

## 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
-----------------------------	----------------------	-----------------------------	-------------------------------	----------------------

### 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>OPTIONAL ELECTIVE</b> 2
-----------------------------	------------------	--	--------------------------------------	-------------------------------

## SECOND YEAR

### FALL SEMESTER

<b>BISC 220L (GE D)</b> 4	<b>GE B</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
------------------------------	------------------	--	--	-------------------------------

### SPRING SEMESTER

<b>GE C</b> 4	<b>BME 210</b> (MATH 245) 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
------------------	-----------------------------------	--	--	-------------------------------

## THIRD YEAR

### FALL SEMESTER

<b>BISC 320L</b> CHEM 105bL 4	<b>CHEM 322aL</b> CHEM 105bL 4	<b>CHE 330</b> (MATH 226) 3	<b>BME 423</b> MATH 245 4	<b>BME 430</b> MATH 245, BME 210 or CHE 205 3
-------------------------------------	--------------------------------------	-----------------------------------	---------------------------------	---

### SPRING SEMESTER

<b>EE 202L</b> PHYS 152L, (MATH 245) 4	<b>BME 410</b> CHEM 322aL 3	<b>CHEM 322bL</b> CHEM 322aL 4	<b>BISC 330L</b> CHEM 322aL 4	<b>CHE 350</b> CHEM 105bL 3
--	-----------------------------------	--------------------------------------	-------------------------------------	-----------------------------------

## FOURTH YEAR

### FALL SEMESTER

<b>MASC 310</b> 3	<b>BME 403L</b> BISC 220L, MATH 245, (EE 202L) 4	<b>BME 405L</b> BME 210, EE 202L 4	<b>WRIT 340</b> WRIT 150 3	<b>BME 413</b> PHYS 152L 4
----------------------	--	--	----------------------------------	----------------------------------

### SPRING SEMESTER

<b>GE C</b> 4	<b>CHE 489</b> CHE 330, BISC 320L 3	<b>BME 402</b> BME 210, MATH 245, and BISC 110 or BISC 220 4	<b>BME 416</b> 3	<b>OPTIONAL ELECTIVE</b> 4
------------------	---	--	---------------------	-------------------------------

### MATHEMATICS (16 UNITS)

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

### PHYSICS (8 UNITS)

**PHYS 151L:** Mechanics and Thermodynamics  
**PHYS 152L:** Electricity and Magnetism

### CHEMISTRY (16 UNITS)

**CHEM 105AL:** General Chemistry  
**CHEM 105BL:** General Chemistry  
**CHEM 322AL:** Organic Chemistry  
**CHEM 322BL:** Organic Chemistry

### BIOLOGY (12 UNITS)

**BISC 220L:** Cell Biology & Physiology  
**BISC 320L:** Molecular Biology  
**BISC 330L:** Biochemistry

### 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 (55 UNITS)

**BME 101:** Intro. to Biomedical Engineering  
**BME 210:** Biomed. Comp. Simulation Meth.  
**BME 402:** Control & Comm. in Nervous Sys.  
**BME 403L:** Physiological Systems  
**BME 405L:** Senior Projects Measurements & Instrumentation  
**BME 410:** Intro. to Biomaterials & Tissue Engr.  
**BME 413:** Bioengineering Signals & Systems  
**BME 416:** Dev. & Reg. of Medical Products  
**BME 423:** Statistical Methods in BME  
**BME 430:** Principles & Applications of Systems Biology  
**CHE 330:** Chemical Engr. Thermodynamics  
**CHE 350:** Intro. to Separation Processes  
**CHE 489:** Biochemical Engineering  
**EE 202L:** Linear Circuits  
**ENGR 102:** Engineering Freshman Academy  
**MASC 310L:** Materials Behavior & Processing

### \* 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.