

# Food Science

University of Wisconsin-River Falls  
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**F**ood Science and Technology are closely involved with agricultural products from the time they leave the farm, the sea, or any other point of production until they reach the consumer. Some would say that all the territory between the "farm gate and the dinner plate" is the concern of Food Science and Technology.

## Goals and Objectives

- Equip graduates with the knowledge and skills necessary for them to effectively contribute to the production of a high quality food supply.
- Develop knowledge and skills in food processing, food chemistry, food microbiology, and food engineering.
- Provide a sound basis for communication, critical thinking, the liberal arts and an appreciation for moral and ethical issues.

## Program

The Food Science major requires that a student take a minimum of 32 credits in Food Science, including:

FDSC 112	Introduction to Food Science
FDSC 113	Introduction to Food Science Laboratory
FDSC 270	Internship
FDSC 285	Sophomore Seminar
FDSC 312	Food Processing
FDSC 313	Food Processing Laboratory
FDSC 320	Food Quality Assurance
FDSC 335	Food Microbiology
FDSC 352	Food Engineering
FDSC 360	Food Chemistry
FDSC 385	Junior Seminar
FDSC 422	Product Development and Sensory Evaluation
FDSC 461	Food Analysis
FDSC 485	Senior Seminar

In addition students must complete general education requirements and required supporting courses such as chemistry and microbiology.

**Faculty and Facilities** The faculty and academic staff work closely with students to provide classroom and hands-on experience in Food Science and Technology. The pilot plants include Dairy Manufacturing, Fruit and Vegetable Processing, and Meat Processing. All of the plants are used for education and training of students, while the Dairy and Meat plants also meet state inspection requirements. A number of student employment opportunities exist within the pilot plant and other Food Science laboratories.

**Career Opportunities** Many Food Science graduates find employment with very small to very large/international food companies, others work for governmental agencies. Typical industry positions available include: production supervision and management, quality assurance, product development, and marketing. Graduates employed in the governmental sector may work for the Food and Drug Administration, the U.S. Department of Agriculture and the state departments of agriculture.



# FOOD SCIENCE

Department of Animal and Food Science  
247 Agriculture Science Hall  
(715) 425-3704



## Bachelor of Science Degree. Academic Advising Plan.

1 = Industry Option course 2 = Dairy Technology Option course 3 = Science Option course

### Semester 1 (Fall)

ENGL 111	Academic Reading and Writing.....	3
CHEM 121	General Chemistry I.....	5
FDSC 112	Introduction to Food Science.....	3
FDSC 113	Introduction to Food Science Lab.....	1
MATH 166	Calculus I.....	4
	Total semester credits .....	16

### Semester 2 (Spring)

ENGL 112	Persuasive Reading and Writing .....	3
CHEM 122	General Chemistry II .....	5
BIOL 150	General Biology .....	3
P ED 108	Health and Fitness for Life .....	1
1&2 AGEC 230	Agricultural Economics I.....	3
3 MATH 167	Calculus II .....	4
	1&2 Total semester credits .....	15
	3 Total semester credits .....	16

### Semester 3 (Fall)

ENGL 245	Sophomore Literature Course .....	3
PHYS 151	General Physics I.....	4
FDSC 285	Sophomore Seminar.....	1
1&3 FDSC 140	Meat and Meat Products	
1,2&3 or FDSC 202	Dairy Manufacturing I	
1&3 or FDSC 259	Cereal Technology.....	3
1&2 CHEM 230	General Organic Chemistry.....	3
1&2	Physical education activity course.....	.5
3 CHEM 231/236	Organic Chemistry I and Lab.....	4
	1&2 Total semester credits .....	14.5
	3 Total semester credits .....	15

### Semester 4 (Spring)

ANSC 231	Principles of Nutrition.....	3
BIOL 324	Microbiology .....	4
	Speech general education course .....	3
	Physical education activity course.....	.5
1&2 AGBI 251/252	Agricultural Biochemistry and Lab.....	4
3 CHEM 232/237	Organic Chemistry II and Lab .....	4
	Total semester credits .....	14.5

### Semester 5 (Fall)

FDSC 312/313	Food Processing and Lab .....	5
FDSC 360	Food Chemistry .....	3
FDSC 385	Junior Seminar .....	1
ANSC 341	Biometrics .....	3
1&2	Social science general education course.....	3
3 AGBI 252	Agricultural Biochemistry Lab.....	1
3 CHEM 361	Biochemistry I.....	3
	1&2 Total semester credits .....	15
	3 Total semester credits .....	16

### Semester 6 (Spring)

FDSC 320	Food Quality Assurance.....	2
FDSC 335	Food Microbiology.....	4
	Social science general education course.....	3
	Humanities/diversity course.....	3
1	Management or marketing or finance course .....	3
2	FDSC 302 Dairy Manufacturing II	
	or FDSC 469/470 Dairy Plant Mangement and Lab.....	3
3	Humanities and fine arts general education course.....	3
	Total semester credits .....	15

### Summer

FDSC 270	Internship.....	2-4
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### Semester 7 (Fall)

FDSC 352	Food Engineering.....	3
FDSC 485	Senior Seminar.....	1
	Food science elective course .....	3
1	ACCT 231 Principles of Accounting I .....	3
2	AGEC 355 Agricultural Markets and Prices.....	3
1&2	Humanities and fine arts general education course.....	3
1&2	Senior Interdisciplinary Course (Social Science) .....	2
3	AGEC 230 Agricultural Economics I.....	3
3	Social science general education course.....	3
3	Physical education activity course .....	.5
	1&2 Total semester credits .....	15
	3 Total semester credits .....	13.5

### Semester 8 (Spring)

FDSC 422	Product Devel. and Sensory Eval. ....	4
FDSC 461	Food Analysis .....	4
1	Management or marketing or finance .....	3
1&3	Food science elective course.....	3
2	FDSC 302 Dairy Manufacturing II	
	or FDSC 469/470 Dairy Plant Mangement and Lab.....	3
2	AGEC 468 Agribusiness Firm Management .....	3
3	Senior Interdisciplinary Course (Social Science) .....	2
	1&2 Total semester credits .....	14
	Total semester credits .....	13

## Summary of Degree Requirements

General Education .....	41-43 cr.
Foundation Courses in Agriculture .....	12 cr.
Major Requirements .....	48 cr.
Option Requirements.....	14-18 cr.
Credits to Degree.....	120 cr.