

Biomolecular Track (13-14)

| | ✓ | Freshman Year | | ✓ | Sophomore Year |
|---------------|---|--|---------------|---|---|
| Fall | | BIOE 1100 – Intro to BIOE | Fall | | CHEM 3331 & 3221 – Organic Chemistry I & Lab |
| | | BIOL 1361 & 1161 –Intro to Biological Science & Lab | | | *BIOE 2150 – Biosensors I |
| | | CHEM 1331 & 1111 – Fund. of Chemistry & Lab | | | ENGL 1304 – First Year Writing II |
| | | ENGL 1303– First Year Writing I | | | MATH 2433 – Calculus III |
| | | MATH 1431 – Calculus I | | | PHYS 1322 – University Physics II |
| Spring | | *ECE 1331 – Computers & Problem-Solving | Spring | | CHEE 2331 – Chemical Processes |
| | | BIOL 1362 & 1162 – Intro to Biological Science & Lab | | | ECE 2300 & 2100 – Circuit Analysis & Lab |
| | | CHEM 1332 & 1112 – Fund. of Chemistry & Lab | | | MATH 3321 – Engineering Math |
| | | MATH 1432 – Calculus II | | | MECE 3400 – Intro to Mechanics |
| | | PHYS 1321 – University Physics I | | | HIST 1377 – The US to 1877 |
| | | Junior Year | | | Senior Year |
| Fall | | Visual & Performing Arts Core | Fall | | BIOE 4366 – Biomolecular Engineering Fund. |
| | | *BIOE 3340 – Quantitative Physiology | | | BIOE 5323 – Fund. of Tissue Engineering |
| | | HIST 1378 – US History Since 1877 | | | *BIOE 5455 – Bioanalytics |
| | | ENGI 2304 – Technical Communication | | | *BIOE 4393 – Cellular & Biological Transport Phenom. |
| | | INDE 2333 – Engineering Statistics | | | POLS 1337 – US Government |
| Spring | | *BIOE 3440 – Biothermodynamics & Biofluids | Spring | | *BIOE 5389 – Transport Phenom. In Physiological Syst. |
| | | *BIOE 3350 – Biosensors II | | | BIOE Technical Elective |
| | | BIOE Technical Elective | | | *BIOE 4334 – Capstone Design |
| | | BCHS 3304 – Biochemistry I | | | Social Science Core Course |
| | | POLS 1336 – US & TX Constitutions | | | Humanities Core Course |

*Course Substitutions:

| Original Course | Course Substitution | Notes |
|--|--|-------------------------|
| ECE 1331 - Computers & Problem-Solving | BIOE 1331 - Computers & Problem-Solving | |
| BIOE 2150 – Biosensors I | BIOE 4197/4115 – Bioinstrumentation Lab | Fall Senior Year Course |
| BIOE 3340 – Quantitative Physiology | BIOE 3340 & 3140 – Quantitative Physiology & Lab | Beginning F14 |
| BIOE 3440 – Biothermodynamics & Biofluids | BIOE 3341 – Biothermodynamics | Beginning F14 |
| BIOE 3350 – Biosensors II | BIOE 4397/4315 – Bioinstrumentation | Fall Senior Year Course |
| BIOE 4393 – Cellular & Biological Transport Phenomena | BIOE 5397/5316 – Transport Phenomena Biosystems | |
| BIOE 5455 – Bioanalytics | BIOE 4397 & 4197 – Genomics and Proteomics & Lab | Beginning Sp14 |
| BIOE 5389 – Transport Phenom. In Physiological Systems | BIOE 4397/6397 – Advanced Biofluid Dynamics | |
| BIOE 4334 – Capstone Design | BIOE 4336 – Capstone Design II | Beginning Sp 15 |