FOOD SCIENCE (H SCI)

Food science is a degree program focused on food issues from the time crops leave the field until consumers buy the food products. Food scientists apply basic science (chemistry, biology, physics) to improve processing, preservation, and safety of food and to develop new food products. There are two options in food science, and both options are approved by the Institute of Food Technologists: food science and technology option, and food science and industry option.

The department also offers a food science minor.

Administered by the Department of Food Science and Human Nutrition

Students select one of the following options and complete all requirements for that option: food science and technology option or food science and industry option. Courses listed below are required for all of the options, except where specified by option below.

Total Degree Requirement: 120 cr.

Students must fulfill International Perspectives and U.S. Diversity requirements by selecting coursework from approved lists. These courses may also be used to fulfill other area requirements. Only 65 cr. from a two-year institution may apply to the degree which may include up to 16 technical cr.; 9 P-NP cr. of electives; 2.00 minimum GPA.

International Perspectives: 3 cr.
U.S. Diversity: 3 cr.
Communications and Library: 10 cr.

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Humanities and Social Sciences: 6-12 cr.

Select Humanities course from approved list

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Ethics and Environmental: 3-6 cr.

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<td>World Food Issues: Past and Present</td>
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Mathematical Sciences: 7-12 cr.

Food science and technology option:

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<td>MATH 165</td>
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Food science and industry option:

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<td>Survey of Calculus</td>
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<td>MATH 165</td>
<td>Calculus I</td>
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Physical Sciences: 14-20 cr.

Food science and technology option:

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<td>or PHYS 115 Physics for the Life Sciences</td>
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Food science and industry option:

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### Biological Sciences: 12-13 cr.

#### Food science and technology option:

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<td>BIOL 211</td>
<td>Principles of Biology I</td>
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<td>MICRO 302</td>
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**Total Credits**: 13

#### Food science and industry option:

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<td>MICRO 201</td>
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<td>or MICRO 302</td>
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**Total Credits**: 12-13

### Food Science and Human Nutrition: 49 cr.

#### First Year

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<td>FS HN 110</td>
<td>Professional and Educational Preparation</td>
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<td>FS HN 167</td>
<td>Introduction to Human Nutrition</td>
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<td>Contemporary Issues in Food Science and Human Nutrition</td>
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<td>FS HN 207</td>
<td>Processing of Foods: Basic Principles and Applications</td>
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<td>FS HN 311</td>
<td>Food Chemistry</td>
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<td>Professional Development for Food Science Majors</td>
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<td>FS HN 351</td>
<td>Introduction to Food Engineering Concepts</td>
<td>3</td>
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<tr>
<td>FS HN 403</td>
<td>Food Laws and Regulations</td>
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<td>FS HN 405</td>
<td>Food Quality Assurance</td>
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<td>FS HN 406</td>
<td>Sensory Evaluation of Food</td>
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<td>Microbiological Safety of Foods of Animal Origins</td>
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<td>Food Analysis</td>
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<td>Food Ingredient Interactions and Formulations</td>
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<td>Food Product Development</td>
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<td>Food Microbiology</td>
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**Total Credits**: 49

#### Electives: 0-12 cr.

Select from any university coursework to earn at least 120 total credits.

Go to FS HN courses.

### Second Year

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**Total Credits**: 6
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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.

**Humanities/Social Sci. (H Sci) or ENV S (AgLS)**

* Choose elective courses to total equal to or greater than 120 credits.

**Food Science, B.S. - Food science and technology option**

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* Choose elective courses to total equal to or greater than 120 credits.

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.