

Earth and Environmental Sciences, BS

Academic 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.

Earth and Environmental Sciences, BS

- Earth and Planetary Science Track [p. 1]
- Environmental Bioscience Track [p. 2]
- Environmental Geoscience Track [p. 3]

Earth and Planetary Science Track

Course	Title	Hours
Academic Career		
Any Semester		
GE CLAS Core: Sustainability ^a		
	Hours	0
First Year		
Fall		
CHEM:1110	Principles of Chemistry I ^b	4
SEES:1050	Introduction to Geology ^b	4
SEES:1085	Fundamentals of Environmental Science ^b	4
RHET:1030 or ENGL:1200	Rhetoric: Writing and Communication or The Interpretation of Literature	3 - 4
CSI:1600	Success at Iowa	1
	Hours	16-17
Spring		
CHEM:1120	Principles of Chemistry II ^b	4
SEES:1040	Evolution and the History of Life ^b	4
SEES:2200	Historical Geology	4
RHET:1030 or ENGL:1200	Rhetoric: Writing and Communication or The Interpretation of Literature	3 - 4
	Hours	15-16
Second Year		
Fall		
MATH:1850	Calculus I ^b	4
SEES:2010	Interdisciplinary Environmental Seminar	1
SEES:2410	Mineralogy	4
GE CLAS Core: Social Sciences ^c		3
GE CLAS Core: World Languages First Level Proficiency or elective course ^d		4 - 5
	Hours	16-17

Spring

SEES:1070	Contemporary Environmental Issues ^b	3
SEES:3510	Igneous and Metamorphic Petrology	4
Major: earth and planetary science track elective course (prefix SEES, numbered 3000 or above)		3 - 4
GE CLAS Core: World Languages Second Level Proficiency or elective course ^d		4 - 5
Elective course ^e		1
	Hours	15-17

Summer

SEES:2831	Geologic Field Methods	3
	Hours	3

Third Year

Fall

PHYS:1611 or PHYS:1511	Introductory Physics I ^b or College Physics I	4
SEES:3330	Sedimentary Geology	4
GE CLAS Core: Understanding Cultural Perspectives ^c		3
GE CLAS Core: World Languages Third Level Proficiency or elective course ^d		4 - 5
	Hours	15-16

Spring

SEES:2050	Foundations of GIS	4
SEES:3840	Structural Geology	4
GE CLAS Core: Historical Perspectives ^c		3
GE CLAS Core: World Languages Fourth Level Proficiency or elective course ^c		4 - 5
	Hours	15-16

Summer

SEES:4832	Geologic Field Analysis	3
	Hours	3

Fourth Year

Fall

STAT:2010 or STAT:3510 or CS:1110	Statistical Methods and Computing or Biostatistics or Introduction to Computer Science	3
Major: "one of these" earth and planetary track course ^f		3 - 4
Major: earth and planetary science track elective course (prefix SEES, numbered 3000 or above) ^g		3 - 4
GE CLAS Core: Literary, Visual, and Performing Arts ^c		3
Elective course ^e		3
	Hours	15-17

Spring

Major: allied math or science course ^h		3 - 4
Major: earth and planetary science track elective course (prefix SEES, numbered 3000 or above) ^g		3 - 4
GE CLAS Core: Values and Society ^c		3
Elective course ^e		3
Elective course ^e		2

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

Hours	14-16
Total Hours	127-138

- 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 or Formal Reasoning; Social Sciences; Historical Perspectives; International and Global Issues; Literary, Visual, and Performing Arts; or Values and Society.
- b Fulfills a major requirement and may fulfill a GE requirement.
- 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 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.
- e 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.
- f Select one course from SEES: 3210, SEES:3608, SEES:4490, SEES:4630, SEES:4790, SEES:4800
- g Students must complete at least 9 s.h. in elective courses from the School of Earth, Environmental, and Sustainability Studies (prefix SEES) numbered 3000 or above. See the General Catalog for list of approved courses.
- h See the General Catalog for additional math or supporting science course options.
- i Please see Academic Calendar, on 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.

Environmental Bioscience Track

Course	Title	Hours
Academic Career		
Any Semester		
GE CLAS Core: Sustainability ^a		
Hours		0
First Year		
Fall		
CHEM:1110	Principles of Chemistry I ^b	4
SEES:1085	Fundamentals of Environmental Science ^b	4
SEES:1070	Contemporary Environmental Issues ^b	3
ENGL:1200 or RHET:1030	The Interpretation of Literature or Rhetoric: Writing and Communication	3 - 4

CSI:1600	Success at Iowa	1
Hours		15-16

Spring

CHEM:1120	Principles of Chemistry II ^b	4
MATH:1850	Calculus I ^b	4
ENGL:1200 or RHET:1030	The Interpretation of Literature or Rhetoric: Writing and Communication	3 - 4
GE CLAS Core: Understanding Cultural Perspectives ^c		3
Elective course ^d		2
Hours		16-17

Second Year

Fall

BIOL:1411	Foundations of Biology ^b	4
SEES:2010	Interdisciplinary Environmental Seminar	1
SEES:3020	Earth Surface Processes	3
GE CLAS Core: World Languages First Level Proficiency or elective course ^e		4 - 5
Elective course ^d		3
Hours		15-16

Spring

BIOL:1412	Diversity of Form and Function ^b	4
Major: environmental bioscience track elective course ^f		3 - 4
GE CLAS Core: Social Sciences ^c		3
GE CLAS Core: World Languages Second Level Proficiency or elective course ^e		4 - 5
Elective course ^d		1
Hours		15-17

