NUTRITIONAL SCIENCES, 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. More information: https://go.wisc.edu/qualifyingenglishplacement (https://go.wisc.edu/qualifyingenglishplacement/)
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. More information: https://go.wisc.edu/qualifyingmathplacement (https://go.wisc.edu/qualifyingmathplacement/)
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 the policy (https://policy.wisc.edu/library/UW-1095/).

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, or, • successfully completing MATH 96, or • successfully completing a more advanced mathematics course such as MATH 112, MATH 113, MATH 114, MATH 141, MATH 211, or MATH 221.
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, 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

CALS GRADUATION REQUIREMENTS

Cumulative Credits	• Students must earn 120 degree credits. • Students declared in Biological Systems Engineering BS must earn 125 degree 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.

In addition to the university's general requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Courses may not double count within university requirements, CALS college requirements, or major requirements. A course may count toward university requirements and a college and/or a major requirement; similarly, a course counted toward college requirements may also be used to satisfy a university and/or a major requirement.

CALS COLLEGE REQUIREMENTS

CALS First-Year Seminar	1 credit. See the full list of eligible courses below or use this link: https://go.wisc.edu/calsfirstyearseminars (https://go.wisc.edu/calsfirstyearseminars/)
Ethnic Studies	3 credits with the Ethnic Studies designation.
Communication A	Complete either: • 1 course with the Communication A designation, or • satisfaction of Communication A based on UW Placement Test.
Quantitative Reasoning A	Complete either: • 1 course with the Quantitative Reasoning A designation, or • satisfaction of Quantitative Reasoning A based on UW Placement Test.
Introductory Chemistry	Complete one: • CHEM 103 • CHEM 108 • CHEM 109
CALS International Comparisons	3 credits. See the full list of eligible courses below or use this link: https://go.wisc.edu/calsinternationalcomparisons (https://go.wisc.edu/calsinternationalcomparisons/)
Communication B	1 course with the Communication B designation.
Quantitative Reasoning B	1 course with the Quantitative Reasoning B designation.
Biological Science	5 credits with the Biological Science designation.
Additional Science	3 credits with the Biological, Physical, or Natural Science designations.
Science Breadth	3 credits with the Biological, Physical, Natural, or Social Science designations.
Humanities	6 credits with the Humanities or Literature designation.
Social Sciences	3 credits with the Social Sciences designation.
Capstone Learning Experience	Each major articulates the required capstone learning experience.

CALS First-Year Seminars

Code	Title	Credits
AN SCI 135	Grand Challenges and Career Opportunities in Animal and Dairy Sciences	1
BIOCHEM 100	Biochemistry First-Year Seminar	1
COUN PSY 125	The Wisconsin Experience Seminar	1
F&W ECOL 101	Orientation to Wildlife Ecology	1
F&W ECOL 105	Environment, Pollutants, and You	3
GENETICS 155	Freshman Seminar in Genetics	1
INTEGSCI 100	Exploring Biology	2
INTEGSCI 140	Exploring Service in STEM	1
INTER-AG 155	Issues in Agriculture, Environment, and Life Sciences	1
LSC 155	First-Year Seminar in Science Communication	1
MICROBIO 150	Microbiomes and Microbiology - First-Year Seminar	1
PLANTSCI/ AGROECOL 100	First-Year Seminar in Agroecology and Plant Science	1
PL PATH 155	Food Frontlines: Security, Sustainability, and Survival	1
SOIL SCI 155	First-year Seminar in Soil and Environmental Sciences	1
Learning Community/Student Group Courses		
The following learning community/student group courses are approved as CALS First-Year Seminars.		
COUN PSY 117	PEOPLE First Year Seminar	1
INTEGSCI 110	BioHouse Seminar: Biology for the 21st Century	1
INTER-AG 117	GreenHouse Roots Seminar	1
INTER-AG 140	CALS QuickStart: Foundations	1
INTER-AG 175	WISE Seminar	1

