

**FOOD SCIENCE: FOOD SCIENCE AND INDUSTRY OPTION***Approved by the Institute of Food Technologists***FOUR-YEAR PLAN****Iowa State University Catalog, 2017-2018**

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, Survey of Biochemistry	3
CHEM 231L, Organic Chemistry Laboratory	1	FS HN 203, Contemporary Issues in FSHN	1
PHYS 115 (4cr) or 111 (5cr), Physics course	4-5	MICRO 201 or 302, Microbiology course	2-3
ENGL 250, WOVE Composition	3	MICRO 201L or 302L, Microbiology laboratory	1
STAT 101, 104, or 105 Statistics course	<u>3-4</u>	Humanities/social sci. (H Sci) or ENV S (AgLS)	2-3
Total credits:	14-16	Humanities (H Sci) or elective (AgLS)	<u>3</u>
		Total credits:	12-14

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 420, Food Microbiology*</b>	3	<b>FS HN 403, Food Laws, Regulations**</b>	2
SP CM 212, Fundamentals of Public Speaking	3	<b>FS HN 405, Food Quality Assurance**</b>	3
Humanities course	3	<b>FS HN 421, Food Microbiology Laboratory**</b>	3
Elective	<u>1</u>	Elective	<u>2</u>
Total credits:	14	Total credits:	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 412, Food Product Development**</b>	3
<b>FS HN 410, Food Analysis*</b>	3	<b>FS HN 472, Food Processing II**</b>	3
FS HN 411, Food Ingredient Interactions & Form.	2	FS HN 480, Professional Communication in FSHN	1
<b>FS HN 471, Food Processing I*</b>	3	Business course	3
Business course	3	U.S. Diversity (if not already taken) or Elective	3
Elective	<u>2</u>	Elective	<u>3</u>
Total credits:	16	Total credits:	16

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 2016*