FOOD SCIENCE, BS

REQUIREMENTS

UNIVERSITY REQUIREMENTS

All undergraduate students must complete both the following Core General Education (Core GenEd) and University Degree and Quality of Work requirements. The requirements below apply to students whose first term at UW-Madison or whose earliest post-high school college attendance at any institution is Summer 2026 or later.

Students whose first term at UW-Madison or whose earliest post-high school college attendance at any institution occurred before Summer 2026 should refer to the archived Guide (https://guide.wisc.edu/archive/) for the requirements that apply to them.

CORE GENERAL EDUCATION (CORE GENED) REQUIREMENTS

Civics & Perspectives	3 credits of Civics & Perspectives coursework.
Communicatio & Literacy	6 credits of Communication & Literacy coursework. This requirement may be partially satisfied by a qualifying placement test score. For more information see this tiny url:
Humanities & Arts	6 credits of Humanities & Arts coursework.
Mathematics & Quantitative Reasoning	6 credits of Mathematics & Quantitative Reasoning coursework. This requirement may be partially satisfied by a qualifying placement test score. For more information see this tiny url:
Natural Science & Wellness	Complete both: • 6 credits of Natural Science & Wellness or Natural Science & Wellness + Laboratory coursework. • one course must be in Natural Science & Wellness + Laboratory coursework.
Social & Behavioral Science	3 credits of Social & Behavioral Science coursework.
Total Credits	30 credits.

For more information see [this url].

UNIVERSITY DEGREE AND QUALITY OF WORK REQUIREMENTS

All undergraduate degree recipients must complete the following minimum requirements. Requirements for some programs will exceed these requirements; see program requirements for additional information.

Total Degree	120 degree credits.
Residency	Complete 30 credits in residence. A course is considered "in residence" if it is taken when in undergraduate degree-seeking status and: • is offered by UW-Madison and completed on the UW-Madison campus or at an approved off-site location, or • is offered by UW-Madison in an online or distance format, or is completed during participation in a UW-Madison study abroad/study away program.
Quality of Work	Achieve at least the minimum grade point average specified by the school, college, and/or academic program.
Math	Demonstrate minimal mathematics competence by: • placing above MATH 96, • successfully completing MATH 96 at UW-Madison, or • transferring the equivalent of MATH 96 or a more advanced mathematics course from another institution (content such as MATH 112, 114, 211, 221, 222, 234).
English Language	If required to take the UW-Madison English as a Second Language Assessment Test (MSN-ESLAT), demonstrate minimal English language competence by: • earning credit for ESL 118 at UW-Madison, or • achieving a qualifying MSN-ESLAT placement test score.
Language	Complete one: • 2 high school units of a single language other than English, or • one course with the second semester Language designation.
Major Declaration	Declare and complete the requirements for at least one major.

COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies, Science, and Capstone), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

COLLEGE REQUIREMENTS FOR ALL CALS BS DEGREE PROGRAMS

Code	Title	Credits
Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.		

Residency: Students must complete 30 degree credits in residence at UW–Madison after earning 86 credits toward their undergraduate degree.		
First year seminar (https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSFirstYearSeminarCourses)		1
International studies (https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSInternationalStudiesCourses)		3
Physical science fundamentals		4-5
CHEM 103	General Chemistry I	
or CHEM 108	Chemistry in Our World	
or CHEM 109	Advanced General Chemistry	
Biological science		5
Additional science (biological, physical, or natural)		3
Science breadth (biological, physical, natural, or social)		3
CALS Capstone Learning Experience: included in the requirements for each CALS major (see "major requirements") (https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSCapstoneRequirement)		

MAJOR REQUIREMENTS

NUTR SCI/A A E 350 World Hunger and Malnutrition is recommended to fulfill the CALS international studies requirement.

Code	Title	Credits
Mathematics and Statistics		
This major requires calculus. Prerequisites may need to taken before enrollment in calculus.		
Complete one of the following:		5
MATH 217		
MATH 221	Calculus and Analytic Geometry 1	
Complete one of the following:		3
STAT 301	Introduction to Statistical Methods	
STAT 371	Introductory Applied Statistics for the Life Sciences	
Chemistry		
General Chemistry		
Complete one of the following:		5-9
CHEM 103 & CHEM 104	General Chemistry I and General Chemistry II	
CHEM 109	Advanced General Chemistry	
Organic Chemistry		
CHEM 343	Organic Chemistry I	3
Physics		
Complete one of the following:		4-5
PHYSICS 103	General Physics	
PHYSICS 201	General Physics	
PHYSICS 207	General Physics	
Biology		
Introductory Biology		
BIOLOGY/BOTANY/ZOOLOGY 151	Introductory Biology	5
Fundamental Biological Sciences		
MICROBIO 101	General Microbiology	3
or MICROBIO 303	Biology of Microorganisms	
MICROBIO 102	General Microbiology Laboratory	2
or MICROBIO 304	Biology of Microorganisms Laboratory	
BIOCHEM 501	Introduction to Biochemistry	3
Nutritional Science		
NUTR SCI/BIOCHEM 510	Nutritional Biochemistry and Metabolism	3
or NUTR SCI 332	Human Nutritional Needs	
Core		
FOOD SCI 301	Introduction to the Science and Technology of Food	3
AN SCI/FOOD SCI 321	Food Laws and Regulations	1
FOOD SCI/MICROBIO 324	Food Microbiology Laboratory	2
FOOD SCI/MICROBIO 325	Food Microbiology	3
FOOD SCI 410	Food Chemistry	3
FOOD SCI 412	Food Analysis	4
FOOD SCI 432	Principles of Food Preservation	3
FOOD SCI 440	Principles of Food Engineering	3
FOOD SCI 514	Integrated Food Functionality	4
FOOD SCI 532	Integrated Food Manufacturing	4
Integrated Food Product Elective		
Complete one of the following (2 credits minimum):		2
FOOD SCI 511	Chemistry and Technology of Dairy Products	
FOOD SCI/AN SCI 515	Commercial Meat Processing	
FOOD SCI 535	Confectionery Science and Technology	
Capstone		
FOOD SCI 602	Senior Project	2
FOOD SCI 603	Senior Seminar	1
Total Credits		**71-76**