Food Science (H SCI)

Curriculum in Food Science

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 fulfill other area requirements. Only 65 cr. from a two-year institution may apply to

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

International Perspectives: 3 cr.

U.S. Diversity: 3 cr.

Communications and Library: 10 cr.

ENGL 150 Critical Thinking and Communication 3
ENGL 250 Written, Oral, Visual, and Electronic Composition 3
LIB 160 Information Literacy 1
SP CM 212 Fundamentals of Public Speaking 3

Total Credits 10

Humanities and Social Sciences: 6-12 cr.

Select Humanities course from approved list 3
ECON 101 Principles of Microeconomics 3
If H Sci student, select: 6
Additional Humanities course
Additional Humanities or Social Science course

Ethics and Environmental: 3-6 cr.

FS HN 342 World Food Issues: Past and Present 3
If AgLS student, select from: 2-3
ENV S 120 Introduction to Renewable Resources
ENV S 201 Introduction to Environmental Issues

Mathematical Sciences: 7-12 cr.

Food science and technology option:

Select from: 8
MATH 165 & MATH 166 Calculus I and Calculus II
or
MATH 181 & MATH 182 Calculus and Mathematical Modeling for the Life Sciences I and Calculus and Mathematical Modeling for the Life Sciences II

Select at least 3 credits from: 3-4
STAT 101 Principles of Statistics
STAT 104 Introduction to Statistics
STAT 105 Introduction to Statistics for Engineers

Total Credits 11-12

Food science and industry option:

Select at least 4 credits from: 4
MATH 160 Survey of Calculus
MATH 165 Calculus I
MATH 181 Calculus and Mathematical Modeling for the Life Sciences I

Select at least 3 credits from: 3-4
STAT 101 Principles of Statistics
STAT 104 Introduction to Statistics

Total Credits 7-8

Physical Sciences: 13-25 cr.

Food science and technology option:

CHEM 177 General Chemistry I 4
CHEM 177L Laboratory in General Chemistry I 1
CHEM 178 General Chemistry II 3
CHEM 331 Organic Chemistry I 3
CHEM 331L Laboratory in Organic Chemistry I 1
CHEM 332 Organic Chemistry II 3
PHYS 111 General Physics 5
PHYS 112 General Physics 5

Total Credits 25

Food science and industry option:

Select from: 5-8
CHEM 163 & 163L College Chemistry and Laboratory in College Chemistry
CHEM 177 & 177L General Chemistry I and Laboratory in General Chemistry I & CHEM 178 and General Chemistry II
CHEM 231 Elementary Organic Chemistry 3
CHEM 231L Laboratory in Elementary Organic Chemistry 1
PHYS 115 Physics for the Life Sciences 4-5
or PHYS 111 General Physics

Total Credits 13-17

Biological Sciences: 12-13 cr.

Food science and technology option:

BBMB 301 Survey of Biochemistry 3
BIOL 211 Principles of Biology I 3
BIOL 212 Principles of Biology II 3
MICRO 302 Biology of Microorganisms 3
MICRO 302L Microbiology Laboratory 1

Total Credits 13

Food science and industry option:

BBMB 301 Survey of Biochemistry 3
BIOL 211 Principles of Biology I 3
BIOL 212 Principles of Biology II 3
MICRO 201 Introduction to Microbiology 2-3
or MICRO 302 Biology of Microorganisms
MICRO 201L Introductory Microbiology Laboratory 1
or MICRO 302L Microbiology Laboratory

Total Credits 12-13

Food Science and Human Nutrition: 44 cr.

FS HN 101 Food and the Consumer 3
FS HN 110 Professional and Educational Preparation 1
FS HN 167 Introduction to Human Nutrition 3
FS HN 203 Contemporary Issues in Food Science and Human Nutrition 1

FS HN 311 Food Chemistry 3
FS HN 311L Food Chemistry Laboratory 1
FS HN 351 Introduction to Food Engineering Concepts 3
FS HN 403 Food Laws, Regulations, and the Regulatory Process 2
FS HN 405 Food Quality Assurance 3
FS HN 406 Sensory Evaluation of Food 3
FS HN 410 Food Analysis 3
FS HN 411 Food Ingredient Interactions and Formulations 2
FS HN 412 Food Product Development 3
FS HN 420 Food Microbiology 3
FS HN 421 Food Microbiology Laboratory 3
FS HN 471 Food Processing I 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS HN 472</td>
<td>Food Processing II</td>
<td>3</td>
</tr>
<tr>
<td>FS HN 480</td>
<td>Professional Communication in Food Science and Human Nutrition</td>
<td>1</td>
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<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>44</strong></td>
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**Food science and industry option:**

Select 6 credits from the following business courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ACCT 215</td>
<td>Legal Environment of Business</td>
</tr>
<tr>
<td>ACCT 284</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>ACCT 285</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>ECON 301</td>
<td>Intermediate Microeconomics</td>
</tr>
<tr>
<td>ECON 320</td>
<td>Labor Economics</td>
</tr>
<tr>
<td>MGMT 310</td>
<td>Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>MGMT 370</td>
<td>Management of Organizations</td>
</tr>
<tr>
<td>MGMT 371</td>
<td>Organizational Behavior</td>
</tr>
<tr>
<td>MGMT 414</td>
<td>International Management</td>
</tr>
<tr>
<td>MGMT 472</td>
<td>Management of Diversity</td>
</tr>
<tr>
<td>MIS 301</td>
<td>Management Information Systems</td>
</tr>
<tr>
<td>MKT 340</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>MKT 447</td>
<td>Consumer Behavior</td>
</tr>
<tr>
<td>MKT 448</td>
<td>Global Marketing</td>
</tr>
</tbody>
</table>

**Total Credits**

6

**Electives:** 0-23 cr. Select from any university coursework to earn at least 120 total credits.

Go to FS HN courses.