Informatics, BS

Academic Plans

Four-Year Graduation Plan

The Four-Year Graduation Plan is not available to BS students majoring in informatics. Students work with their advisors on individual graduation plans.

Sample Plans of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

Informatics, BS

- Bioinformatics Track [p. 1]
- Medical Informatics Track [p. 2]

Bioinformatics Track

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Academic Career</td>
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<tr>
<td>GE CLAS Core: Sustainability</td>
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<td>Any Semester</td>
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<tr>
<td>First Year</td>
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<tr>
<td>Fall</td>
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<tr>
<td>CS:1110</td>
<td>Introduction to Computer Science</td>
<td>3</td>
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<td>CHEM:1110</td>
<td>Principles of Chemistry I</td>
<td>4</td>
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<tr>
<td>RHET:1030</td>
<td>Rhetoric or The Interpretation of Literature</td>
<td>3 - 4</td>
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<tr>
<td>GE CLAS Core: Diversity and Inclusion</td>
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<td>3</td>
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<tr>
<td>CSI:1600</td>
<td>Success at Iowa</td>
<td>2</td>
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<td>15-16</td>
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<td>Spring</td>
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<tr>
<td>CS:2110</td>
<td>Programming for Informatics</td>
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<tr>
<td>CHEM:1120</td>
<td>Principles of Chemistry II</td>
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<td>ENGL:1200</td>
<td>The Interpretation of Literature or Rhetoric</td>
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<td>Elective course d</td>
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<td>Second Year</td>
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<td>Fall</td>
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<tr>
<td>BIOL:1411</td>
<td>Foundations of Biology</td>
<td>4</td>
</tr>
<tr>
<td>Major: statistics requirement e</td>
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<tr>
<td>GE CLAS Core: Social Sciences  c</td>
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<tr>
<td>GE CLAS Core: World Languages First Level  f</td>
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<td>4 - 5</td>
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<tr>
<td>Proficiency or elective course</td>
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<td>Spring</td>
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<td>CS:2420</td>
<td>Analyzing Data for Informatics</td>
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<td>CS:2520</td>
<td>Human-Computer Interaction for Informatics</td>
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<tr>
<td>BIOL:1412</td>
<td>Diversity of Form and Function</td>
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<tr>
<td>GE CLAS Core: International and Global Issues c</td>
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</table>

GE CLAS Core: World Languages Second Level
Proficiency or elective course e

Hours  17-18

Third Year

Fall

CS:2620      Server-Side Development for Informatics | 3     |
GE CLAS Core: Historical Perspectives c | 3     |
GE CLAS Core: World Languages Third Level  f
Proficiency or elective courses | 4 - 5 |
Elective course d |                          | 3     |
Elective course d |                          | 2     |

Hours  15-16

Spring

BIOL:2512     Fundamental Genetics        | 4     |
Major: advanced informatics elective g | 3     |
GE CLAS Core: Literary, Visual, and Performing Arts c | 3     |
GE CLAS Core: World Languages Fourth Level  f
Proficiency or elective course | 4 - 5 |
Elective course d |                          | 2     |

Hours  16-17

Fourth Year

Fall

BIOL:3172     Evolution                      | 4     |
Major: advanced informatics elective g | 3     |
Major: advanced biology elective h | 3     |
Major: advanced biology elective h | 3     |
Elective course d |                          | 3     |
Elective course d |                          | 3     |

Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall) i

Hours  15

Total Hours  122-127

a Sustainability must be completed by choosing a course that has been approved for Sustainability AND for one of these General Education areas: Natural Sciences; Quantitative and Formal Reasoning; Social Sciences; Historical Perspectives; International and Global Issues; Literary, Visual, and Performing Arts; or Values and Culture.

b Enrollment in chemistry courses requires completion of a placement exam.

c GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.

d Students may use elective courses to earn credit towards the total s.h. required for graduation or to complete a double major, minors, or certificates.

e Choose from STAT:2010 or STAT:3510.

f Students who have completed four years of a single language in high school have satisfied the GE CLAS Core World Languages requirement. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course.
Medical Informatics Track

Course Title Hours

GE CLAS Core: World Languages Third Level Proficiency or elective course

GE CLAS Core: Values and Culture

GE CLAS Core: World Languages Fourth Level Proficiency or elective course

GE CLAS Core: Diversity and Inclusion

GE CLAS Core: World Languages First Level Proficiency or elective course

GE CLAS Core: International and Global Issues

GE CLAS Core: Sustainability

GE CLAS Core: Sustainability must be completed by choosing a course that has been approved for Sustainability AND for one of these General Education areas: Natural Sciences; Quantitative and Formal Reasoning; Social Sciences; Historical Perspectives; International and Global Issues; Literary, Visual, and Performing Arts; or Values and Culture.

Enrollment in chemistry courses requires completion of a placement exam, unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.

Students may use elective courses to earn credit towards the total s.h. required for graduation or to complete a double major, minors, or certificates.

Students must choose from BIOL:2673, BIOL:3212, or BIOL:3314.

Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor or Graduation Services.

First Year

Fall

CS:1110 Introduction to Computer Science 3
CHEM:1110 Principles of Chemistry I 4
ENGL:1200 The Interpretation of Literature 3 - 4
GE CLAS Core: Diversity and Inclusion 3
CIS:1600 Success at Iowa 2

Spring

CS:2110 Programming for Informatics 4
CHEM:1120 Principles of Chemistry II 4
ENGL:1200 The Interpretation of Literature 3 - 4
RHET:1030 or Rhetoric 3
Elective course 3

Second Year

Fall

BIOL:1411 Foundations of Biology 4
Major: statistics requirement 3
GE CLAS Core: Social Sciences 3
GE CLAS Core: World Languages First Level Proficiency or elective course
Elective course 2

Spring

CS:2420 Analyzing Data for Informatics 3
CS:2520 Human-Computer Interaction for Informatics 3
BIOL:1412 Diversity of Form and Function 4
GE CLAS Core: World Languages Second Level Proficiency or elective course
Elective course 2

Third Year

Fall

CS:2620 Server-Side Development for Informatics 3
GE CLAS Core: Historical Perspectives 3
GE CLAS Core: International and Global Issues 3

Fourth Year

Fall

CHEM:2220 Organic Chemistry II 3
Major: advanced informatics elective 3
GE CLAS Core: Values and Culture 3
Elective course 3
Elective course 3

Spring

CS:3910 Informatics Project 3
Major: advanced science elective 3
Major: advanced science elective 3
Elective course 3
Elective course 3
Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall)

Total Hours 123-129
timing, contact your academic advisor or Graduation Services.