

## FOOD SCIENCE: FOOD SCIENCE AND INDUSTRY OPTION

*Approved by the Institute of Food Technologists*

### FOUR-YEAR PLAN

**Iowa State University Catalog, 2018-2019**

Department of Food Science and Human Nutrition

First Year			
Fall Semester		Spring Semester	
FS HN 101, Food and the Consumer	3	FS HN 167, Introduction to Human Nutrition	3
FS HN 110, Professional/Educational Preparation	1	CHEM 178, General Chem.II, if CHEM 177 taken	3
CHEM 163 or 177, College or General Chemistry	4	Or, elective	
CHEM 163L or 177L, Chemistry Laboratory	1	BIOL 212, Principles of Biology II	3
BIOL 211, Principles of Biology I	3	MATH 160, 165, or 181, Calculus course	4
ENGL 150, Critical Thinking & Communication	3	ECON 101, Principles of Microeconomics	<u>3</u>
LIB 160, Library	<u>1</u>	Total credits:	16
Total credits:	16		

Second Year			
Fall Semester		Spring Semester	
CHEM 231, Elementary Organic Chemistry	3	BBMB 301 or 316, Biochemistry	3
CHEM 231L, Organic Chemistry Laboratory	1	MICRO 201 or 302, Microbiology course	2-3
ENGL 250, Written, Oral, Visual, Electronic Comp.	3	MICRO 201L or 302L, Microbiology laboratory	1
FS HN 203, Contemporary Issues in FSHN	1	STAT 101, 104, or 105 Statistics course	3-4
<b>FS HN 207, Processing of Foods: Basic Principles*</b>	2	Humanities	3
PHYS 111 or [115 plus 115L], Physics with lab	<u>5</u>	Elective	<u>3</u>
Total credits:	15	Total credits:	15-17

Third Year			
Fall Semester		Spring Semester	
<b>FS HN 311, Food Chemistry*</b>	3	FS HN 342, World Food Issues	3
<b>FS HN 311L, Food Chemistry Laboratory*</b>	1	<b>FS HN 351, Intro.to Food Engineering Concepts**</b>	3
<b>FS HN 315, Professional Development-Food Sci.*</b>	2	FS HN 403, Food Laws and Regulations	2
<b>FS HN 420, Food Microbiology*</b>	3	FS HN 411, Food Ingredient Interactions & Form.	2
SP CM 212, Fundamentals of Public Speaking	3	<b>FS HN 421, Food Microbiology Laboratory**</b>	3
Humanities/social sci. (H Sci) or ENV S (AgLS)	<u>2-3</u>	Humanities (H Sci) or elective (AgLS)	<u>1-3</u>
Total credits:	14-15	Total credits:	14-16

**Summer:** Food science internship experience (FS HN 491B option for elective credits)

Fourth Year			
Fall Semester		Spring Semester	
<b>FS HN 406, Sensory Evaluation of Food*</b>	3	<b>FS HN 405, Food Quality Assurance**</b>	2
<b>FS HN 410, Food Analysis*</b>	3	<b>FS HN 407, Microbiological Safety of Foods**</b>	3
<b>FS HN 471, Food Processing*</b>	3	<b>FS HN 412, Food Product Development**</b>	3
<b>FS HN 472, Food Processing Laboratory*</b>	2	FS HN 480, Professional Communication in FSHN	1
Business course	<u>3</u>	U.S. Diversity (if not already taken) or Elective	3
Total credits:	14	Business course	<u>3</u>
		Total credits:	15

Choose elective courses to total  $\geq$  120 credits.

\* **Fall-only course offering**, \*\* **Spring-only course offering**. Planned course offerings may change, and students need to check the online Schedule of Classes each term to confirm course offerings: <http://classes.iastate.edu/>.

*Note: This sequence is only an example. The number of credits taken each semester should be based on the individual student's situation. Factors that may affect credit hours per semester include student ability, employment, health, activities, and grade point considerations. Updated November 2017*