FOOD SCIENCE: FOOD INDUSTRY, BSAG

Requirements for Students Matriculating in or before Academic Year 2019-2020. Learn more about University Academic Regulation 3.1 (http://catalog.okstate.edu/university-academic-regulations/#matriculation).

Minimum Overall Grade Point Average: 2.00
Total Hours: 120

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 1113</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>or ENGL 1313</td>
<td>Critical Analysis and Writing I</td>
<td>3</td>
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Select one of the following:

- ENGL 1213 | Composition II                                           | 3     |
- ENGL 1413 | Critical Analysis and Writing II                          | 3     |
- ENGL 3323 | Technical Writing                                         | 3     |

American History & Government
Select one of the following:

- HIST 1103 | Survey of American History                              | 3     |
- HIST 1483 | American History to 1865 (H)                             | 3     |
- HIST 1493 | American History Since 1865 (DH)                        | 3     |
- POLS 1113 | American Government                                      | 3     |

Analytical & Quantitative Thought (A)
Select one of the following:

- MATH 1513 | College Algebra (A)                                      | 3     |
- or MATH 1483 | Mathematical Functions and Their Uses (A)               | 3     |

Select one of the following:

- MATH 1613 | Trigonometry (A)                                         | 3     |
- STAT 2013 | Elementary Statistics (A)                               | 3     |
- STAT 2023 | Elementary Statistics for Business and Economics (A)   | 3     |

Humanities (H)
Courses designated (H)                                             6

Natural Sciences (N)
Must include one Laboratory Science (L) course
- BIOL 1114 | Introductory Biology (LN)                                | 4     |

Any course designated (N)                                         3

Social & Behavioral Sciences (S)
- AGEC 1113 | Introduction to Agricultural Economics (S)               | 3     |
- or ECON 2103 | Introduction to Microeconomics (S)                      | 3     |

Additional General Education
Courses designated (A), (H), (N), or (S)                          6

Hours Subtotal                                                   40

Diversity (D) & International Dimension (I)
May be completed in any part of the degree plan
Select at least one Diversity (D) course
Select at least one International Dimension (I) course

College/Departmental Requirements

Agricultural Sciences and Natural Resources
- AG 1011 | First Year Seminar                                       | 1     |
- ANSI 2111 | Animal and Food Science Professional Development        | 1     |
- ANSI 2253 | Meat Animal and Carcass Evaluation                      | 3     |
- or ANSI 2233 | The Meat We Eat                                       | 3     |
- FDSC 1133 | Fundamentals of Food Science                            | 3     |
- CHEM 1215 | Chemical Principles I (LN)                              | 4     |
- or CHEM 1314 | Chemistry I (LN)                                        | 4     |
- CHEM 1225 | Chemical Principles II (LN)                             | 5     |
- or CHEM 1515 | Chemistry II (LN)                                      | 5     |
- MICR 2123 | Introduction to Microbiology                            | 3     |
- MICR 2132 | Introduction to Microbiology Laboratory                  | 2     |

Select one of the following:

- ENVR 1113 | Elements of Environmental Science                       | 3     |
- HORT 1013 | Principles of Horticultural Science (LN)               | 3     |
- BIOL 2344 | Chemistry and Applications of Biomolecules             | 3     |
- PLNT 1213 | Introduction to Plant and Soil Systems                  | 3     |
- SOIL 1113 | Land, Life and the Environment (N)                      | 3     |
- SOIL 2124 | Fundamentals of Soil Science (N)                        | 3     |

Written and Oral Communications
- AGCM 3103 | Written Communications in Agricultural Sciences and Natural Resources (S) | 3 |
- or ENGL 3323 | Technical Writing                                      | 3     |

Select one of the following:

- AGCM 3203 | Oral Communications in Agricultural Sciences & Natural Resources (S) | 3 |
- SPCH 2713 | Introduction to Speech Communication (S)                | 3     |
- SPCH 3733 | Elements of Persuasion (S)                              | 3     |

Hours Subtotal                                                   31

Major Requirements

Core Courses
- ANSI 4863 | Capstone for Animal Agriculture                         | 3     |
- FDSC 3113 | Quality Control                                         | 3     |
- FDSC 3123 | HACCP in the Food Industry                              | 3     |
- FDSC 3154 | Food Microbiology                                       | 4     |
- FDSC 3373 | Food Chemistry I                                        | 3     |
- FDSC 4763 | Analysis of Food Products                                | 3     |
- FDSC 4910 | Food Industry Internship                                | 3     |
- HORT 3213 | Fruit and Nut Production                                | 3     |
- NSCI 3223 | Nutrition Across the Life Span                          | 3     |
- or ANSI 3543 | Principles of Animal Nutrition                        | 3     |

Select 12 hours of the following:

- AST 4123 | Principles of Food Engineering                          | 3     |
- ANSI 3232 | Advanced Meat Evaluation                                 | 3     |
- ANSI 3310 | Advanced Competitive Evaluation                         | 3     |
- ANSI 3333 | Meat Science                                             | 3     |
- FDSC 3603 | Processing Dairy Foods                                  | 3     |
- FDSC 4113 | Quality Control II                                      | 3     |
- FDSC 4143 | Food Safety Modernization Act                           | 3     |
- FDSC 4153 | Advanced Food Microbiology                              | 3     |
- FDSC 4233 | Food Safety Audit Schemes                               | 3     |
FDSC 4253 Pre-Harvest Food Safety
FDSC 4333 Processed Meat
FDSC 4910 Food Industry Internship
MICR 3033 Cell and Molecular Biology
MICR 3223 Advanced Microbiology
NSCI 3543 Food and the Human Environment (IS)
NSCI 3223 Nutrition Across the Life Span

Related Courses
Select 9 hours of the following: 9

ANSI 3903 Agricultural Animals of the World (I) (or any course designated (I))

ACCT, AGEC, ANSI, AGCM, FDSC, HORT, HTM, PLNT, MICR, MGMT, MKTG, MATH, NSCI, STAT, Foreign Language

Hours Subtotal 49

Electives
Select 0 hours or hours to complete required total for degree 0

Total Hours 120

1 College & Departmental requirements that may be used to meet GE requirements.
2 If used for (N) requirement, hours in this block are reduced by CHEM course hours.
3 If ENGL 3323 Technical Writing is substituted for ENGL 1213 Composition II above; hours in this block are reduced by 3.
4 If used as (S) course above, hours in this block reduced by 3.

Other Requirements
• A minimum of 40 semester credit hours and 100 grade points must be earned in courses numbered 3000 or above.
• A 2.00 GPA or higher in upper-division hours.

Additional State/OSU Requirements
• At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
• Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
• Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
• Degrees that follow this plan must be completed by the end of Summer 2025.