FOOD SCIENCE & HUMAN NUTRITION: FOOD SCIENCE, BS

for the degree of Bachelor of Science Major in Food Science & Human Nutrition, Food Science Concentration

department website: https://fshn.illinois.edu
department faculty: https://fshn.illinois.edu/directory/faculty/
overview of college admissions & requirements: Agricultural, Consumer & Environmental Sciences (http://catalog.illinois.edu/schools/aces/academic-units/#academicunitstext)
college website: https://aces.illinois.edu/

The Food Science concentration exposes students to all components of food production: harvesting and raw-product handling, food-processing procedures and techniques, packaging, and food storage. Students selecting this concentration are prepared for careers in many areas of the food industry.

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Prescribed Courses including Campus General Education

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>Composition I and Speech</td>
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<tr>
<td>Select one of the following:</td>
<td>6-7</td>
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<tr>
<td>RHET 105 &amp; CMN 101</td>
<td>Writing and Research &amp; Public Speaking (or equivalent) (see college Composition I requirement)</td>
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<tr>
<td>CMN 111 &amp; CMN 112</td>
<td>Oral &amp; Written Comm I &amp; Oral &amp; Written Comm II</td>
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</table>

Advanced Composition

Select one course from campus approved list of Advanced Composition courses. 3-4

Cultural Studies

Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists. 9

Foreign Language

Coursework at or above the third level is required for graduation.

Quantitative Reasoning I

Select one of the following: 1 4-5

MATH 220 Calculus
MATH 221 Calculus I
MATH 234 Calculus for Business I (This course does not count for students in the Food Science Concentration; choose from the other two options.)

Quantitative Reasoning II

Select one of the following: 3-4

ACE 261 Applied Statistical Methods

Natural Sciences and Technology

Chemistry 2 3 or 8

CHEM 101 Introductory Chemistry
CHEM 102 General Chemistry I & CHEM 103 and General Chemistry Lab I
CHEM 104 General Chemistry II & CHEM 105 and General Chemistry Lab II

MCB 100 Introductory Microbiology 3
MCB 101 Intro Microbiology Laboratory 2

Humanities and the Arts

Select from campus approved list. 6

Social and Behavioral Sciences

Select from campus approved list and/or see individual concentration. 3

ACES Prescribed Course

ACES 101 Contemporary Issues in ACES 2

Required Concentration

Concentration prescribed courses. See specific requirements for each concentration listed below.

Total Hours 4 126 or 130

1 Students in the Food Science Concentration must select from MATH 220 or MATH 221.
2 Students in the Hospitality Management Concentration must take CHEM 101. All other concentrations take CHEM 102 + 103 & CHEM 104 + 105, which are not required for the Hospitality Management Concentration.
3 Six hours for Food Science Concentration.
4 The Food Science Concentration requires a minimum of 130 hours; the Dietetics, Human Nutrition, and Hospitality Management Concentrations each require a minimum of 126 hours.

Other Natural Sciences and Technology Required Courses

CHEM 232 Elementary Organic Chemistry I 4
CHEM 233 Elementary Organic Chem Lab I 2
FSHN 312 2
PHYS 101 College Physics: Mech & Heat 5
PHYS 102 College Physics: E&M & Modern 5
Select one of the following: 4-5

IB 103 Introduction to Plant Biology
IB 104 Animal Biology
MCB 150 Molec & Cellular Basis of Life
MCB 151 and Molec & Cellular Laboratory
MCB 244 Human Anatomy & Physiology I

Food Science Concentration Required

FSHN 101 Intro Food Science & Nutrition 3
FSHN 120 Contemporary Nutrition 3
FSHN 230 Food Sci Professional Issues 1
FSHN 232 Science of Food Preparation 3
FSHN 260 Raw Materials for Processing 4

Information listed in this catalog is current as of 04/2019
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FSHN 302</td>
<td>Sensory Evaluation of Foods</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 414</td>
<td>Food Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 416</td>
<td>Food Chemistry Laboratory</td>
<td>2</td>
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<tr>
<td>FSHN 418</td>
<td>Food Analysis</td>
<td>4</td>
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<tr>
<td>FSHN 460</td>
<td>Food Processing Engineering</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 461</td>
<td>Food Processing I</td>
<td>4</td>
</tr>
<tr>
<td>FSHN 462</td>
<td>Food Processing II</td>
<td>2</td>
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<tr>
<td>FSHN 466</td>
<td>Food Product Development</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 471</td>
<td>Food &amp; Industrial Microbiology</td>
<td>3</td>
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<tr>
<td>ANSC 350</td>
<td>Cellular Metabolism in Animals</td>
<td>3</td>
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<tr>
<td></td>
<td>or MCB 450 Introductory Biochemistry</td>
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**Elective hours as needed to reach a minimum of 130**

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