COLLEGE OF AGRICULTURAL AND LIFE SCIENCES

Students curious to discover how our living world works and how they can improve it—from the smallest microbe to ecosystem-wide weather patterns—will find a home in the College of Agricultural and Life Sciences. Students explore global questions in these five CALS areas of study:

- Health and nutrition
- Food and agriculture
- Biological sciences
- Sustainability, natural resources, and the environment
- Business, communication, and society

CALS brings together students, faculty, and staff from diverse backgrounds to create an enriching and welcoming culture that produces socially aware graduates who will make an impact locally and globally.

CALS students are passionate about using science to improve the world, and CALS programs encourage students to pursue their passions in the classroom and beyond.

CALS students gain critical thinking, research, and communication skills that lead them to careers in a wide variety of industries and public service – including biotechnology, healthcare, food, and agriculture – and prepare them well for graduate and professional studies at top-ranked institutions.

Students in all majors graduate on average in four years.

CALS faculty are involved in all aspects of student education, including teaching in classrooms, hosting research opportunities in labs, leading study abroad experiences, and providing professional mentorship to students.

CALS promotes working across disciplines; half of CALS students double-major or complete at least one certificate (similar to a minor).

As evidence of a strong community, CALS awards over $1.2 million in scholarships supported by alumni and friends eager to give new students the same positive experiences they enjoyed. These awards are in addition to university scholarships, grants, and loans.

CALS Signature Experiences reflect the core values of a CALS education and offer a variety of options for students in all majors:

Learn through hands-on, real world experience

All CALS majors include a senior-level capstone course that integrates interdisciplinary knowledge to address a problem of societal relevance and also helps prepare students for their future careers. Additionally, most students complete independent research under the guidance of internationally recognized faculty researchers.

Build community and networks

With more than 20 CALS-sponsored student organizations, students can build their professional networks early and enhance their leadership skills. Students also engage with faculty mentors, often for exploration of majors and career pathways.

Customize a path of study

More than half of CALS students double-major or complete at least one certificate (similar to a minor) to meet their goals and interests. To augment bachelor of science degrees for top students, CALS offers honors programs in research and in many majors.

Make a strong start

All CALS students take a First-Year Seminar to explore different areas of study, learn about how to access student services, and make friends. There are several seminars to choose from, including QuickStart (https://cals.wisc.edu/academics/undergraduate/quick-start/), an online course that allows students to begin their college career the summer before they arrive on campus.

Gain global perspective

Because CALS disciplines have global reach, students take at least one course with a purposeful international focus, and many students choose to study abroad. CALS offers more than 34 faculty-led study abroad programs specifically designed to fulfill CALS students' academic, professional and personal goals. Additionally, CALS students can choose from more than 250 UW-Madison study abroad programs.

CALS students are growing the future through a better understanding of living things. Explore our majors and certificates (p. 1) to learn more.

DEGREES/MAJORS/CERTIFICATES

The College of Agricultural and Life Sciences provides opportunities for study in a wide variety of majors. **Students are responsible for knowing academic requirements for graduation** and should consult with an advisor regularly.

First-year students are encouraged to declare a major so that an advisor can be assigned in their area of interest. However, students may change majors if their academic or professional goals change. Incoming or continuing students unsure about which CALS major to declare may opt to remain undecided in CALS while exploring their options. Undecided students are assigned a CALS advisor (https://cals.wisc.edu/academics/undergraduate-students/advising/) in the Academic Affairs Office. In addition to their major, students may also elect to complete additional majors or one or more certificate programs.

- Agricultural and Applied Economics, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/agricultural-applied-economics/agricultural-applied-economics-bs/)
- Agricultural Business Management, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/agricultural-applied-economics/agricultural-business-management-bs/)
- Agronomy, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/agronomy/agronomy-bs/)
- Animal Sciences, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/animal-dairy-sciences/animal-sciences-bs/)
- Biochemistry, B.S. (CALS) (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/biochemistry/biochemistry-bs/)
- Biological Systems Engineering, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/biological-systems-engineering/biological-systems-engineering-bs/)
- Biology, B.S. (CALS) (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/bacteriology/biology-bs/)

