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
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
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 Geology 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 IP 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.