



# Cornell Institute of Food Science

## Bachelor of Science Program in Food Science

### *Food Science Option*

<b>Curriculum Outline</b>	<b>Freshman Year</b>		<b>Spring Semester</b>	
	<i>Fall Semester</i>	<i>Credits</i>		<i>Credits</i>
	FDSC 1101 Sci & Tech of Foods	1	FDSC 1102 Leadership & Career Skills in FS	2
	CHEM 2070 General Chemistry	4	CHEM 2080 General Chemistry	4
	MATH 1110* Calculus	4	MATH 1120* Calculus	4
	BIOG ** Biology	3	BIOG ** Biology	3
	Freshman Writing Seminar	3	Freshman Writing Seminar	3
		<b>(15)</b>		<b>(16)</b>
	<b>Sophomore Year</b>		<b>Spring Semester</b>	
	<i>Fall Semester</i>	<i>Credits</i>		<i>Credits</i>
	FDSC 2000 Intro Physicochem & Biological Aspects of Foods	3	FDSC 2100 Food Analysis	3
	CHEM 3570 Organic Chemistry	3	CHEM 3580 Organic Chemistry	3
	PHYS 1101* General Physics	4	BIOMI 2900 General Microbiology Lec	3
	NS 1150 Nutrition and Health	3	BIOMI 2910 Gen Microbiology Lab	2
	<i>Humanities, Career or General Elective</i>	3	<i>Humanities, Career or General Elective</i>	4
		<b>(16)</b>		<b>(15)</b>
	<b>Junior Year</b>		<b>Spring Semester</b>	
	<i>Fall Semester</i>	<i>Credits</i>		<i>Credits</i>
	FDSC 4210 Food Engineering Principles	4	FDSC 4170 Food Chemistry I	3
	FDSC 3940 Food Microbiology Lecture	3	Statistics***	4
	FDSC 3950 Food Microbiology Lab	3	Oral Expression****	3
	BIOBM 3310 Prin BiochemProteins/Metab	3	<i>Humanities, Career or General Elective</i>	3
	<i>Humanities, Career or General Elective</i>	5		
		<b>(18)</b>		<b>(13)</b>
	<b>Senior Year</b>		<b>Spring Semester</b>	
	<i>Fall Semester</i>	<i>Credits</i>		<i>Credits</i>
	FDSC 4100 Sensory Evaluation of Foods	3	FDSC 4000 Capstone Project in Food Sci	2
	FDSC 4180 Food Chemistry II	3	FDSC 3960 Food Safety Assurance	2
	FDSC 4190 Food Chemistry Lab	2	FDSC 4250 Unit Operations & Dairy Foods Processing	3
	FDSC 4230 Physical Principles of Food Preservation and Manufacturing	3	<i>Humanities, Career or General Elective</i>	9
	<i>Humanities, Career or General Elective</i>	6		
		<b>(16)</b>		<b>(16)</b>

**Requirements/Recommendations** \* Engineering Math 1910-1920 can be substituted for Math 1110-1120, and calculus-based Physics 2207 can be substituted for Physics 1101 for students interested in Food Process Engineering.

\*\*BIO courses suggested BIOG 1140, 1440 or 1500; BIOEE 1610 or 1780; BIOAP 1100; PLBIO 2410; PLHRT 1115

Pre-med students must take Organic Chem Lab (CHEM 2510) and a second semester of Physics, e.g. PHYS 2207-2208

\*\*\* Statistic courses suggested: AEM 2100; STSCI 2100, 2150 or 2200; MATH 1710; PSYCH 3500

\*\*\*\*Oral expressions suggested courses: COMM 2010, ILRLR 3300