- Business Management for Agricultural and Life Sciences, Certificate (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/agricultural-applied-economics/business-management-agricultural-life-sciences-certificate/)
- Community and Environmental Sociology, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/community-environmental-sociology/community-environmental-sociology-bs/)
- Dairy Science, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/animal-dairy-sciences/dairy-science-bs/)
- Development Economics, Certificate (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/agricultural-applied-economics/development-economics-certificate/)
- Entomology, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/entomology/entomology-bs/)
- Environmental Sciences, B.S. (CALS) (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/soil-science/environmental-sciences-bs/)
- Food Science, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/food-science/food-science-bs/)
- Food Systems, Certificate (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/community-environmental-sociology/food-systems-certificate/)
- Forest Science, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/forest-wildlife-ecology/forest-science-bs/)
- Genetics and Genomics, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/genetics/genetics-genomics-bs/)
- Global Health, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/entomology/global-health-bs/)
- Global Health, Certificate (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/entomology/global-health-certificate/)
- Horticulture, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/horticulture/horticulture-bs/)
- Individual Major, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/college-wide/individual-major-bs/)
- Life Sciences Communication, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/life-sciences-communication/life-sciences-communication-bs/)
- Microbiology, B.S. (CALS) (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/bacteriology/microbiology-bs/)
- Nutritional Sciences, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/nutritional-sciences/nutritional-sciences-bs/)
- Nutritional Sciences, B.S. Nutrition and Dietetics (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/nutritional-sciences/nutritional-sciences-bs-nutrition-dietetics/)
- Organic Agriculture, Certificate (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/plant-pathology/organic-agriculture-certificate/)
- Plant Pathology, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/plant-pathology/plant-pathology-bs/)
- Science Communication, Certificate (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/life-sciences-communication/science-communication-certificate/)
- Science of Fermented Food and Beverages, Certificate (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/food-science/science-fermented-food-beverages-certificate/)
- Soil Science, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/soil-science/soil-science-bs/)
- Wildlife Ecology, B.S. (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/forest-wildlife-ecology/wildlife-ecology-bs/)

ENTERING THE COLLEGE

ADMISSION

CALS offers 23 majors in a broad area of topics encompassed within the life sciences and agriculture. Students who know they are interested in CALS areas of study but are uncertain about a specific major may choose "undecided" in CALS to take advantage of all that CALS has to offer students while they explore life science and agricultural science options.

Admissions for incoming first-year and transfer students are handled centrally through the UW-Madison Office of Admissions and Recruitment (https://admissions.wisc.edu/). However, through this process students will be directly admitted into CALS if they choose a CALS major, including the CALS undecided option. CALS majors do not have enrollment caps, and most do not have special admissions criteria.

All students, including incoming first-year and transfer students, with questions about study in the College of Agricultural and Life Sciences are encouraged to contact the CALS Office of Academic Affairs at 608-262-3003 or academicaffairs@cals.wisc.edu. Prospective students can also connect with the college and learn more in a variety of other ways, including attending informational sessions, taking a tour, and connecting with student ambassadors.

For students transferring from another university or college, transfer credits are evaluated by the UW-Madison Registrar's Office (https://registrar.wisc.edu/transfer-your-credit-to-uw-madison/) after acceptance. Transfer students must complete all CALS degree requirements, including earning at least 30 credits at UW-Madison.

Students may also transfer to the College of Agricultural and Life Sciences from other schools and colleges at UW-Madison. For more information, contact the academic advisor in your intended major or the CALS Office of Academic Affairs (academicaffairs@cals.wisc.edu), or visit the CALS transfer information page (https://cals.wisc.edu/academics/undergraduate/visit-and-apply/transfer-students/).

WISCONSIN EXPERIENCE

Opportunities to apply classroom learning to real-world settings is at the core of a CALS education. We offer a variety of CALS Signature Experiences for students in all majors to live the Wisconsin idea and fulfill the Wisconsin Experience (https://wisconsinexperience.wisc.edu/).

These opportunities fall into five major categories:

We want our students to **make a strong start** and every CALS first-year student can achieve that through a CALS First-Year seminar to explore different areas of study, learn about how to take advantage of campus resources, and make friends. There are several seminars to choose from, including QuickStart (https://cals.wisc.edu/academics/undergraduate/quick-start/), which allows students to begin their college career the summer before they arrive on campus.

CALS students **learn through hands-on, real world experiences**. A majority of CALS students earn credit for research experiences in labs and internships.

Through student organizations, peer advising and mentoring, and residential learning communities, **students build their community and networks**.

Students **gain a global perspective** by taking courses with an international focus and many students choose to study abroad. CALS offers more than 34 faculty-led study abroad programs, and students may also choose from general UW-Madison study abroad opportunities.

Finally, many CALS students take advantage of the ability to **customize their path of study** by participating in an honors program (p. 8), pursuing certificates or second majors, and choosing elective courses that match their interests and meet their goals.

POLICIES AND REGULATIONS

Policies may be found on the Office of Academic Affairs KnowledgeBase (https://kb.wisc.edu/cals/academicaffairs/).

