BME Undergraduate Tracking Document

Student: Biomechanics Sample Rev: May 22, 2023

|  |  |  |
| --- | --- | --- |
| 13/3 Units |  | 2/3 Units |
| **MATH / BASIC SCIENCE / SUPPLEMENTAL SCIENCE** |  | **SOCIAL SCIENCE** |
| Math(2 Units) | Biology(2/3 Units; at least one at 2000+) | Chemistry(2/3 Units) |  | ECON 1110 | ID 2050 |
|  | [courses](https://www.wpi.edu/academics/departments/social-science-policy-studies/courses) & ID 2050 (for global IQP) |
| MA 1021: Calculus I | BB 2550: Cell Biol. | CH 1010: Chem I |  | 6/3 Units |
| MA 1022: Calculus II | BB 3102: Physiol. | CH 1020: Chem II |  | **HUMANITIES REQ’MENT** |
| MA 1023: Calculus III | Physics(2/3 Units) | Suppl. Science(1/3 Units; any level)(BB, PH, CH, MA, CS, FY) |  | Hu | Hu | Hu |
| MA 1024: Calculus IV |  | Hu | Hu | InqSem |
| MA 2051: Diff. Equat. | PH 1110: Mechanics |  | Click for [HU Requirement](https://www.wpi.edu/project-based-learning/project-based-education/humanities-arts-requirement) |
| MA 2610: Statistics I | PH 1120: Electricity | PH 2510: AFM |  |  |
|  |  |  | 3/3 Unit |
| **COMPUTER PROGRAMMING** (1/3 Unit) | BME 1004 |  | **IQP** |
|  |  |  | Away | Away | Away |
| **HUMAN PHYSIOLOGY** (1/3 Unit) | BME 3111 |  | To find an IQP click [link](https://www.wpi.edu/academics/undergraduate/interactive-qualifying-project) |
|  |  |  |  |  |
| 1/3 Unit |  | 1/3 Unit |  | 3/3 Unit |
| **WELLNESS & PHYSICAL EDUCATION** |  | **FREE ELECTIVE** |  | **MQP** |
| 1/12 | 1/12 | 1/12 | 1/12 |  | ES 1310 |  | 1/6 A | 1/3 B | 1/3 C | 1/6 D |

|  |
| --- |
| 14/3 Units |
| **ENGINEERING** |
| **Distribution requirement**(or higher level, or equivalent) | **Course** | **Notes** |
| **Sensors & Instrument\*** | **Signals\*** | **Imaging\*** |
| Biomechanics | BME 2502  | - Consult the Biomedical Engineering Program Chart in the Undergraduate catalog for courses that count towards these requirements. - Students that entered Fall 2020 and after: You can only receive ENGR distribution credit for one of BME2502 or ES2502.You can only receive ENGR distribution credit for one of BME2001 or ES2001.- We do not recommend you take both BME2210 and ECE2010. |
| Biomaterials | BME 2001 |
| Bioinstrumentation | BME 2210 |
| BME Analysis | BME 2211 – Analysis/Prog |
| ENGR 2000+ | ES 2501 |
| ENGR 2000+ | ES 2503 | **Notes** |
| ENGR 2000+ | ES 3001 | ENGR course can be all courses designated “BME” (except BME 1001, BME 1004, BME 3110, BME 532, BME 560, BME 562, BME 564, and BME 593; BME 595 requires departmental approval) and ES, AE, AREN, CE, CHE, ECE, RBE, and ME courses at the 2000-level or above (except RBE 3100 and CE3022). | Extra suggested courses:ES 3004 FluidsME4606 Biofluids1ME 3501 |
| Engr Design  | BME 3300 |
| BME Lab #1 (1/6 unit) | BME 3505 Biomech: techniques lab |
| BME Lab #2 (1/6 unit) | BME 3506  | BME 3605 | BME 3506 |
| BME Lab #3 (1/6 unit) | BME 3503 Skel Biomech lab |
| BME Lab #4 (1/6 unit) | BME 3014 Signal Processing lab |
| ENGR 3000+ | BME 3610  | BME 36101  |
| ENGR 3000+ | ME 3506 |
| BME 4000 depth | BME 4504 Biomechanics  | 4000+ should be in your specialization area |
| BME 4000+ depth | BME 4814 | BME 450X  |

|  |
| --- |
| **SELF AUDIT** (check WorkDay to assure your courses are assigned correctly) |
| * 1/3 unit Computer program (BME1004, CS1004, or equiv.) (y/n)? \_\_\_\_\_\_\_
 |
| * 1/3 unit Human Physiology (BME 3111, BME3112, BB3101, BB3102, or equiv.) (y/n)? \_\_\_\_\_\_\_
* 14/3 units Engineering (y/n)? \_\_\_\_\_\_\_ with 9/3 units BME (y/n)?\_\_\_\_\_\_\_
 |
| * 3/3 units ENG 2000+ level (y/n)?\_\_\_\_\_\_\_ **(the green rows may bin in this category if they are not BME designated courses)**
* 2/3 units ENG 3000+ level (y/n)?\_\_\_\_\_\_\_
 |
| * BME Labs (4 x 1/6 unit) (y/n)?\_\_\_\_\_\_\_
* Living Systems Laboratory requirement (BME3111, BME 3012, BME 3503, or BME 3813) (y/n)?\_\_\_\_\_
* 2/3 units BME 4000+ (y/n)? \_\_\_\_\_\_\_\_ (Note: 1/3 unit **must be at the** BME 4000 level)
* 1/3 unit BME design (BME 3300) (y/n)? \_\_\_\_\_\_
* 1/3 unit Capstone Design in BME (must be checked off by BME program MQP advisor during the MQP eCDR process) (y/n)?\_\_\_\_\_\_\_
* **BME3111 cannot double count** towards an ENGR requirement and the physiology requirement.
* **No more than one 500 or 5000 level course** towards the 14/3 Units of Biomedical Engineering and Engineering requirement
 |