### CHEMISTRY B.I.



#### **ACADEMIC ADVISING**

Partnering with students to successfully navigate college

**Location:** Main Hall 208 **Phone:** 719.255.3260 **Website:** www.uccs.edu/ad

#### **Connect With Your Advisor**

**Current UCCS Students** 

Appointments: <a href="www.uccs.edu/advising/current-students">www.uccs.edu/advising/current-students</a>
 Drop In Advising: Most Wednesdays, 1:00pm - 4:00pm
 Prospective Students: <a href="www.uccs.edu/admissions/contact">www.uccs.edu/admissions/contact</a>

#### **GENERAL ACADEMIC INFORMATION**

#### **Minimum Graduation Requirements**

- 1. 120 credit hours
- 2. 45 upper-division credit hours (3000-4999 level)
- 3. 2.0 CU cumulative GPA
- Residency: Last 30 credit hours of degree must be completed while registered in the College of Letters, Arts, and Sciences at UCCS

#### **Student Responsibilities**

Students are required to know and follow:

- All academic policies set forth by the University, College, and academic department in the UCCS Catalog: <u>catalog.uccs.edu</u>
- All course prerequisites designated by the University. Failure to
  meet course prerequisites may result in an administrative drop
  of the course from a student's schedule. See degree audit for
  course prerequisites within the academic major.

#### **MAJOR INFORMATION**

The Bachelor of Innovation™ (BI) in Chemistry is a cross-disciplinary degree that combines chemistry, engineering, and business. A collaboration between the Department of Chemistry in the College of Letters, Arts, and Sciences, the College of Engineering, and the College of Business, this cutting edge curriculum combines academic studies, technical skills, and professional training to prepare students for a variety of careers in the broad spectrum of the chemical industry. The degree is structured so that students gain a fundamental basis of knowledge and skills in chemistry along with preparation in business law, technology, innovation, and entrepreneurship.

|                                    | N                    | lajor Requirements  |                  |
|------------------------------------|----------------------|---|------------------|
| Chemistry Major                    | Course/Area          | Course Title  | Credit Hours     |
| (36 hours) CHEM 1401               |                      | General Chemistry I and Lab I   | 5                |
|                                    | CHEM 1511/1513       | General Chemistry II for Majors and Lab II  | 5                |
| Requires a minimum of 36 credit    | CHEM 3201/3203       | Organic Chemistry for Majors I and Lab I  | 4                |
| hours of CHEM course work          | CHEM 3211/3213       | Organic Chemistry for Majors II and Lab II  | 4                |
| Reguires a minimum of 16 credit    | CHEM 4001/4002       | Analytical Chemistry and Lab  | 4                |
| hours of upper-division (3000-4999 | CHEM 4211            | Biochemistry  | 3                |
| level) CHEM course work.           | CHEM 4701            | Biophysical Chemistry   | 3                |
|                                    | Electives            | Complete 6 hours of Upper Division (3000+ level) Chemistry Electives.               | 6                |
| Must maintain a minimum 2.0 major  |                      | Auxiliary Requirements  |                  |
| GPA (all CHEM courses) to graduate | BIOL 1350            | General Biology II: Introduction to the Cell  | 3                |
|                                    | MATH 1330            | Calculus for Life Science   | 4                |
|                                    | PES 1110/1160        | General Physics I and Lab   | 5                |
|                                    |                      |   |                  |
| BI Innovation Core                 | BLAW 2010            | Business and Intellectual Property Law  | 3                |
| (24 hours)                         | ENTP 1000            | Introduction to Entrepreneurship  | 3                |
|                                    | ENTP 4500            | Entrepreneurship and Strategy   | 3                |
|                                    | INOV 1010            | The Innovation Process  | 3                |
|                                    | INOV 2010            | Innovation Team: Analyze and Report   | 3                |
|                                    | INOV 2100            | Technical Writing, Proposals, and Presentations                                     | 3                |
|                                    | INOV 3010            | Innovation Team: Research and Execute   | 3                |
|                                    | INOV 4010            | Innovation Team: Design and Lead  | 3                |
|                                    |                      |   |                  |
| BI Cross Discipline Core           | •                    | e Cross Discipline Cores listed below. Each Cross Discipline Core consists of 15 cr | redit hours. See |
| (15 hours)                         | the website for spec | ific courses ( <u>innovation.uccs.edu</u> )   |                  |
|                                    | Engineering Techno   | logy  |                  |
|                                    | Globalization        | поду  |                  |
| <u>'</u>                           | 3.330112411011       |   |                  |

