

Food Engineering

Emphasis Electives- Need 2 courses

Course		Cr	Semester	Pre-reqs	Others	LibEd
BBE 4404	Biopolymers & Biocomposites Eng.	3	Fall	upper division, or instr consent		
BBE 4533	Sustainable Waste Managem. Eng	3	Spring	BBE 3023, and upper div CSE		
BBE 4753	Air Quality and Pollution Control E.	3	Spring	BBE 3012, 3043, UD		
BBE 4733	Renewable Energy Technologies	3	Spring	Junior or senior		TS
CEGE 4502	Water and Wastewater Treatment	3	F,S	CEGE 3501, or CHEN 2001		
IE 5513	Engineering Safety	4	F	Upper div CSE, or grad student		
IE 5541	Project Management	4	S	Upper div CSE, or grad student		

Technical Electives- Need 9 credits

Course		Cr	Semester	Pre-reqs	Others	Lib Ed
BBE 3396	Industry Assignment	1	F,S			
BBE 4001	Chemistry of Biomass and Biomass Conversion	4	Fall	CHEM 2301, or instr consent		ENV
BBE 4301	Applied Surface and Colloid Science	3	Fall	BBE 3043, or BMEN 2101, or CHEN 3101, or CHEM 4501,		
BBE 4401	Bioproducts Separation and Purification Processes	3	Fall	BBE3012, 3033, 3043, and Concurrent 4013	*	
BBE 4404	Biopolymers & Biocomposites Eng.	3	Fall	BBE/CSE upper division, or instr consent	*	
BBE 4533	Sustainable Waste Managem. Eng	3	S	BBE 3023, and upper div CSE	*	
BBE 4733	Renewable Energy Technologies	3	Spring	Junior or senior	*	TS
BBE 4900	Intern Reports	2	F, S, Su	student in BBE	Repeat allowed	
CHEM 2302	Organic Chemistry II	3	F, S, Su	CHEM 2301		
CHEM 2311	Organic Lab	4	F, S, Su	CHEM 2302 or CHEM 2304, or concurrent registration in CHEM 2302 or CHEM 2304		
CEGE 4502	Water and Wastewater Treatment	3	F, S	CEGE 3501 or CHEN 2001		
FSCN 1102	Food: Safety, Risks, & Technology	3	F, S			CIV
FSCN 1112	Principles of Nutrition	3	F, S, Su	High school biology&chemistry		
FSCN 3102	Introduction to Food Science	3	Fall	CHEM 1022, or [CHEM 1062 and CHEM 1066]		
FSCN 4112	Food Chemistry and Functional Foods	3	Fall	FSCN 3102 and BIOC 3021		
FSCN 4121	Food Microbiology	3	Spring	BIOC 3021, and [FSCN 2021 or VBS 2032 or MICB 3301]		
FSCN 4332	Food Processing Operations	3	Spring			
IE 5513	Engineering Safety	4	F,S	Upper div CSE	*	
IE 5541	Project Management	4	S	Upper div CSE	*	

* if not already taken as Emphasis electives.