

Bioengineering Monroe Flowchart

| 1ST YEAR | | 2ND YEAR | | | | 3RD YEAR | | | 4TH YEAR | | 5TH YEAR | |
|--|--|---|--|---|--|---------------------------------------|---|---------------------------------------|---|---------------------------------------|--|---|
| Fall | Spring | Fall | Spring | Summer | Fall | Spring | Summer | Fall | Spring | Summer | Fall | Spring |
| Calculus I MATH 171 4 hrs | Calculus II MATH 172 4 hrs | Multivariate Calculus MATH 271 4 hrs | Differential Equations MATH 273 3 hrs | Electrical Circuits EECS 2300 4 hrs | Orientation & Intro to BIOE BIOE 1000 3 hrs | Co-op Experience BIOE 3940 1 hr | Coursework for deficiencies, medical school requirements, business minor or additional co-op experience. | Co-op Experience BIOE 3940 1 hr | Intro to Biomechanics BIOE 3110 3 hrs | Co-op Experience BIOE 3940 1 hr | Biosignal Processing BIOE 4120 4 hrs | HUM/SS/MC Elective 3 hrs |
| General Chemistry I CHM 151 4 hrs | General Chemistry II CHM 152 4 hrs | Fund. of Life Science II BIOL 152 4 hrs | Cell Biology BIOL 3030 3 hrs | Statics CIVE 1150 3 hrs | Biomaterials BIOE 2200 3 hrs | | | | Biomedical Electronics BIOE 3300 4 hrs | | Senior Design Project I BIOE 4410 3 hrs | Senior Design Project II BIOE 4420 3 hrs |
| General Chem Lab I CHM 151 1 hr | General Chem Lab II CHM 152 1 hr | Fund. of Life Science Lab II BIOL 152 1 hr | Professional Development BIOE 1010 1 hr | HUM/SS/MC Elective 3 hrs | Bitransport Phenomena BIOE 3400 3 hrs | | | | Analysis of BIOE Systems BIOE 4300 3 hrs | | BIOE Technical Elective 3 hrs | BIOE Technical Elective 3 hrs |
| English Composition ENGL 151 3 hrs | Physics I PHY 251 5 hrs | Physics II PHY 252 5 hrs | Computer Applications BIOE 1200 3 hrs | HUM/SS/MC Elective 3 hrs | Bioprocessing Laboratory BIOE 3500 3 hrs | | | | Technical Elective 3 hrs | | Technical Elective 3 hrs | Technical Elective 3 hrs |
| SPCH 151 Elective 3 hrs | PSYC 151 Elective 3 hrs | Technical Writing ENGL 155 3 hrs | BIOE Thermo- dynamics BIOE 2100 3 hrs | | Physiology for Bioengineers BIOE 4100 3 hrs | | | | | | | |
| 15 hours | 17 hours | 17 hours | 13 hours | 13 hours | 15 hours | 1 hour | Optional | 1 hour | 13 hours | 1 hour | 13 hours | 12 hours |