# A Suggested Course Plan for: Biomedical (Mechanical)

## First Year

### Fall Semester
- **BME 101 or GE B**
- **WRIT 150**
- **MATH 125 (GE F)**
- **CHEM 105aL (GE E)**
- **ENGR 102**

### Spring Semester
- **GE A**
- **MATH 126 or MATH 129**
- **CHEM 105bL**
- **OPTIONAL ELECTIVE**

## Second Year

### Fall Semester
- **GE C**
- **AME 201**
- **MATH 226 or MATH 229**
- **PHYS 151L (GE E)**
- **OPTIONAL ELECTIVE**

### Spring Semester
- **BISC 220L (GE D)**
- **BME 210**
- **MATH 245**
- **PHYS 152L**
- **OPTIONAL ELECTIVE**

## Third Year

### Fall Semester
- **EE 202L**
- **MASC 310**
- **BME 423**
- **AME 301**
- **AME 204**

### Spring Semester
- **GE B**
- **CHEM 322aL**
- **AME 309**
- **AME 308 or ITP 308**
- **TECHNICAL ELECTIVE**

## Fourth Year

### Fall Semester
- **BISC 320L**
- **AME 302**
- **BME 403**
- **BME 404**
- **BME 405L**

### Spring Semester
- **WRIT 340**
- **GE C**
- **BME 402**
- **BME 416**
- **TECHNICAL ELECTIVE**

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**Mathematics (16 Units)**
- **MATH 125**: Calculus I
- **MATH 126 or 129**: Calculus II
- **MATH 226 or 229**: Calculus III
- **MATH 243**: Mathematics of Phys. and Engr. I

**Physics (8 Units)**
- **PHYS 151L**: Mechanics and Thermodynamics
- **PHYS 152L**: Electricity and Magnetism

**Chemistry (12 Units)**
- **CHEM 105AL**: General Chemistry
- **CHEM 105BL**: General Chemistry
- **CHEM 322AL**: Organic Chemistry

**Biology (8 Units)**
- **BISC 220L**: Cell Biology & Physiology
- **BISC 320L**: Molecular Biology

**General Education (32 Units)**
- **GE A**: The Arts (1 Course)
- **GE B**: Humanistic Inquiry (2 Courses)
- **GE C**: Social Analysis (2 Courses)
- **GE D**: Life Sciences (1 Course)
- **GE E**: Physical Sciences (1 Course)
- **GE F**: Quantitative Reasoning (1 Course)
- **GE G,H**: Global Perspectives (2 Courses)*
- **GESM**: General Education Seminar (1 Course)*

**Writing (7 Units)**
- **WRIT 150**: Writing and Critical Reasoning
- **WRIT 340**: Advanced Writing

**Engineering (60 Units)**
- **AME 201**: Statics
- **AME 204**: Strength of Materials
- **AME 301**: Dynamics
- **AME 302**: Dynamic Systems
- **AME 308**: Comp. Aid. Analysis for Design or ITP 308: Comp. Aid. Design for Bio-Mechanical Systems
- **AME 309**: Dynamics of Fluids
- **BME 101**: Intro. to Biomedical Engineering
- **BME 210**: Biomed. Comp. Simulation Methods
- **BME 402**: Control & Comm. in Nerv. System
- **BME 403**: Biomechanics
- **BME 405L**: Senior Projects: Meas. and Instrument
- **BME 416**: Development and Regulation of Medical Products
- **BME 423**: Statistical Methods in BME
- **EE 202L**: Linear Circuits
- **ENGR 102**: Engineering Freshman Academy
- **MASC 310**: Materials Behavior and Processing

**Technical Electives**: One course from BME 410, BME 425, BME 430, BME 451, or BME 452 and four additional units of engineering coursework, at least three of which are upper-division.

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**Special Notes**
- Courses with this symbol may be satisfied with AP, IB or A-Level exams. See page 17 for more information.
- GE: Engineering students are encouraged to satisfy GE G and GE H with a course that also satisfies a Core Literacy. GE H may be satisfied by exam. Additionally, your GESM course should be taken in categories A, B, C, or D only. See pp. 18-17 for more information and consult your advisor for detailed assistance.
- Optional Electives: Consult with your academic advisor to explore optional elective courses. These courses are not required.

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