

BACHELOR OF SCIENCE DEGREE ENVIRONMENTAL GEOSCIENCES

COORDINATE MAJOR

FOR ADDITIONAL INFORMATION, PLEASE CONTACT THE
DEPARTMENT OF GEOLOGICAL SCIENCES ADVISING OFFICE

1) UNIVERSITY REQUIREMENTS

Writing Requirement

Tier I: LB 133 4
Tier II: Satisfied by completing the Lyman Briggs College History, Philosophy and Sociology of Science and Senior requirements listed below.

Integrative Studies in Arts & Humanities (IAH)

IAH 201-210* 4
IAH 211-241*‡# 4

Integrative Studies in Social, Behavioral & Economic Sciences (ISS)

ISS 200-level course* 4
ISS 300-level course*‡@ 4

*National, International, & Multicultural Diversity
Students must include at least one "N" course and one "I" course in their Integrative Studies programs. A "D" course may meet either an "N" or an "I" requirement, but not both.

‡Summer 2013 to Summer 2017: LB 331, 333, and 336 will fulfill the IAH "B" university requirement (IAH 211 or higher). Please consult your LBC Academic Advisor for specific details for your program.

‡Summer 2013 to Summer 2017; LB 332, 334, and 335 will fulfill the ISS 300-level university requirement. Please consult your LBC Academic Advisor for specific details for your program.

Beginning Fall 2017; LB 321a, 322a, 323a, 324a, 325a, 326a and 327a will fulfill the IAH university requirement (IAH 211 or higher).

@ Beginning Fall 2017; LB 321b, 322b, 323b, 324b, 325b, 326b and 327b will fulfill the ISS 300-level university requirement.

Please contact your LBC Academic Advisor for specific details for your program. If you fulfilled the LB 331, 332, 333, 334, 335 or 336 requirement you do not need the new Fall 2017 courses.

Mathematics, Biological and Physical Sciences

Satisfied by the Lyman Briggs College requirements in Mathematics, Biological and Physical Sciences (see next section).

(2) LYMAN BRIGGS COLLEGE REQUIREMENTS

Biological Sciences (9 cr.)

Complete ONE of the following groups of courses
(1) LB 144 & 145 9
(2) BS 161, 162, 171, & 172 10

Chemistry (8-9 cr.)

Complete ONE of the following groups of courses
(1) LB 171, 171L, 172, & 172L 9
(2) CEM 141, 142, & 161 8
(3) CEM 151, 152, & 161 8

Physics (8-10 cr.)

Complete ONE of the following groups of courses
(1) LB 273, 274 8
(2) PHY 183, 184 8
(3) PHY 231, 232, 251, 252 8

Mathematics (6-7 cr.)

Complete ONE of the following groups of courses
(1) LB 118 & 119 8
(2) MTH 132 & 133 7

History, Philosophy & Sociology of Science (11-12 cr.)

LB 133 4
LB 330-336, 355, 490E; ENG 473A; HST 425; SOC 368 7-8

Senior Seminar (4 cr.)

LB 492 4

Minimum number of credits required: 120

Minimum cumulative and major grade point average: 2.0

(3) MAJOR REQUIREMENTS

Complete ALL of the following courses (31 cr.)

GLG	201	The Dynamic Earth	4
GLG	304	Physical and Biological History of Earth	4
GLG	321	Mineralogy and Geochemistry	4
GLG	401	Plate Tectonics (W)	4
GLG	411	Hydrogeology	3
GLG	412	Glacial Geology & the Record of Climate Change	4
GLG	421	Environmental Geochemistry	4
GLG	431	Sedimentology & Stratigraphy	4

Complete ONE of the following courses (3-4 cr.)

LB	220	Calculus III	4
MTH	234	Multivariable Calculus	4
STT	200	Statistical Methods	3
STT	201	Statistical Methods	3
STT	231	Statistics for Scientists	3
STT	421	Statistics I	3

Complete ONE of the following courses (3-4 cr.)

GEO	203	Introduction to Meteorology	3
IBIO	303	Oceanography	4

Complete ONE of the following courses (3-4 cr.)

GEO	324	Remote Sensing of the Environment	4
GEO	325	Geographic Information Systems	3
STT	464	Statistics for Biologists	3

Complete ONE of the following courses (3 cr.)

GEO	435	Geography of Health & Disease	3
IBIO	355	Ecology	3

Complete ONE from each of the following areas (9-10 cr.)

(1) Geophysical Systems

CE	421	Engineering Hydrology	3
GEO	409	Global Climate Change & Variability	3
GLG	413	Groundwater Contamination	3
GLG	471	Applied Geophysics	4
GLG	481	Reservoirs & Aquifers	3

(2) Geochemical Systems

CE	481	Environmental Engineering Chemistry	3
CEM	251	Organic Chemistry I	3
CSS	455	Pollutants in the Soil Environment	3

(3) Geobiological Systems

ENT	319	Introduction to Earth Systems Science	3
FW	420	Stream Ecology	3
MMG	425	Microbial Ecology	3
MMG	426	Biogeochemistry	3

Complete additional credits in Geological Science courses at the 300-400 level to total 40 credits. Credits used to satisfy this requirement may be used to satisfy either the requirements for the Geological Sciences major or the requirements for the Environmental Geosciences major, but not both of these requirements.

Concentration in Geophysics (OPTIONAL)

A concentration in geophysics is also available. Students must complete all of the following courses. Courses that are used to satisfy the requirements for the concentration may also be used to satisfy the requirements for the Bachelor of Science degree in Environmental Geosciences. The concentration will be noted on the student's transcript.

Complete ALL of the following courses (22 cr.)

GLG	470	Principles of Modern Geophysics	3
GLG	471	Applied Geophysics	4
LB	220	Calculus III*	4
MTH	235	Differential Equations	3
LB	273	Physics I†	4
LB	274	Physics II‡	4

*MTH 234 may be substituted for LB 220

†PHY 183 may be substituted for LB 273

‡PHY 184 may be substituted for LB 274

IMPORTANT: This advising guide is presented for planning purposes only. It is the student's responsibility for knowing and following University, college and departmental requirements as stated in the [Academic Programs Catalog](#).

The Academic Advisors will provide information and suggest others based on expressed interests. It is the student's responsibility for enrolling in classes and selecting the number of credits per semester for success. Appointments are made using the [Student Success Dashboard](#).