CALS International Comparisons

Code	Title	Credits
The 3 credit requirement may be fulfilled as either a stand-alone 3 credit course or as a set of courses as listed below.		
A A E/ENVIR ST 244	The Environment and the Global Economy	4
A A E 319	The International Agricultural Economy	3
A A E/ NUTR SCI 350	World Hunger and Malnutrition	3
A A E 352	Global Health: Economics, Natural Systems, and Policy (approved for enrollments Summer 2021 and later)	4
A A E/INTL ST 373	Globalization, Poverty and Development	3
A A E/INTL ST 374	The Growth and Development of Nations in the Global Economy	3
A A E/ECON 473	Economic Growth and Development in Southeast Asia	3
A A E/ECON 474	Economic Problems of Developing Areas	3
A A E/ECON/ INTL BUS 462	Latin American Economic Development	3
A A E/ECON 477	Agricultural and Economic Development in Africa	3
AGROECOL 377	Global Food Production and Health	3
AN SCI/DY SCI 370	Livestock Production and Health in Agricultural Development	3
ASIAN/HISTORY/ POLI SCI 255	Introduction to East Asian Civilizations (approved for enrollments Summer 2021 and later)	3-4
C&E SOC/SOC 341	Labor in Global Food Systems (approved for enrollments Summer 2020 and later)	3
C&E SOC/ENVIR ST/ SOC 540	Sociology of International Development, Environment, and Sustainability	3

CSCS 500	Global Health and Communities: From Research to Praxis	3
DY SCI 471	Food Production Systems and Sustainability	3
ENTOM/ ENVIR ST 201	Insects and Human Culture-a Survey Course in Entomology	3
ENTOM/ ENVIR ST 205	Our Planet, Our Health (approved for enrollments Fall 2026 and later)	3
ENTOM/ ZOOLOGY 371	Medical Entomology: Biology of Vector and Vector-borne Diseases	3
F&W ECOL/ ENVIR ST 100	Forests of the World (approved for enrollments Summer 2020 and later)	3
F&W ECOL/ ENVIR ST/ ZOOLOGY 360	Extinction of Species	3
LSC 251	Science, Media and Society (approved for enrollments Summer 2020 and later)	3
PL PATH/ BOTANY 123	Plants, Parasites, and People	3
PL PATH 311	Global Food Security	3
PLANTSCI 370	World Vegetable Crops	3
The following study abroad courses fulfill the CALS International Comparisons requirement. Only the specific course numbers and titles listed, including Topics titles (in parentheses), are approved to meet the CALS International Comparisons requirement.		
BIOCHEM 307	Study Abroad: Introduction to Biological Sciences Research in Japan (approved for enrollments Fall 2026 and later)	3
NUTR SCI/INTER-AG 421	Global Health Field Experience (UW Mobile Clinics and Health Care in Uganda)	3
INTER-AG 321 & INTER-AG/ NUTR SCI 421	Study Abroad Pre-Departure Seminar and Global Health Field Experience (UW Global Health Community Health and Asset-Based Community Development in Sri Lanka)	3
INTER-AG 321 & INTER-AG/ NUTR SCI 421	Study Abroad Pre-Departure Seminar and Global Health Field Experience (UW Agriculture, Health and Nutrition in Uganda)	3
INTER-AG/ NUTR SCI 421	Global Health Field Experience (UW Health, Education and Tanzanian Culture)	3

