# Food Science and Technology - BS, Food Industry Option

## Program Requirements

### First Year

- **Fall**
  - CHEM 119: Fundamentals of Chemistry I, 4 credits
  - ENGL 103 or ENGL 104: Introduction to Rhetoric and Composition or Composition and Rhetoric, 3 credits
  - FSTC 201: Food Science, 3 credits
  - FSTC 210 / NUTR 210: Horizons in Nutrition and Food Science, 2 credits
  - Mathematics (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics), 3 credits

  **Semester Credit Hours**: 15

- **Spring**
  - CHEM 120: Fundamentals of Chemistry II, 4 credits
  - Select one of the following:
    - AGEC 105: Introduction to Agricultural Economics, 3 credits
    - ECON 202: Principles of Economics, 3 credits
    - ECON 203: Principles of Economics, 3 credits
  - American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history), 3 credits
  - Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture), 3 credits
  - Mathematics (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics), 3 credits

  **Semester Credit Hours**: 16

### Second Year

- **Fall**
  - BIOL 111: Introductory Biology I, 4 credits
  - CHEM 227: Organic Chemistry I, 3 credits
  - CHEM 237: Organic Chemistry Laboratory, 1 credit
  - NUTR 202 or NUTR 203: Fundamentals of Human Nutrition or Scientific Principles of Human Nutrition, 3 credits
  - POLS 206: American National Government, 3 credits

  **Semester Credit Hours**: 14

- **Spring**
  - ACCT 209: Survey of Accounting Principles, 3 credits
  - PHYS 201: College Physics, 4 credits
  - American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history), 3 credits

  **Semester Credit Hours**: 14

### Third Year

- **Fall**
  - ENGL 210: Technical and Professional Writing, 3 credits
  - FSTC 311: Principles of Food Processing, 3 credits
  - POLS 207: State and Local Government, 3 credits
  - Select one of the following:
    - ANSC 307 / FSTC 307: Meats
    - ANSC 457 / FSTC 457: Hazard Analysis and Critical Control Point System
    - FSTC 305: Fundamental Baking
    - FSTC 320 / NUTR 320: Understanding Obesity - A Social and Scientific Challenge
    - FSTC 324: Food Safety and Preventive Controls for Human Food
    - FSTC 406 / POSC 406: Poultry Further Processing
    - FSTC 420: Supervised Research in Mediterranean Nutrition and Food Processing in Italy
    - FSTC 422: Food Processing for Sustainable Nutrition in Brazil
    - FSTC 457 / ANSC 457: Hazard Analysis and Critical Control Point System
    - FSTC 485: Directed Studies
    - FSTC 489: Special Topics in...
    - FSTC 491: Research
    - HORT 419: Viticulture and Small Fruit Culture
    - HORT 420: Concepts of Wine Production
    - HORT 421: Enology
    - NUTR 211: Scientific Principles of Foods
    - NUTR 300: Religious and Ethnic Foods
    - NUTR 410 / FSTC 410: Nutritional Pharmacometrics of Food Compounds
    - General elective, 3 credits

  **Semester Credit Hours**: 16

- **Spring**
  - AGEC 314: Marketing Agricultural and Food Products, 3 credits
  - FSTC 312: Food Chemistry, 3 credits
  - FSTC 313: Food Chemistry Laboratory, 1 credit
  - MGMT 309: Survey of Management, 3 credits
  - Select one of the following:
    - STAT 301: Introduction to Biometry
    - STAT 302: Statistical Methods
    - STAT 303: Statistical Methods
    - General elective, 3 credits

  **Semester Credit Hours**: 14

### Fourth Year

- **Fall**
  - FSTC 314: Food Analysis, 3 credits

  **Semester Credit Hours**: 14

Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts), 3 credits

General elective, 3 credits

**Semester Credit Hours**: 3

**Semester Credit Hours**: 3

**Semester Credit Hours**: 16

**Semester Credit Hours**: 16

**Semester Credit Hours**: 3

**Semester Credit Hours**: 3

**Semester Credit Hours**: 1

**Semester Credit Hours**: 14
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</table>
| AGSM 315/  
FSTC 315  | Food Process Engineering Technology                  | 3            |
| ANSC 326/  
FSTC 326  | Food Bacteriology                                    | 3            |
| ANSC 327/  
FSTC 327  | Food Bacteriology Lab                                | 1            |

Select one of the following: 3

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credit Hours</th>
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</thead>
</table>
| ANSC 307/  
FSTC 307  | Meats                               |              |
| ANSC 457/  
FSTC 457  | Hazard Analysis and Critical Control  
Point System                      |              |
| FSTC 305    | Fundamental Baking                  |              |
| FSTC 320/  
NUTR 320  | Understanding Obesity - A Social and Scientific Challenge | |
| FSTC 324    | Food Safety and Preventive Controls for Human Food   |              |
| FSTC 406/  
POSC 406  | Poultry Further Processing          |              |
| FSTC 420    | Supervised Research in Mediterranean Nutrition and Food Processing in Italy | |
| FSTC 422    | Food Processing for Sustainable Nutrition in Brazil | |
| FSTC 457/  
ANSC 457  | Hazard Analysis and Critical Control Point System | |
| FSTC 485    | Directed Studies                     |              |
| FSTC 489    | Special Topics in...                 |              |
| FSTC 491    | Research                             |              |
| HORT 419    | Viticulture and Small Fruit Culture   |              |
| HORT 420    | Concepts of Wine Production           |              |
| HORT 421    | Enology                              |              |
| NUTR 211    | Scientific Principles of Foods       |              |
| NUTR 300    | Religious and Ethnic Foods           |              |
| NUTR 410/  
FSTC 410  | Nutritional Pharmacometrics of Food Compounds         |              |

**Semester Credit Hours** 13

**Spring**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>BICH 303</td>
<td>Elements of Biological Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>or BICH 410</td>
<td>Comprehensive Biochemistry I</td>
<td></td>
</tr>
<tr>
<td>FSTC 401</td>
<td>Food Product Development</td>
<td>3</td>
</tr>
<tr>
<td>FSTC 444</td>
<td>Fundamentals of Food Law</td>
<td>3</td>
</tr>
<tr>
<td>FSTC 481</td>
<td>Seminar</td>
<td>1</td>
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<tr>
<td>General electives 3</td>
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**Semester Credit Hours** 16

**Total Semester Credit Hours** 120

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1. MATH prefix required.
2. The Graduation requirements include a requirement for 3 hours of International and Cultural Diversity (http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/) and 3 hours of Cultural Discourse (http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/). Selection must be from courses on the approved list. Selection can be courses that also satisfy the requirement for social and behavioral sciences; creative arts; language, philosophy and culture; or electives. For more information on core requirements visit the University Core Curriculum (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/)
3. Students may achieve a business minor by taking the following courses as general electives: ISTM 209, MGMT 209, FINC 409, MKTG 409.

A total of 120 hours is required for graduation; 36 hours of 300/400 level courses are required to meet the Texas A&M University residency requirement.