BS SOIL SCIENCE

Flowchart

- 60 units upper division
- 2.0 GPA
- GWR
- USCP

* = Required in Support; also satisfies GE
Note: No major, support or concentration courses may be taken as credit/no credit.

MAJOR COURSES
SS 110 Orientation in Earth and Soil Sciences or NR 140 Careers in Forestry & Env Mgmt (7/2/13)...
SS 121 Introductory Soil Science
ERSC 202 Soil Erosion and Water Conservation...
SS 221 Fertilizers and Plant Nutrition
ERSC 223 Rocks and Minerals
SS 321 Soil Morphology
SS 322 Soil Plant Relationshi
ERSC 323 Geomorphology
SS 325 Geomorphology (effective Summer 2009)
SS 422 Soil Microbiology and Biochemistry
SS 423 Soil and Water Chemistry
SS 431 Soil Resource Inventory
SS 432 Soil Physics
SS or ERSC 461 Senior Project I
SS or ERSC 462 Senior Project II
SS or ERSC 463 Undergraduate Seminar
Concentration courses (see below).............................. 27-28

SUPPORT COURSES
BOT 121 General Botany (B2 & B4)*................. 4
BRAE 340 Irrigation Water Management (Area F)*
CHEM 127 General Chemistry (B3&B4)*........ 4
CHEM 128 General Chemistry
CHEM 129 General Chemistry
CHEM 313 Survey of Biochemistry
GEO 201 Physical Geology
NR/LA 318 Applications of GIS
1 MATH 118 Pre-Calculus Algebra or
MATH 141 Calculus I (B1)*.......................... 4
1 MATH 119 Pre-Calculus Trigonometry or
MATH 142 Calculus II (B1)*.......................... 4
2 PHYS 121/PHYS 141................................. 4
STAT 218 Appl Statistics-Life Sciences

GENERAL EDUCATION (GE) 72 units required, 20 of which are specified in Support.
→ See page 50 for complete GE course listing.
→ Minimum of 12 units required at the 300 level.

Area A Communication (12 units)
A1 Expository Writing ...................................... 4
A2 Oral Communication ...................................... 4
A3 Reasoning, Argumentation, and Writing.............. 4

Area B Science and Mathematics (no add'l units req'd)
B1 Mathematics/Statistics * 8 units in Support.... 0
B2 Life Science * 4 units in Support...................... 0
B3 Physical Science * 4 units in Support.............. 0
B4 One lab taken with either a B2 or B3 course

Area C Arts and Humanities (20 units)
C1 Literature ................................................................ 4
C2 Philosophy ....................................................... 4
C3 Fine/Performing Arts ........................................... 4
C4 Upper-division elective ........................................... 4
Area C elective (Choose one course from C1-C4) 4

Area D/E Society and the Individual (20 units)
D1 The American Experience (40404) ............ 4
D2 Political Economy ............................................. 4
D3 Comparative Social Institutions ..................... 4
D4 Self Development (CSU Area E) .................... 4
D5 Upper-division elective ...................................... 4

Area F Technology Elective (upper division)
* 4 units in Support .............................................. 0

FREE ELECTIVES .................................................. 0-1
(7/27/12)

180

CONCENTRATIONS (select one):

Environmental Management Concentration
CHEM 312 Survey of Organic Chemistry (transfer equivalent CHEM 212).............. 5
CRSC 411 Experimental Techniques & Analysis or STAT 313 Applied Experimental Design & Regression Models............................................. 4
ERSC 323 Geomorphology........................................ 4
GEOG 440 Geo-Social Applications in GIS........ 4
SS 433 Land Use Planning................................. 3
Approved electives................................................. 12 &
Select 12 & units from the following:
BRAE 415;
CHEM 341, 342;
CRP 212, 336;
CRP/NR 404, 408;
GEOG 440;
NR 142, 306, 320, 335, 416, 418, 425;
NR/ES 406 (6/30/13)
NR/RPTA 311;
PHIL 340;
RPTA 302;
SS 339, 440, 444, 453

Corrections effective Summer 2009 28

1 Students in the Environmental Science and Technology concentration take MATH 141 and MATH 142.
2 Students in the Environmental Science and Technology concentration take PHYS 141.
3 Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.
4 No more than 4 units of SS 339 may be used.
Environmental Science and Technology Concentration
CHEM 216 or 316, CHEM 217 or 317
(transfer equivalent CHEM 216), (transfer equivalent CHEM 217) Organic Chemistry I, II...  5, 4/5
Select from: CHEM 218/318, 231/331, 319, 341, 342, 385, 481................................. 8
Select from: ENVE 325, 330, 434, 439; SS 442 ......  6
STAT 313 Applied Experimental Design & Regression Models or CRSC 411 Experimental
Techniques & Analysis........................................ 4
(7/27/12)  27-28

Land Resources Concentration
CHEM 312 Survey of Organic Chemistry (transfer equivalent CHEM 212)............................ 5
CRSC 411 Experimental Techniques & Analysis ....  4
Approved electives ........................................... 19
Select 19 units from any one minor, or select 19 units from the following courses.
Note: The prerequisite courses are not listed - check the catalog.
AG 450;
AGB 321, 370;
AGED 310;
ARCH 202;
ASCI 220, 221, 222, 223, 231, 329, 420;
BIO 112, 114, 161, 162, 325, 415, 427, 435;
BOT 238, 323, 324, 433;
BRAE 340, 348, 405, 415, 435, 440, 448;
CHEM 216, 217, 218, 316, 317, 318, 319, 341, 342, 385, 481;
COMS 212;
CRP 212, 214;
CRSC 132, 203, 333, 421, 422, 445;
DSCI 101, 121, 230;
EHS 343;
ENVE 325, 330, 434, 436, 439;
ERSC/GEOG 250, 325, 333;
FRSC 132, 133, 230, 231, 342, 422;
FSN 121, 125, 341;
GEOG 150, 300, 301, 308, 340;
GEOL 204;
HUM 302;
JOUR 205;
LA 551;
MCRO 221;
NR 141, 142, 208, 306, 420; NR/ES 406 (6/30/13)
NR/GEOG/LA 318;
NR/RPTA 311;
PHIL 321, 331, 337, 340;
PPSC 311, 321, 327, 431, 441;
PSY 301, 302;
RPTA 320;
SOC 309;
SS 301, 310, 339†, 433, 440, 442, 444, 453;
VGSC 230, 260
(7/27/12)  28

† Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.
†† No more than 4 units of SS 339 may be used.