Students select one of the following options and complete all requirements for that option:

**Food Science and Technology option, Food Science and Industry option, or Consumer Food Science option.**

Courses listed below are required for all of the options, except where specified by option below. Minimum of 120 total semester credits required for the degree. Course credits shown in parentheses.

(6) **INT’L PERSPECTIVES/U.S. DIVERSITY**
- (3) Select from International Perspectives (IP) approved list: [http://www.iastate.edu/~registrar/courses/ip-list.html](http://www.iastate.edu/~registrar/courses/ip-list.html)
- (3) Select from U.S. Diversity approved list: [http://www.iastate.edu/~registrar/courses/diversity-list.html](http://www.iastate.edu/~registrar/courses/diversity-list.html)

(13) **COMMUNICATIONS AND LIBRARY**
- (3) ENGL 150 Critical Thinking and Communication
- (3) ENGL 250 Written, Oral, Visual, Electronic Comp.
- (1) LIB 160 Library Instruction
- (3) SP CM 212 Fundamentals of Public Speaking
- (3) TSM 115 Solving Technical Problems

(11-15) **HUMANITIES AND SOCIAL SCIENCES**
- **College of Agriculture & Life Sciences students, 11-12 credits**
  - (3) Humanities course
  - (3) ECON 101 Principles of Microeconomics
  - (3) FS HN 342 World Food Issues
    - (This course can also meet the IP requirement)
  - (2-3) ENV S 120 or 201 Environmental course
- **OR, College of Human Sciences students, 15 credits**
  - (6) Humanities courses
  - (3) ECON 101 Principles of Microeconomics
  - (3) FS HN 342 World Food Issues
    - (This course can also meet the IP requirement)
  - (3) Humanities or Social Science course

(7-12) **MATHEMATICAL SCIENCES**
- **Food Science and Technology option:**
  - (8) MATH 165 and 166; or MATH 181 and 182 Calculus
  - (3-4) STAT 101, 104, or 105 Statistics course
- **Food Science and Industry option, and Consumer Food Science option:**
  - (4) MATH 160, 165, or 181 Calculus course
  - (3-4) STAT 101, 104, or 105 Statistics course

(13-23) **PHYSICAL SCIENCES**
- **Food Science and Technology option:**
  - (5) CHEM 177 and 177L General Chemistry I and Lab.
  - (3) CHEM 178 General Chemistry II
  - (4) CHEM 331 and 331L Organic Chemistry I and Lab.
  - (3) CHEM 332 Organic Chemistry II
  - (8) PHYS 111 and 112 General Physics
- **Food Science and Industry option, and Consumer Food Science option:**
  - (5-8) CHEM 163 and 163L College Chemistry and Lab.
    - or CHEM 177, 177L, and 178 General Chemistry I & II
  - (3) CHEM 231 Elementary Organic Chemistry
  - (1) CHEM 231L Lab in Elementary Organic Chemistry
  - (4) PHYS 106, 111, or 115 Physics course

(12-13) **BIOLOGICAL SCIENCES**
- (3) BBMB 301 Survey of Biochemistry
- (3) BIOL 211 Principles of Biology I
- (3) BIOL 212 Principles of Biology II

**Food Science and Technology option:**
- (3) MICRO 302 Biology of Microorganisms
- (1) MICRO 302L Microbiology Laboratory

**Food Science and Industry option, and Consumer Food Science option:**
- (2-3) MICRO 201 or 302 Microbiology course
- (1) MICRO 201L or 302L Microbiology laboratory

(43-44) **FOOD SCIENCE AND HUMAN NUTRITION**
- (3) FS HN 101 Food and the Consumer
- (1) FS HN 110 Professional and Educational Preparation
- (3) FS HN 167 Introduction to Human Nutrition
- (1) FS HN 203 Contemporary Issues in FSHN
- (3) FS HN 311 Food Chemistry
- (1) FS HN 311L Food Chemistry Laboratory
- (3) FS HN 351 Intro. to Food Engineering Concepts
- (2) FS HN 403 Food Laws, Regulations, & Reg. Process
- (3) FS HN 405 Food Quality Assurance
- (3) FS HN 406 Sensory Evaluation of Food
- (3) FS HN 410 Food Analysis
- (2) FS HN 411 Food Ingredient Interactions & Formulations
- (3) FS HN 412 Food Product Development
- (3) FS HN 420 Food Microbiology
- (3) FS HN 471 Food Processing
- (1) FS HN 480 Professional Communication in FSHN
- (5-6) Additional FS HN courses based on option:
  - **Food Science and Technology option,** and
  - **Food Science and Industry option:** FS HN 421 and 472

**Consumer Food Science option:**
- Select 5-6 credits from FS HN (214 and 215), 265, 421, or 472

**ADDITIONAL REQUIREMENTS**
- Food Science and Industry option:
  - Select 6 credits from the following business courses
    - ACCT 215, 284, 285; ECON 301, 320; MGMT 310, 370, 371, 414, 414, 472; MIS 330; MKT 340, 447, 448

**Consumer Food Science option:**
- Select 6 credits from the following consumer-focused courses
  - JL MC 220, 305, 347; MKT 340, 447, 448

(5-19) **ELECTIVES** – Select from any university coursework to earn ≥ 120 total semester credits prior to graduation.

**NOTES:**
- * Students must fulfill the International Perspectives and U.S. Diversity requirements by selecting coursework from approved lists; these course may dual with other degree requirements.
- ** Links to approved humanities and social sciences courses: [http://www.fshn.hs.iastate.edu/undergraduate/advising/approved-courses/](http://www.fshn.hs.iastate.edu/undergraduate/advising/approved-courses/)

*Updated May 2012*