

**Undergraduate Curriculum in Biological Systems Engineering
Biorenewable Resources Engineering Option**

2011-2012 Catalog

Total Credits 127.5

First Year (31.5 cr.)

Semester 1 (15.5 cr.)		Semester 2 (16 cr.)	
R	Engr101	Orientation (FS)	1 BSE 110
3	BSE 170	Graphics and Design (FS)	3 Engr 160
4	Math 165	Calculus I (FS)	4 Math 166
4	Chem 167	General Chemistry (FS)	5 Phys 221
1	Chem 167L	General Chemistry Lab (FS)	3
3	Engl 150	Crit. Think. and Comm.(FSSS)	
.5	Lib 160	Library Instruction (FSSS)	

Second Year (31 cr.)

Semester 3 (17 cr.)		Semester 4 (14 cr.)	
3	EM 274	Statics of Engineering (FSSS)	1 BSE 201
3	Stat 305	Engineering Statistics (FSSS)	2 BSE 218
5	Phys 222	Classical Physics II (FSSS)	3 EM 324
3	Biol 212	Principles of Biology II (FS)	1 EM 327
3	BSE 216	Fund. Ag. and Biol. Engineering (F)	3 Engl 250
			4 Math 267

Third Year (33 cr.)

Semester 5 (17 cr.)		Semester 6 (16 cr.)	
4	AE 363	Electric Power and Electronics (F)	3 ChE 356
3	BSE 316	Applications and Systems Modeling (F)	3 Micro 302
3	Chem 331	Organic Chemistry (FS)	1 Micro 302L
1	Chem 331L	Organic Chemistry Lab(FS)	3 BSE 380
3	AE 388	Sustain Engr. and Int Dev (F)	3 Chem 332
3		SS&H Elective (FSSS)	3 ME 231

Fourth Year (32 cr.)

Semester 7 (15 cr.)		Semester 8 (17 cr.)	
3	AE 404	Instrumentation for Ag and Bio Engr (F)	2 BSE 416
2	BSE 415	Biological Systems Engr. Design I (FS)	3 BSE 403
3	ChE 357	Transport Phenomena II (FS)	3
3	BSE 480	Engineering Analysis of Bio Systems (F)	3
4		Biorenewable Elective I (FSSS)	3
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