REQUIREMENTS

All undergraduate students in CALS must satisfy a set of college and university requirements:

UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin–Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (http://guide.wisc.edu/undergraduate/#requirementsforundergraduatestudytext) section of the *Guide*.

General Education	• Breadth—Humanities/Literature/Arts: 6 credits • Breadth—Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits • Breadth—Social Studies: 3 credits • Communication Part A & Part B * • Ethnic Studies * • Quantitative Reasoning Part A & Part B *

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

UNIVERSITY DEGREE REQUIREMENTS

Total Degree	To receive a bachelor's degree from UW–Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
Residency	Degree candidates are required to earn a minimum of 30 credits in residence at UW–Madison. "In residence" means on the UW–Madison campus with an undergraduate degree classification. “In residence” credit also includes UW–Madison courses offered in distance or online formats and credits earned in UW–Madison Study Abroad/Study Away programs.
Quality of Work	Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.

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 B.S. 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 (p. 4)		1
International Studies (p. 5)		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") (p. 6)

Students are advised to complete introductory and basic course requirements (i.e., biological and physical sciences, chemistry, mathematics, communications, etc.) early in their academic programs.

Students must also satisfy a minimum of 15 credits in the selected major (these 15 credits may not be double counted with CALS or General Education requirements) and a Capstone course that meets the stated criteria (and may be included in the 15 credits toward the major).

CALS FIRST-YEAR SEMINAR REQUIREMENT

Courses meeting the CALS first-year seminar requirement must meet most of the following criteria:

- The course is designed specifically for first-year undergraduate students, to support their academic and personal transition to UW–Madison. For example, the course may acquaint students with academic, campus and community resources to assist in their transition through presentations, discussion, projects, or papers. Because students took this course, their transition to UW–Madison is more rapid and well supported.
- Course enrolls fewer than 25 students or a significant portion of the course meets in groups of fewer than 25 students. A larger lecture course will be considered if students interact regularly in sustained and substantive small groups with a faculty member or well-prepared graduate student or peer. This interaction must go beyond review of material and question and answer and be an ongoing relationship.
- Students receive frequent feedback from the instructor(s) on their academic performance and receive a grade in the course.
- Students are put in circumstances that essentially demand they interact with faculty and peers about substantive matters. As a result of taking this course, students have gotten to know their instructor(s) and peers through meaningful course-related dialogue.
- Students will experience diversity through meaningful dialogue with people who are different from themselves and/or engage with diversity through course content which addresses inclusivity, diversity and identity.
- Students experience an integration of experiential and classroom learning. For example, students might be asked to attend a student organization meeting, meet with a faculty or staff member, or participate in research or service.
- Students have opportunities to integrate, synthesize and apply knowledge while exploring big questions and big ideas.
- The learning objectives for the course are aligned with the UW–Madison Essential Learning Outcomes (https://assessment.provost.wisc.edu/uw-madison-essential-learning-outcomes/).

APPROVED FIRST-YEAR SEMINAR COURSES

Code	Title	Credits
AN SCI 135	Grand Challenges and Career Opportunities in Animal and Dairy Sciences	1
BIOCHEM 100	Biochemistry Freshman Seminar	1
BSE 170	Product Design Practicum	2
COUN PSY 125	The Wisconsin Experience Seminar	1
F&W ECOL 101	Orientation to Wildlife Ecology	1
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
INTER-AG 165	Introduction to International Issues in Agricultural & Life Sciences	1
INTEREGR 170	Design Practicum	3
INTER-HE 201	Belonging, Purpose and the Ecology of Human Happiness: EcoYou	3
LSC 155	First-Year Seminar in Science Communication	1
First Year Interest Groups (All) [1]		
The following Learning Community/student group courses are approved as CALS First-Year Seminars. Only the specific course numbers and titles listed, including Topics titles (in parentheses), are approved.		
AFROAMER 271	Selected Topics in African American Culture (Topic: Multiculturalism & Social Justice (Seminar for Multicultural Learning Community))	3
COUN PSY 115	Human Resources Development: Educational Effectiveness (Topics: First-Year Transition Active Student; PEOPLE First Year Experience Seminar)	1
ENVIR ST 117	GreenHouse Roots Seminar	1
INTEGSCI 110	BioHouse Seminar: Biology for the 21st Century	1
INTER-AG 140	CALS QuickStart: Foundations	1
INTER-AG 175	WISE Seminar	1
ILS 138	CRC First-Year Seminar: Foundations of a Liberal Arts Education	1

1 For more information, see http://figs.wisc.edu/

CALS INTERNATIONAL STUDIES REQUIREMENT

Required of all CALS majors, the intent of the CALS International Studies requirement is to deepen student knowledge and understanding of international issues related to scientific and sociological themes in CALS; develop openness, awareness and respect with regard to other cultures;

and prepare students to address global challenges as engaged employees and active citizens.

