

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

Course	Title	Hours
Academic Career		
Any Semester		
GE CLAS Core: Sustainability ^a		
Hours		0
First Year		
Fall		
CS:1110	Introduction to Computer Science	3
CHEM:1110	Principles of Chemistry I ^b	4
ENGL:1200 or RHET:1030	The Interpretation of Literature or Rhetoric	3 - 4
GE CLAS Core: Diversity and Inclusion ^c		3
CSI:1600	Success at Iowa	2
Hours		15-16
Spring		
CS:2110	Programming for Informatics	4
CHEM:1120	Principles of Chemistry II	4
RHET:1030 or ENGL:1200	Rhetoric or The Interpretation of Literature	3
Elective course ^d		3
Hours		14
Second Year		
Fall		
BIOL:1411	Foundations of Biology	4
Major: statistics requirement ^e		3
GE CLAS Core: Social Sciences ^c		3
GE CLAS Core: World Languages First Level Proficiency or elective course ^f		4 - 5
Elective course ^d		1
Hours		15-16
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: International and Global Issues ^c		3

GE CLAS Core: World Languages Second Level Proficiency or elective course ^f 4 - 5

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 Proficiency or elective courses ^f 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 Proficiency or elective course ^f 4 - 5

Elective course ^d 2

Hours 16-17

Fourth Year

Fall

BIOL:3172 Evolution 4

Major: advanced informatics elective ^g 3

GE CLAS Core: Values and Culture ^c 3

Elective course ^d 3

Elective course ^d 2

Hours 15

Spring

CS:3910 Informatics Project 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 levels of a single language or two levels of two different languages in high school or college have satisfied the GE CLAS Core World Languages requirement. Students who have completed three levels of a single language may complete a fourth-

level course in the same language or may choose an approved World Language and Cultural Exploration course. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course. Contact your academic advisor or CLAS Undergraduate Programs Office with questions concerning the World Languages requirement.

g BAIS:4220, or a computer science course (prefix CS) numbered 3000-4999, including CS:3990 for 3 s.h., but excluding CS:3910 and CS:4510.

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

i 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 Degree Services.

Medical Informatics Track

Course	Title	Hours
Academic Career		
Any Semester		
GE CLAS Core: Sustainability ^a		
Hours		0
First Year		
Fall		
CS:1110	Introduction to Computer Science	3
CHEM:1110	Principles of Chemistry I ^b	4
RHET:1030 or ENGL:1200	Rhetoric or The Interpretation of Literature	3 - 4
GE CLAS Core: Diversity and Inclusion ^c		3
CSI:1600	Success at Iowa	2
Hours		15-16
Spring		
CS:2110	Programming for Informatics	4
CHEM:1120	Principles of Chemistry II	4
RHET:1030 or ENGL:1200	Rhetoric or The Interpretation of Literature	3 - 4
Elective course ^d		3
Hours		14-15
Second Year		
Fall		
BIOL:1411	Foundations of Biology	4
Major: statistics requirement ^e		3
GE CLAS Core: Social Sciences ^c		3
GE CLAS Core: World Languages First Level Proficiency or elective course ^f		4 - 5
Elective course ^d		2
Hours		16-17
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 ^f		4 - 5
Elective course ^d		2
Hours		16-17

Third Year

Fall

CS:2620	Server-Side Development for Informatics	3
GE CLAS Core: Historical Perspectives ^c		3
GE CLAS Core: International and Global Issues ^c		3
GE CLAS Core: World Languages Third Level Proficiency or elective course ^f		4 - 5
Elective course ^d		3
Hours		16-17

Spring

CHEM:2210	Organic Chemistry I	3
Major: advanced informatics elective ^g		3
GE CLAS Core: Literary, Visual, and Performing Arts ^c		3
GE CLAS Core: World Languages Fourth Level Proficiency or elective course ^f		4 - 5
Elective course ^d		3
Hours		16-17

Fourth Year

Fall

CHEM:2220	Organic Chemistry II	3
Major: advanced informatics elective ^g		3
GE CLAS Core: Values and Culture ^c		3
Elective course ^d		3
Elective course ^d		3
Hours		15

Spring

CS:3910	Informatics Project	3
Major: advanced science elective ^h		3
Major: advanced science 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

123-129

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exam, unless enrolling in a first-semester-level course. Contact your academic advisor or CLAS Undergraduate Programs Office with questions concerning the World Languages requirement.

- g BAIS:4220, or a computer science course (prefix CS) numbered 3000-4999, including CS:3990 for 3 s.h., but excluding CS:3910 and CS:4510.
- h Choose from BIOL:2512, BIOL:3172, CHEM:2410, HHP:1100 or HMP:4000.
- i 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 Degree Services.