BNG 411 Bioengineering Lab [3] (Fall)
- University Studies 3A Elective [3] (Fall/Spring)
- University Studies 4B Elective [3] (Spring/Fall)

Spring 14.5 credits
- Specialization [3] (Spring/Fall)
- BNG 423 Biosys Analysis & Design [3.5] (Spring/Fall)
- BNG 497 Capstone Design I [2] (Fall)
- BNG 498 Capstone Design II [2] (Spring)
- Specialization [3] (Spring/Fall)
- University Studies 3B Elective [3] (Fall/Spring)
- University Studies 4A Elective [3] (Spring/Fall)
- University Studies 4B Elective [3] (Spring/Fall)
- University Studies 4C Elective [3] (Spring/Fall)

Revised 6/13/2024/Jm