

## B.S. CHEMISTRY—PROFESSIONAL OPTION SAMPLE CURRICULUM

### → FRESHMAN YEAR

| FALL            |   |   | SPRING        |  |   |
|-----------------|---|---|---------------|--|---|
| CHEM 111/111L   | <i>General Chemistry I and Lab</i>            | 4 | CHEM 112/112L | <i>General Chemistry II and Lab</i>                | 5 |
| MATH 170        | <i>Calculus I</i>                             | 4 | MATH 175      | <i>Calculus II</i>                                 | 4 |
| ENGL 102        | <i>Writing and Rhetoric</i>                   | 3 | COMM 101      | <i>Fundamentals of Oral Communication</i>          | 3 |
| CS 112          | <i>Computational Thinking and Prob. Solv.</i> | 3 | ECON 201      | <i>Princ. of Macroeconomics (Soc. Sci. 1 of 2)</i> | 3 |
| ART 100         | <i>Intro. to Art (Hum. 1 of 2)</i>            | 3 |               |  |   |
| Semester total: |   |   | 17            | Semester total:                                    |   |
|                 |   |   |               | 15   |   |

### → SOPHOMORE YEAR

| FALL            |                                      |   | SPRING        |  |   |
|-----------------|--------------------------------------|---|---------------|--|---|
| ★CHEM 253/254   | <i>Quantitative Analysis and Lab</i> | 5 | ◆CHEM 372/374 | <i>Organic Chemistry II and Lab</i>            | 4 |
| CHEM 277/278    | <i>Organic Chemistry I and Lab</i>   | 4 | PHYS 211/211L | <i>Engineering Physics I and Lab</i>           | 4 |
| MATH 275        | <i>Calculus III</i>                  | 3 | CHEM 491      | <i>Research</i>                                | 2 |
| STAT 251        | <i>Statistical Methods (Elec.)</i>   | 3 | ANTH 261      | <i>Language and Culture (Soc. Sci. 2 of 2)</i> | 3 |
|                 |                                      |   | MATH 310      | <i>Ordinary Differential Equations (Elec.)</i> | 3 |
| Semester total: |                                      |   | 15            | Semester total:                                |   |
|                 |                                      |   |               | 16   |   |

### → JUNIOR YEAR

| FALL            |                                       |   | SPRING        |  |   |
|-----------------|---------------------------------------|---|---------------|--|---|
| ★CHEM 305/307   | <i>Physical Chemistry I and Lab</i>   | 4 | ◆CHEM 306/308 | <i>Physical Chemistry II and Lab</i>             | 4 |
| PHYS 212/212L   | <i>Engineering Physics II and Lab</i> | 4 | FLEN 307      | <i>Institutions of the European Union (Int.)</i> | 3 |
| ★BIOL 380       | <i>Biochemistry I</i>                 | 4 | PHIL 351      | <i>Philosophy of Science (Hum. 2 of 2)</i>       | 3 |
| ENGL 202        | <i>Technical Writing I (Elec.)</i>    | 3 | CHEM 491      | <i>Research (Elec.)</i>                          | 2 |
|                 |                                       |   | ◆PHYS 213     | <i>Engineering Physics III (Elec.)</i>           | 3 |
| Semester total: |                                       |   | 15            | Semester total:                                  |   |
|                 |                                       |   |               | 15   |   |

### → SENIOR YEAR

| FALL            |  |   | SPRING        |  |   |
|-----------------|--|---|---------------|--|---|
| ★CHEM 463       | <i>Inorganic Chemistry I</i>                     | 3 | ◆CHEM 464/465 | <i>Inorganic Chemistry II and Lab</i>        | 4 |
| CHEM 409        | <i>Proseminar</i>                                | 1 | ◆CHEM 454     | <i>Instrumental Analysis</i>                 | 4 |
| ★CHEM 473       | <i>Interm. Organic Chem. (Adv. Chem. 1 of 2)</i> | 3 | POLS 333      | <i>American Political Culture (Am. Div.)</i> | 3 |
| ★CHEM 495       | <i>Statistical Thermo. (Adv. Chem. 2 of 2)</i>   | 3 | ◆CHEM 418     | <i>Environmental Chemistry (Elec.)</i>       | 3 |
| CHEM 491        | <i>Research (Elec.)</i>                          | 3 |               |  |   |
| Semester total: |  |   | 13            | Semester total:                              |   |
|                 |  |   |               | 14   |   |

### NOTES

- This sample curriculum totals 120 credits (the required number to graduate).
- Courses listed in red are required.
- Courses listed in blue are required but have alternatives to choose from (e.g., ART 101 is one of any number of courses that will count toward the fulfillment of the "Humanistic and Artistic Ways of Knowing" requirement).
- Courses labeled with a star (★) are only offered in the fall.
- Courses labeled with a diamond (◆) are only offered in the spring.
- Courses in black are "free" electives taken only for their credit contribution to the 120 required to graduate. As such, they can be any course of your choosing (i.e., any discipline, any level).