MAJOR REQUIREMENTS

Code	Title	Credits
Mathematics and Statistics		
Complete one of the following (or may be satisfied by placement exam):		5-6
MATH 112 & MATH 113	College Algebra and Trigonometry	
MATH 114	Precalculus	
MATH 221	Calculus and Analytic Geometry 1	
Complete one of the following:		3-5
STAT 301	Introduction to Statistical Methods	
STAT 371	Introductory Applied Statistics for the Life Sciences	
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
CHEM 344	Introductory Organic Chemistry Laboratory	2
CHEM 345	Organic Chemistry II	3
Introductory Biology		
Complete one of the following options:		10
Option 1:		
BOTANY/ BIOLOGY 130	General Botany	
ZOOLOGY/ BIOLOGY 101	Animal Biology	
ZOOLOGY/ BIOLOGY 102	Animal Biology Laboratory	
Option 2:		
BIOLOGY/ BOTANY/ ZOOLOGY 151	Introductory Biology	
BIOLOGY/ BOTANY/ ZOOLOGY 152	Introductory Biology	
Option 3:		
BIOCORE 381	Evolution, Ecology, and Genetics	
BIOCORE 382	Evolution, Ecology, and Genetics Laboratory	
BIOCORE 383	Cellular Biology	
BIOCORE 384	Cellular Biology Laboratory	
Nutritional Sciences Biology		
Complete one of the following options:		8-13
Option 1:		
ANAT&PHY 335	Physiology	
GENETICS 466	Principles of Genetics	
And complete one of the following:		
MICROBIO 101 & MICROBIO 102	General Microbiology and General Microbiology Laboratory	
MICROBIO 303 & MICROBIO 304	Biology of Microorganisms and Biology of Microorganisms Laboratory	
Option 2 (If the Biocore sequence is taken to fulfill the first biology requirement, it must be taken to fulfill the second biology requirement)		
BIOCORE 485	Principles of Physiology	
BIOCORE 486	Principles of Physiology Laboratory	

BIOCORE 587	Biological Interactions	
Physics		
Complete one of the following:		8-10
PHYSICS 103 & PHYSICS 104	General Physics and General Physics	
PHYSICS 201 & PHYSICS 202	General Physics and General Physics	
PHYSICS 207 & PHYSICS 208	General Physics and General Physics	
Core		
NUTR SCI/AN SCI/ DY SCI 311	Comparative Animal Nutrition	3
or NUTR SCI 332	Human Nutritional Needs	
NUTR SCI 431	Nutrition in the Life Span	3
BIOCHEM/NUTR SCI 510	Nutritional Biochemistry and Metabolism	3
Complete one of the following:		3-7
BIOCHEM 501	Introduction to Biochemistry	
BIOCHEM 507 & BIOCHEM 508	General Biochemistry I and General Biochemistry II	
Electives within the Major		
Complete 6 credits from the following:		6
A A E/ NUTR SCI 350	World Hunger and Malnutrition	
ANAT&PHY 337	Human Anatomy	
ANAT&PHY 338	Human Anatomy Laboratory	
ANTHRO 365	Medical Anthropology	
BIOCHEM/ NUTR SCI 560	Principles of Human Disease and Biotechnology	
BIOCHEM/ M M & I 575	Biology of Viruses	
BIOCHEM/ NUTR SCI 645	Molecular Control of Metabolism and Metabolic Disease	
C&E SOC/ SOC 533	Public Health in Rural & Urban Communities	
CHEM 311	Chemistry Across the Periodic Table	
CHEM 327	Fundamentals of Analytical Science	
CHEM 329	Fundamentals of Analytical Science	
DY SCI 378	Lactation Physiology	
FOOD SCI/ AN SCI 321	Food Laws and Regulations	
FOOD SCI/ MICROBIO 325	Food Microbiology	
GENETICS 545	Genetics Laboratory	
PLANTSCI 338	Plant Breeding and Biotechnology	
PLANTSCI 360	Genetically Modified Crops: Science, Regulation & Controversy	
MED HIST/ PHILOS 515	Public Health Ethics	
MED HIST/ PHILOS 558	Ethical Issues in Health Care	
M M & I/PATH-BIO 528	Immunology	
NUTR SCI 375	Special Topics	
NUTR SCI 377	Cultural Aspects of Food and Nutrition	
NUTR SCI 379	Introduction to Epidemiology	
NUTR SCI/INTER-AG 421	Global Health Field Experience	
NUTR SCI/ KINES 525	Nutrition in Physical Activity and Health	
NUTR SCI 500	Undergraduate Capstone Seminar Laboratory	
NUTR SCI 540	Community Nutrition and Health Equity	
NUTR SCI 618	Research Approaches in the Era of Precision Nutrition	
NUTR SCI/ BIOCHEM 619	Advanced Nutrition: Intermediary Metabolism of Macronutrients	
NUTR SCI/ POP HLTH 621	Introduction to Nutritional Epidemiology	
NUTR SCI 627	Advanced Nutrition: Vitamins	
NUTR SCI 631	Clinical Nutrition I	
NUTR SCI 681 & NUTR SCI 682	Senior Honors Thesis and Senior Honors Thesis	
NUTR SCI 691 & NUTR SCI 692	Senior Thesis-Nutrition and Senior Thesis	
NUTR SCI 699	Special Problems	
ONCOLOGY 401	Introduction to Experimental Oncology	
PATH 404	Pathophysiologic Principles of Human Diseases	
POP HLTH/ C&E SOC 370	Introduction to Public Health	
ZOOLOGY 470	Introduction to Animal Development	
ZOOLOGY 570	Cell Biology	
Capstone		
Complete one of the following. Courses may not count toward Electives and Capstone requirement.		1-8
NUTR SCI 500	Undergraduate Capstone Seminar Laboratory	
NUTR SCI 681 & NUTR SCI 682	Senior Honors Thesis and Senior Honors Thesis	
NUTR SCI 691 & NUTR SCI 692	Senior Thesis-Nutrition and Senior Thesis	
NUTR SCI 699	Special Problems (with program permission)	
Total Credits		**66-91**

