uinnesota state university Chemistry BS Roadmap
Program Total Credits
Catalog Bachelor of Science: Chemistry

The plan below is one of several possible ways for you to complete this degree.
Your individualized plan may look different if you have already fulfilled some requirements.
Your Financial Aid Award may require additional term credits for full-time funding.
You must complete all university and program requirements successfully to complete this degree (GPA, 120 credits, LASC, WI, residency)

| Curriculum |  | Course |  | Course Title | Credits | Take When | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1st Year |  | Notes |  |  |  |  | 105.00 |
|  |  |  |  |  |  |  |  |
| Core Requirement: | LASC 3 |  | CHEM 150 | General Chemistry I Lecture | 3.00 | 1st Fall | 15.00 |
| Core Requirement: | LASC 3 |  | 1 CHEM 150L | General Chemistry I Lab | 1.00 | 1st Fall |  |
| Graduation Requirement: | First-Year Experience Course |  | FYE 101 | First Year Experience | 1.00 | 1st Fall |  |
|  | LASC 2 | 1 |  |  | 3.00 | 1st Fall |  |
|  | LASC Elective | 8 |  |  | 3.00 | 1st Fall |  |
| Related Requirement: | LASC 4 |  | 2 MATH 261 | Calculus I | 4.00 | 1st Fall |  |
| Core Requirement: | LASC 3 |  | CHEM 210 | General Chemistry II Lecture | 3.00 | 1st Spring | 15.00 |
| Core Requirement: | LASC 3 |  | 1 CHEM 210L | General Chemistry II Lab | 1.00 | 1st Spring |  |
| Core Requirement: |  |  | CHEM 297 | Introduction to Research | 1.00 | 1st Spring |  |
| Related Requirement: | LASC 4 |  | MATH 262 | Calculus II | 4.00 | 1st Spring |  |
|  | LASC 1A |  | ENGL 101 | English Composition | 3.00 | 1st Spring |  |
|  | LASC/WI Elective | 8 | 8 |  | 3.00 | 1st Spring |  |

2nd Year

| Core Requirement: Core Requirement: Related Requirement: |  | CHEM 350 CHEM 355 | Organic Chemistry I Lecture Organic Chemistry I Lab | 3.00 1.00 | 2nd Fall 2nd Fall | 14.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LASC 3 | PHYS 200 | Physics I with Calculus and Lab | 4.00 | 2nd Fall |  |
|  | LASC Elective | 8 |  | 3.00 | 2nd Fall |  |
|  | LASC/WI Elective | 8 |  | 3.00 | 2nd Fall |  |
| Core Requirement: Core Requirement: Core Requirement: Related Requirement: |  | CHEM 360 | Organic Chemistry II Lecture | 3.00 | 2nd Spring | 15.00 |
|  |  | CHEM 365 | Organic Chemistry II Lab | 1.00 | 2nd Spring |  |
|  |  | CHEM 380/380 Analytical Chemistry I with Lab |  | 4.00 | 2nd Spring |  |
|  | LASC 3 | PHYS 201 | Physics II with Calculus and Lab | 4.00 | 2nd Spring 2nd Spring |  |
|  | LASC 1A | COMM 100 | Speech Communication | 3.00 |  |  |
| 3rd Year |  |  |  |  |  |  |
| Core Requirement: Core Requirement: Core Requirement: Core Requirement: |  | CHEM 300 | Inorganic Chemistry I | 3.00 | 3rd Fall | 16.00 |
|  |  | CHEM 400 | Biochemistry I | 3.00 | 3rd Fall |  |
|  |  | CHEM 405 | Biochemistry I lab | 1.00 | 3rd Fall |  |
|  |  | 6 CHEM 480 | Analytical Chemistry II | 3.00 | 3rd Fall |  |
|  | LASC Elective |  |  | 3.00 | 3rd Fall |  |
|  | LASC Elective |  |  | 3.00 | 3rd Fall |  |
| Core Requirement: |  | 7 CHEM 420 | Inorganic Chemistry II | 3.00 | 3rd Spring | 16.00 |
| Core Requirement: Upper level electives: |  | CHEM 397 | Undergraduate Research | 1.00 | 3rd Spring |  |
|  |  | 3.00 |  | 3rd Spring |  |  |
| Writing Intensive: | 200-level or higher |  |  | 3.00 | 3rd Spring |  |
| Electives: |  |  |  | 4 | 3.00 |  | 3rd Spring |
| Electives: |  | 4 |  | 3.00 | 3rd Spring |  |

4th $Y$

| Core Requirement: | WI for major | 6 CHEM 375 | Team-Based Research | 4.00 | 4th Fall | 14.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Core Requirement: |  | 3 CHEM 460 | Physical Chemistry: Quantum Chemistry \& Kir | 3.00 | 4th Fall |  |
| Core Requirement: |  | CHEM 397 | Undergraduate Research | 1.00 | 4th Fall |  |
| Electives: |  | 4 |  | 3.00 | 4th Fall |  |
| Electives: |  | 4 |  | 3.00 | 4th Fall |  |
| Core Requirement: |  | 7 CHEM 450 | Physical Chemistry: Thermodynamics | 3.00 | 4th Spring | 15.00 |
| Core Requirement: |  | CHEM 497 | Senior Thesis | 1.00 | 4th Spring |  |
| Core Requirement: |  | 5 CHEM 465 | Physical Chemistry Lab | 1.00 | 4th Spring |  |
| Electives: |  | 4 |  | 10.00 | 4th Spring |  |

${ }^{1}$ CHEM 275 can be taken in place of either general chemistry lab and counts as a LASC 2. Students in LC will either take Biol 100 or Chem 275
${ }^{2}$ ACT math score is needed to inform whether a student should begin directly in calculus or a lower math class.
${ }^{3}$ CHEM 460 is an even, fall course. It will need to be taken either fall of year 3 or fall of year 4, depending on the year.
${ }^{4}$ In considering electives, keep in mind that all of the Liberal Arts and Science Curriculum requirements must be fulfilled.
${ }^{5}$ CHEM 465 is an odd spring course. It will need to be taken either spring of year 3 or spring of year 4, depending on the year.
${ }^{6}$ CHEM 480 is a odd fall course. It will need to be taken either fall of year 3 or fall of year 4, depending on the year. Flip with CHEM 375 depending on year.
${ }^{7}$ CHEM 420 is a odd spring course. It will need to be taken either fall of year 3 or fall of year 4, depending on the year. Consider flipping with CHEM 450 depending on year.
${ }^{8}$ Classes like HIST 374/379 (5/10/WI), HIST 105 (5/8), POL 160 (5/8), POL 120 (5/9), ENGL 407 ( $6 / 10$ ), PHIL 215/311/312/318 (6/9/WI?), PHIL 102/120/235 (6/7), MUS 240

