

**CURRICULUM FOR ECOLOGICAL ENGINEERING OPTION  
BIOSYSTEMS ENGINEERING DEPARTMENT**

<b>FRESHMAN YEAR</b>			
COMP 1200 Intro to Computing (P)	2	ENGR 1110 Intro to Engineering (P)	2
MATH 1610 Calculus I (P)	4	MATH 1620 Calculus II (P)	4
CHEM 1030 Chemistry I (P)	3	PHYS 1600 Engr Physics I (P)	4
CHEM 1031 Chemistry I Lab (P)	1	ENGL 1120 English Composition II	3
HIST 1210 Tech & Civilization I	3	HIST 1220 Tech & Civilization II	3
ENGL 1100 English Composition I	3		
ENGR 1100 Engng Orientation (P)	0		
<b>SOPHOMORE YEAR</b>			
<b>BSEN 2210 Engng Methods for Biosys</b>	<b>2</b>	<b>BSEN 2240 Biol Bioenvr Heat &amp; Mass Transf.</b>	<b>3</b>
ENGR 2010 Thermodynamics	3	ENGR 2070 Mechanics of materials	3
ENGR 2050 Statics	3	MATH 2650 Linear Diff Eqns	3
MATH 2630 Calculus III	4	BIOL 1030 Organismal Biology	4
BIOL 1020 Principles of Biology	4	Fine Arts Core	3
<b>SUMMER</b>			
ECON 2020 Principles of Microeconomics	3		
CHEM 1040 Chemistry II	3		
STAT 3010 Statistics for Engineers & Scientists	3		
PHIL 1020/1040	3		
<b>JUNIOR YEAR</b>			
<b>BSEN 3310 Hydraulic Transport in Biosys</b>	<b>4</b>	<b>BSEN 3230 Natural Resource Conserv Engng</b>	<b>3</b>
CIVL 3230 Intro to Environmental Engng.	4	<b>BSEN 3610 Instrumentation &amp; Controls Biosys.</b>	<b>3</b>
BIOL 3200 Microbiology	4	<b>Ecological Elective</b>	<b>3</b>
AGRN 2040 Basic Soil Science	4	Social Science Core*	3
		ENGL 2200 World Lit 1	3
<b>SENIOR YEAR</b>			
<b>BSEN 4510 Ecological Engineering</b>	<b>3</b>	<b>BSEN 4230 Waste Management &amp; Utiliz Engng.</b>	<b>3</b>
<b>BSEN 4560 Site Design for Biosystems</b>	<b>3</b>	<b>BSEN 4310 Engng Design for Biosystems</b>	<b>3</b>
<b>BSEN 5220 Geospatial Tech for Biosys</b>	<b>3</b>	<b>BSEN 4520 Watershed Modeling</b>	<b>3</b>
<b>BSEN 4300 Prof. Practice in Biosys Engng.</b>	<b>2</b>	ENGL 2210 World Lit II	3
<b>Ecological Engng Elective</b>	<b>3</b>	UNIV 4AA0 EN1 Undergrad Graduation	0

Total of 133 SEMESTER HOURS

Date:

\*Students must complete a Core course that addresses Auburn University General Education Student Learning Outcome 9

(P) denotes courses required for pre-engineering

Biosystems Electives: See advisor for approved course listing

<b>Ecological Engineering electives (one of the following)</b>	<b>Ecological Electives (one of the following)</b>
CIVL 3220 Water and Waste Treatment	BIOL 5700 Applied and Environmental Biology
CIVL 5250 Biological Principles of Environmental Engng	AGRN 5060 Soil Microbiology
INSY 3600 Engineering Economy	AGRN 5080 Soil Resources and Conservation
BSEN 4210 Irrigation Systems Design	AGRN 5000 Soil & Environmental Quality
BSEN 4260 – Renewable Energy Engineering in Biosys	BIOL 3060 Ecology
	FORY 4230 Forest Ecology