RECOMMENDED NUTRITIONAL SCIENCE ELECTIVES

Code	Title	Credits
ANTHRO 365	Medical Anthropology	3
BIOCHEM/ NUTR SCI 560	Principles of Human Disease and Biotechnology	2
BIOCHEM/ M M & I 575	Biology of Viruses	2
BIOCHEM/ NUTR SCI 645	Molecular Control of Metabolism and Metabolic Disease	3

C&E SOC/SOC 533	Public Health in Rural & Urban Communities	3
CHEM 311	Chemistry Across the Periodic Table	4
CHEM 327	Fundamentals of Analytical Science	4
CHEM 329	Fundamentals of Analytical Science	4
AN SCI/ FOOD SCI 305	Introduction to Meat Science and Technology	4
FOOD SCI/ AN SCI 321	Food Laws and Regulations	1
FOOD SCI/ MICROBIO 325	Food Microbiology	3
GENETICS 545	Genetics Laboratory	2
PLANTSCI 338	Plant Breeding and Biotechnology	3
PLANTSCI 360	Genetically Modified Crops: Science, Regulation & Controversy	2
ANAT&PHY 337	Human Anatomy	3
ANAT&PHY 338	Human Anatomy Laboratory	2
MED HIST/ PHILOS 515	Public Health Ethics	3
MED HIST/ PHILOS 558	Ethical Issues in Health Care	3
M M & I/PATH-BIO 528	Immunology	3
NUTR SCI/ A A E 350	World Hunger and Malnutrition	3
NUTR SCI 375	Special Topics	1-4
NUTR SCI 377	Cultural Aspects of Food and Nutrition	3
NUTR SCI/INTER-AG 421	Global Health Field Experience	1-4
NUTR SCI 500	Undergraduate Capstone Seminar Laboratory	1
NUTR SCI/ KINES 525	Nutrition in Physical Activity and Health	3
NUTR SCI 540	Community Nutrition and Health Equity	3
ONCOLOGY 401	Introduction to Experimental Oncology	2
PATH 404	Pathophysiologic Principles of Human Diseases	3
POP HLTH/ C&E SOC 370	Introduction to Public Health	3
ZOOLOGY 470	Introduction to Animal Development	3
ZOOLOGY 570	Cell Biology	3