Food Science

Department Information

- **Department Web Site:**
  www.ag.ndsu.edu/plantsciences/ (http://www.ag.ndsu.edu/plantsciences/)
- **Credential Offered:**
  B.S.
- **Sample Program Guide:**
  catalog.ndsu.edu/programs-study/undergraduate/food-science/#planofstudytext (http://catalog.ndsu.edu/programs-study/undergraduate/food-science/#planofstudytext)

Major Requirements

Major: Food Science

Degree Type: B.S.
Minimum Degree Credits to Graduate: 120

University Degree Requirements

1. Satisfactory completion of all requirements of the curriculum in which one is enrolled.
2. Earn a minimum total of 120 credits in approved coursework. Some academic programs exceed this minimum.
3. Satisfactory completion of the general education requirements as specified by the university.
4. A minimum institutional GPA of 2.00 based on work taken at NDSU.
5. At least 30 credits must be NDSU resident credits. Resident credits include credits registered and paid for at NDSU.
6. At least 36 credits presented for graduation must be in courses numbered 300 or higher.
7. Students presenting transfer credit must meet the NDSU residence credits and the minimum upper level credit. Of the 30 credits earned in residence, a minimum of 15 semester credits must be in courses numbered 300 or above, and 15 semester credits must be in the student’s curricula for their declared major.

For complete information, please refer to the Degree and Graduation Requirements (http://catalog.ndsu.edu/academic-policies/undergraduate-policies/degree-and-graduation/) section of this Bulletin.

University General Education Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENGL 110</td>
<td>College Composition I</td>
<td>12</td>
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<tr>
<td>ENGL 120</td>
<td>College Composition II</td>
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<tr>
<td>COMM 110</td>
<td>Fundamentals of Public Speaking</td>
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</table>

Upper Division Writing

Quantitative Reasoning (R)

Science and Technology (S)

Humanities and Fine Arts (A)

Social and Behavioral Sciences (B)

Wellness (W)

Cultural Diversity (D)

Global Perspectives (G)

Total Credits: 39

* May be satisfied by completing courses in another General Education category.

† General education courses may be used to satisfy requirements for both general education and the major, minor, and program emphases, where applicable. Students should carefully review major requirements to determine if specific courses can also satisfy these general education categories.
Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PLSC 189</td>
<td>Skills for Academic Success</td>
<td>1</td>
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<tr>
<td>ANSC 340</td>
<td>Principles of Meat Science</td>
<td>3</td>
</tr>
<tr>
<td>CFS 210</td>
<td>Introduction to Food Science and Technology</td>
<td>3</td>
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<tr>
<td>CFS 370</td>
<td>Food Processing I</td>
<td>3</td>
</tr>
<tr>
<td>CFS 430</td>
<td>Food Unit Operations</td>
<td>3</td>
</tr>
<tr>
<td>CFS 450</td>
<td>Cereal Technology</td>
<td>3</td>
</tr>
<tr>
<td>CFS 452</td>
<td>Food Laws and Regulations</td>
<td>3</td>
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<tr>
<td>MICR 453</td>
<td>Food Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>CFS 460</td>
<td>Food Chemistry</td>
<td>3</td>
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<tr>
<td>CFS 461</td>
<td>Food Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CFS 464</td>
<td>Food Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CFS 470</td>
<td>Food Processing II</td>
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<tr>
<td>CFS 471</td>
<td>Food Processing Laboratory</td>
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<tr>
<td>CFS 473</td>
<td>Food Safety</td>
<td>3</td>
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<tr>
<td>CFS 474</td>
<td>Sensory Science of Foods</td>
<td>3</td>
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<tr>
<td>CFS 480</td>
<td>Food Product Development (Capstone)</td>
<td>3</td>
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</table>

Select one of the following: 3-4

- BIOC 260 Elements of Biochemistry
- BIOC 460 & 460L Foundations of Biochemistry and Molecular Biology I and Foundations of Biochemistry I Laboratory
- BIOL 150 General Biology I
- BIOL 151 General Biology II
- CHEM 121 General Chemistry I & 121L and General Chemistry I Laboratory (May satisfy general education category S)
- CHEM 122 General Chemistry II & 122L and General Chemistry II Laboratory (May satisfy general education category S)
- CHEM 341 & 341L Organic Chemistry I and Organic Chemistry I Laboratory
- CSCI 114 or TL 116 Computer Applications (May satisfy general education category S) Business Software Applications
- ECON 201 Principles of Microeconomics (May satisfy general education category B and G)
- HNES 250 Nutrition Science (May satisfy general education category W)
- MATH 146 or MATH 165 Applied Calculus I (May satisfy general education category R) Calculus I
- MICR 350 & 350L General Microbiology and General Microbiology Lab
- PHYS 211 & 211L College Physics I and College Physics I Laboratory (May satisfy general education category S)
- STAT 330 Introductory Statistics (May satisfy general education category R)

Total Credits 88-89

PLSC 189 is only required for first-time, first-year students—A first-time, first-year student is defined as a student who has not yet completed a college course as a college student. Students that are not first-time, first-year students that either transfer into the university or change their major are not required to take PLSC 189.
Degree Requirements and Notes:
- A 2.00 cumulative GPA is required for graduation and to remain in program.
- The department would highly recommend students consider taking CFS 462 Food Ingredient Technology and CFS 472 Cereal and Food Fermentation as electives courses for the degree.