BIOLOGICAL & AGRICULTURAL ENGINEERING
Kansas State University
Bachelor of Science in Biological Systems Engineering
127 hours required for graduation

ENVIRONMENTAL OPTION

TO:

Freshman		Sem.
Fall Semester	COURSE	hrs.
BAE 020	Engineering Assembly	0
BAE 101	Intro Biol and Agric Engg Tech	1
BAE 131	Intro Design Biological and Agric Engineers	1
CHM 210	♦Chemistry I	4
ECON 110	♦Principles of Macroeconomics	3
MATH 220	Analytic Geometry and Calculus I	4
COMM 105	Public Speaking 1A	2
		15

Sophomore		Sem.
Fall Semester	COURSE	hrs.
BAE 020	Engineering Assembly	0
BAE 331	Biological Systems Engg Project II	1
CHM 350	♦General Organic Chemistry	3
MATH 222	Analytic Geometry and Calculus III	4
PHYS 213	Engineering Physics I	5
STAT 490	Statistics for Engineers	1
_____	Humanities or Social Science Elective[b]	3
		17

Junior		Sem.
Fall Semester	COURSE	hrs.
BAE 020	Engineering Assembly	0
BAE 545	Biological Process Engineering	3
AGRON 305	Soils	4
GEOG 508	♦Geographic Information Systems I	3
ME 513	Thermodynamics I	3
ME 571	Fluid Mechanics	3
		16

Senior		Sem.
Fall Semester	COURSE	hrs.
BAE 020	Engineering Assembly	0
BAE 535	Structures and Environ Engineering	3
BAE 536	Biological Systems Engg Senior Design	3
BAE 660	Natural Resource Engineering II	3
_____	Ecoengineering Elective[c]	3
_____	Environmental Technical Elective[c]	1
_____	Humanities or Social Science Elective[b]	3
		16

TO:

Freshman		Sem.
Spring Semester	COURSE	hrs.
BAE 020	Engineering Assembly	0
BAE 231	Biological Systems Engg Project I	1
BIOL 198	♦Principles of Biology	4
CHM 230	♦Chemistry II	4
ENGL 100	Expository Writing I[a]	3
MATH 221	Analytic Geometry and Calculus II	4
		16

Sophomore		Sem.
Spring Semester	COURSE	hrs.
BAE 020	Engineering Assembly	0
BAE 345	Properties of Biological Materials	2
CE 530	Statics and Dynamics	3
IMSE 530	Engineering Economic Analysis	2
MATH 240	Elementary Differential Equations	4
PHYS 214	Engineering Physics II	5
		16

Junior		Sem.
Spring Semester	COURSE	hrs.
BAE 020	Engineering Assembly	0
BAE 560	Natural Resource Engineering I	3
BAE 651	Air Pollution Engineering	3
EECE 519	Electric Circuits and Control	4
ENGL 415	Written Communication for Engineers[a]	3
_____	Biology Elective[c]	3
		16

Senior		Sem.
Spring Semester	COURSE	hrs.
BAE 020	Engineering Assembly	0
BAE 640	Instrumentation and Control for Biol Sys	3
_____	Environmental Technical Elective[c]	3
_____	Environmental Technical Elective[c]	3
_____	Humanities or Social Science Elective[b]	3
_____	Science Elective[c]	3
		15

[a] Prerequisites for Written Communication for Engineers (ENGL 415) must be met from Expository Writing I or II. If both ENGL 100 and ENGL 200 must be taken, the additional 3 hours do not count towards the 128 hours required for graduation.

[b] Humanities and Social Science electives are to be selected from the approved list and need not be taken in order listed in the curriculum (2 courses must be 300 level or above).

[c] Environmental Technical, Ecoengineering, Science and Biology electives are to be chosen from an approved departmental list of courses with the advice and approval of the faculty advisor and department head.

Effective Spring 2010

06/11/2010