

## FIRST YEAR

### FALL SEMESTER

<b>BME 101 or GE B</b> 4	<b>WRIT 150</b> 4	<b>MATH 125 (GE F)</b> 4	<b>CHEM 105aL (GE E)</b> 4	<b>ENGR 102</b> 2
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### SPRING SEMESTER

<b>BME 101 or GE B</b> 4	<b>GE A</b> 4	<b>MATH 126 or MATH 129</b> MATH 125 4	<b>CHEM 105bL</b> CHEM 105aL 4	<b>ITP 165</b> 2
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## SECOND YEAR

### FALL SEMESTER

<b>BISC 220L (GE D)</b> 4	<b>GE C</b> 4	<b>MATH 226 or MATH 229</b> MATH 126 or MATH 129 4	<b>PHYS 151L (GE E)</b> MATH 125 or 126 or 226 4	<b>OPTIONAL ELECTIVE</b> 2
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### SPRING SEMESTER

<b>EE 109L</b> 4	<b>BME 210 (MATH 245)</b> 4	<b>MATH 245</b> MATH 226 or MATH 229 4	<b>PHYS 152L</b> PHYS 151L, (MATH 226) 4	<b>OPTIONAL ELECTIVE</b> 2
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## THIRD YEAR

### FALL SEMESTER

<b>EE 202L</b> PHYS 152L, (MATH 245) 4	<b>EE 209</b> EE 109L 4	<b>BME 423</b> MATH 245 4	<b>BME 425</b> PHYS 152L 4	<b>WRIT 340</b> WRIT 150 3
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### SPRING SEMESTER

<b>FIRST TRACK COURSE: EE 338 OR 354L</b> 4	<b>GE B</b> 4	<b>MATH 445</b> (MATH 245) 4	<b>BME 416</b> 3	<b>TECHNICAL ELECTIVE</b> 2
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## FOURTH YEAR

### FALL SEMESTER

<b>BISC 320L</b> CHEM 105bL 4	<b>GE C</b> 4	<b>BME 413</b> PHYS 152L 4	<b>BME 403L or 405L</b> BISC 220L, MATH 245, (EE 202L) BME 210, EE 202L 4	<b>OPTIONAL ELECTIVE</b> 2
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### SPRING SEMESTER

<b>CHEM 322aL</b> CHEM 105bL 4	<b>SECOND TRACK COURSE: EE 348L OR EE 454L</b> 4	<b>BME 405L or 403L</b> BME 210, EE 202L, MATH 245, (EE 202L) BISC 220L, MATH 245, (EE 202L) 4	<b>BME 402</b> BISC 220L, BME 410, MATH 245 4	<b>OPTIONAL ELECTIVE</b> 2
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### MATHEMATICS (20 UNITS)

- MATH 125:** Calculus I
- MATH 126 or 129:** Calculus II
- MATH 226 or 229:** Calculus III
- MATH 245:** Mathematics of Phys. and Engr. I
- MATH 445:** Mathematics of Phys. and Engr. II

### 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)

- BME 101:** Intro. to Biomedical Engineering
  - BME 210:** Biomed. Comp. Simulation Methods
  - BME 402:** Control & Comm. in Nerv. System
  - BME 403L:** Physiological Systems
  - BME 405L:** Senior Projects Measurements & Instrumentation
  - BME 413:** Bioengineering Signals & Systems
  - BME 416:** Development and Regulation of Medical Products
  - BME 423:** Statistical Methods in BME
  - BME 425:** Basics of Biomedical Imaging
  - EE 109L:** Introduction to Embedded Systems
  - EE 209:** Foundations of Digital System Design
  - EE 202L:** Linear Circuits
  - ITP 165:** Introduction to C++ Programming
  - DIGITAL TRACK: EE 354L:** Introduction to Digital Circuits
  - & EE 454:** Introductions to System on Chip
  - ANALOG TRACK: EE 338L:** Physical Electronics
  - & EE 348:** Electronic Circuits
  - ENGR 102:** Engineering Freshman Academy
- TECHNICAL ELECTIVES**

### \* 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. 16-17 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.

**TECHNICAL ELECTIVES:** At least 4 units of engineering coursework, including at least two units of upper-division coursework.