Third Year

Fall

STAT:3510 or CS:1110 or STAT:2010	Biostatistics or Introduction to Computer Science or Statistical Methods and Computing	3
SEES:2374 or SEES:2950 or SEES:3070	Biogeography or Environmental Conservation or Marine Ecosystems and Conservation	3 - 4
BIOL:2246 or BIOL:1261 or SEES:3220	Entomology Lab ^g or Introduction to Botany or Evolution of the Vertebrates	4
GE CLAS Core: Historical Perspectives ^c		3
GE CLAS Core: World Languages Third Level Proficiency or elective course ^e		4 - 5
Hours		17-19

Spring

SEES:2050	Foundations of GIS	4
SEES:2310 or SEES:3320	Introduction to Climatology or Earth's Climate System	3
SEES:2673	Ecology	3
GE CLAS Core: Literary, Visual, and Performing Arts ^c		3
GE CLAS Core: World Languages Fourth Level Proficiency or elective course ^e		4 - 5
Hours		17-18

Fourth Year**Fall**

SEES:3315	Ecosystem Ecology	4
Major: environmental bioscience track elective course (numbered 3000 or above) ^f		3 - 4
Major: environmental bioscience track elective course ^f		3 - 4
GE CLAS Core: Values and Society ^c		3
Elective course ^d		3
Hours		16-18

Spring

Major: environmental bioscience track elective course (numbered 3000 or above) ^f		3 - 4
Major: environmental bioscience track elective course (numbered 3000 or above) ^f		3 - 4
Major: environmental bioscience track elective course ^f		3 - 4
Elective course ^d		3
Elective course ^d		2
Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall) ^h		
Hours		14-17
Total Hours		125-138

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 or Formal Reasoning; Social Sciences; Historical Perspectives; International and Global Issues; Literary, Visual, and Performing Arts; or Values and Society.

b Fulfills a major requirement and may fulfill a GE requirement.

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 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.

f Students must complete at least 18 s.h. in elective courses, including at least one course from the field study category and one course from each of three other categories; at least 9 s.h. must be numbered 3000 or above. See the General Catalog for list of approved courses.

g May also complete an approved organismal course (3-4 s.h.) at the Iowa Lakeside Laboratory (prefix IALL).

h Please see Academic Calendar, on 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.

Environmental Geoscience Track

Course	Title	Hours
Academic Career		
Any Semester		
GE CLAS Core: Sustainability ^a		
Hours		0

First Year**Fall**

SEES:1070	Contemporary Environmental Issues ^b	3
SEES:1085	Fundamentals of Environmental Science ^b	4
MATH:1850	Calculus I ^b	4
RHET:1030 or ENGL:1200	Rhetoric: Writing and Communication or The Interpretation of Literature	3 - 4
CSI:1600	Success at Iowa	1
Hours		15-16

Spring

SEES:1050	Introduction to Geology ^b	4
MATH:1860	Calculus II	4
ENGL:1200 or RHET:1030	The Interpretation of Literature or Rhetoric: Writing and Communication	3 - 4
GE CLAS Core: Understanding Cultural Perspectives ^c		3
Elective course ^d		2
Hours		16-17

Second Year**Fall**

CHEM:1110	Principles of Chemistry I ^b	4
SEES:2010	Interdisciplinary Environmental Seminar	1
SEES:3020	Earth Surface Processes	3
GE CLAS Core: Social Sciences ^c		3
GE CLAS Core: World Languages First Level Proficiency or elective course ^e		4 - 5
Hours		15-16

Spring

CHEM:1120	Principles of Chemistry II	4
SEES:2310 or SEES:3320	Introduction to Climatology or Earth's Climate System	3
SEES:2673	Ecology	3
GE CLAS Core: World Languages Second Level Proficiency or elective course ^e		4 - 5
Elective course ^d		2
Hours		16-17

Third Year**Fall**

PHYS:1511 or PHYS:1611	College Physics I ^b or Introductory Physics I	4
SEES:2050	Foundations of GIS	4
SEES:3330	Sedimentary Geology	4

GE CLAS Core: World Languages Third Level
Proficiency or elective course^e 4 - 5

Hours 16-17

Spring

PHYS:1612 Introductory Physics II^b 4
or PHYS:1512 or College Physics II

SEES:3360 Soil Genesis and Geomorphology 3

Major: environmental geoscience track elective 3 - 4
course^f

GE CLAS Core: Historical Perspectives^c 3

GE CLAS Core: World Languages Fourth Level
Proficiency or elective course^e 4 - 5

Hours 17-19

Fourth Year

Fall

SEES:4630 Hydrogeology 4

SEES:4790 Applied Environmental Geology 3

Major: environmental geoscience track elective 3 - 4
course (numbered 3000 or above)^f

GE CLAS Core: Literary, Visual, and Performing Arts^c 3

Elective course^d 3

Hours 16-17

Spring

STAT:2010 Statistical Methods and Computing 3
or STAT:3510
or CS:1110 or Biostatistics
or Introduction to Computer
Science

Major: environmental geoscience track elective 3 - 4
course (numbered 3000 or above)^f

Major: environmental geoscience track elective 3 - 4
course (numbered 3000 or above)^f

GE CLAS Core: Values and Society^c 3

Elective course^d 2

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

Hours 14-16

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Hours 14-16

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.

^f Students must complete at least 12 s.h. in elective courses, including at least one course from the field study category and one course from each of three other categories; at least 9 s.h. must be numbered 3000 or above. See the General Catalog for list of approved courses.

^g Please see Academic Calendar, on 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.

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^b Fulfills a major requirement and may fulfill a GE requirement.

^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 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.