# **CHEMISTRY B.I.**



| G   | General Education and Elective F                          | Requirements  |
|---|---|---|
| Composition   | 1. ENGL 1310  |   |
| (3 hours)   | 2. INOV 2100 3. PORT 3000 (0 Credits) – Writing Portfolio |   |
| Reasoning Skills  | 1. MATH 1330  |   |
| (4 hours)   | 2. CHEM 4001  |   |
| Area Requirements   | Humanities – 9 credit hours of which 3 cred               | dits must be HUM 3990.  |
| (27 hours)  | 2. Social Sciences – 9 credit hours                       |   |
| <ul> <li>Maximum 2 courses from any one</li> </ul>        | 3. Natural Sciences – BIOL 1350, PES 1110, PE             | ES 1160   |
| discipline may be applied to the area                     |   |   |
| requirements  | NOTE: Cannot select courses from primary                  | major courses for area requirements.                            |
| <ul> <li>Courses may not be taken pass/fail</li> </ul>    |   |   |
| Oral Communication, Cultural Diversity,                   | One course from each list (see degree audit). All cours   | es that fulfill these requirements may also count towards other |
| and Global Awareness Requirements                         | general education or major requirements.                  |   |
| Compass Curriculum  | Component   | Course  |
| (3 hours)   | Gateway   | GPS 1010  |
| <ul> <li>Explore and Navigate courses must be</li> </ul>  | <b>Explore</b> – Arts, Humanities and Cultures            | INOV 1010 (included in Innovation requirements)                 |
| outside major and area requirements                       | Explore – Society, Behavior and Health                    | ENTP 1000 (included in Innovation requirements)                 |
| <ul> <li>Writing Intensive, Inclusiveness, and</li> </ul> | Explore – Physical and Natural World                      | MATH 1330 (included in Auxiliary requirements)                  |
|   | Navigate  | INOV 3010 (included in Innovation requirements)                 |
| Sustainability courses can count                          | Summit  | ENTP 4500 (included in Innovation requirements)                 |
| towards other requirements within                         | Writing Intensive Courses (WIC)                           | INOV 2010 (included in Innovation requirements)                 |
| degree  | Two courses with one upper-division (3000+ level)         | 2. INOV 3010 (included in Innovation requirements)              |
|   | Inclusiveness   | INOV 1010 (included in Innovation requirements)                 |
|   | Sustainability  | ENTP 1000 (included in Innovation requirements)                 |
| General Electives   | Complete additional courses to meet total and upper-      | division requirements for your degree program.                  |
| (9 hours)   |   |   |

## **Four-Year Degree Plan**

| Four-Tear Degree Flair |     |  |           |        |  |       |  |  |
|------------------------|-----|--|-----------|--------|--|-------|--|--|
|                        | Ple | ease note that this is an example degree program and your progra | m may var | y. Stu | dents are responsible for completing all course prerequisites. |       |  |  |
|                        | 1   | FALL   | Hours     | J      | SPRING   | Hours |  |  |
| ٦e                     |     | CHEM 1401/1402   | 5         |        | CHEM 1511/1513   | 5     |  |  |
| ō                      |     | ENTP 1000  | 3         |        | INOV 1010  | 3     |  |  |
| ē                      |     | GPS 1010   | 3         |        | PES 1110/1160  | 5     |  |  |
| ัด                     |     | MATH 1220  | 1         |        | ENGL 1210  | 2     |  |  |

| ۳ ـ | CHEM 1401/1402 | 5  | CHEM 1511/1513 | 5  |
|-----|----------------|----|----------------|----|
| ō   | ENTP 1000      | 3  | INOV 1010      | 3  |
| ear | GPS 1010       | 3  | PES 1110/1160  | 5  |
| ₹   | MATH 1330      | 4  | ENGL 1310      | 3  |
|     | TOTAL          | 15 | TOTAL          | 16 |
|     |                |    |                |    |

|    | 1 | FALL                                      | Hours | J | SPRING                                    | Hours |
|----|---|---|-------|---|---|-------|
| 9  |   | CHEM 3201/3203                            | 5     |   | CHEM 3211/3213                            | 5     |
| ≥  |   | BIOL 1350                                 | 3     |   | INOV 2100                                 | 3     |
| ā  |   | BLAW 2010                                 | 3     |   | INOV 2010 or Cross-Discipline Core Course | 3     |
| Υe |   | INOV 2010 or Cross-Discipline Core Course | 3     |   | General Elective                          | 3     |
|    |   | TOTAL                                     | 14    |   | TOTAL                                     | 14    |

|      | 1 | FALL                                      | Hours | J | SPRING                                      | Hours |
|------|---|---|-------|---|---|-------|
| e e  |   | CHEM 4001/4002                            | 4     |   | CHEM 4211                                   | 3     |
| lre- |   | INOV 3010 or Cross-Discipline Core Course | 3     |   | INOV 3010 or Cross-Discipline Core Course   | 3     |
| ĮĘ   |   | HUM 3990                                  | 3     |   | Humanities Elective                         | 3     |
| Year |   | Social Science Elective                   | 3     |   | Cross-Discipline Core Course                | 3     |
|      |   | General Elective                          | 3     |   | Upper-Division (UD) Social Science Elective | 3     |
|      |   | TOTAL                                     | 16    |   | TOTAL                                       | 15    |

|          | 1 | FALL                                      | Hours | 1 | SPRING                                    | Hours |
|----------|---|---|-------|---|---|-------|
| _        |   | CHEM 4701                                 | 3     |   | UD CHEM Elective                          | 3     |
| l o      |   | INOV 4010 or Cross-Discipline Core Course | 3     |   | ENTP 4500                                 | 3     |
| <u> </u> |   | Cross-Discipline Core Course              | 3     |   | INOV 4010 or Cross-Discipline Core Course | 3     |
| ea       |   | Social Science Elective                   | 3     |   | UD Humanities Elective                    | 3     |
| >        |   | UD CHEM Elective                          | 3     |   | General Elective                          | 3     |
|          |   | TOTAL                                     | 15    |   | TOTAL                                     | 15    |