The following learning outcomes must be satisfied for courses to fulfill the CALS International Studies requirement:

- Identify and explain, to diverse audiences, global issues pertaining to one or more CALS Priority Themes (https://cals.wisc.edu/about-cals/initiatives/strategic-plan/priority-themes/)
- Demonstrate critical thinking and comparative perspectives with respect to experiences or cultural approaches to international challenges

Courses that satisfy the 3-credit CALS International Studies requirement must meet all of the following criteria:

- Be connected to one or more of the CALS Priority Themes
- Include substantial international comparative content
- Include substantial non-U.S. content (typically >50% of the content or assignments or grade in the course)
- Facilitate active student engagement consistent with the learning outcomes and university assessment criteria
- Fulfill 3 credits (either by a single course or a pair of courses)

APPROVED INTERNATIONAL STUDIES COURSES (EFFECTIVE FALL 2019 UNLESS OTHERWISE NOTED)

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/AGRONOMY/ NUTR SCI 350	World Hunger and Malnutrition	3
A A E 352	Global Health: Economics, Natural Systems, and Policy [2]	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
AGRONOMY 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 [2]	3-4
C&E SOC/SOC 341	Labor in Global Food Systems [1]	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/ AGRONOMY 471	Food Production Systems and Sustainability	3
ENTOM/ ENVIR ST 201	Insects and Human Culture-a Survey Course in Entomology	3
ENTOM/ ZOOLOGY 371	Medical Entomology	3
F&W ECOL/ ENVIR ST 100	Forests of the World [1]	3
F&W ECOL/ ENVIR ST/ ZOOLOGY 360	Extinction of Species	3
HORT 370	World Vegetable Crops	3
LSC 251	Science, Media and Society [1]	3
NUTR SCI/ AGRONOMY/ ENTOM 203	Introduction to Global Health	3
PL PATH/ BOTANY 123	Plants, Parasites, and People	3
PL PATH 311	Global Food Security	3
HORT/ AGRONOMY 376 & HORT 378	Tropical Horticultural Systems and Tropical Horticultural Systems International Field Study	4
DY SCI/AN SCI/ FOOD SCI/ SOIL SCI 472 & DY SCI/AN SCI/ FOOD SCI/ SOIL SCI 473	Animal Agriculture and Global Sustainable Development and International Field Study in Animal Agriculture and Sustainable Development	3
The following study abroad courses fulfill the CALS International Studies requirement. Only the specific course numbers and titles listed, including Topics titles (in parentheses), are approved to meet the CALS International Studies requirement.		
BIOCHEM 699	Special Problems (UW SCORE Cambridge International Research Program (England))	3
BIOCHEM 699	Special Problems (UW SCORE Oxford International Research Program (England))	3
BIOCHEM 699	Special Problems (UW SUPERG International Research Program (Germany))	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/ NUTR SCI 421	Global Health Field Experience (UW Health and Food Systems: Human, Agricultural & Environmental Health in Ghana)	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
INTER-AG 321 & INTER-AG/ NUTR SCI 421	Study Abroad Pre-Departure Seminar and Global Health Field Experience (UW Microbiology and Public Health in Northern Thailand)	3
MICROBIO 399	Coordinative Internship/ Cooperative Education (UW Microbiology International Internships (Thailand))	3

1

Approved for enrollments Summer 2020 and later.

2

Approved for enrollments Summer 2021 and later.

CALS CAPSTONE LEARNING LEARNING EXPERIENCE REQUIREMENT

A CALS Capstone is a course in which students are required to integrate diverse bodies of knowledge to solve a problem or formulate a policy of societal importance with the intent of facilitating the transition to post-baccalaureate life. Capstone courses are approved by the college for each major.

A Capstone Experience should:

- Develop problem solving skills
- Expose the student to multidisciplinary approach
- Develop teamwork and interpersonal skills, including the ability to communicate effectively to multiple audiences
- Develop skills in accessing and using information resources (e.g., electronic databases, library resources, national repositories)
- Address societal, economic, ethical, scientific, and professional issues
- Communicate and extend the capstone experience via written, oral, and/or multimedia reports by each student

The Capstone Experience will normally be completed during the student's final 2 or 3 semesters. The intent is to have the student utilize and integrate their undergraduate learning into a culminating, or capstone, experience. Students should consult with their departmental faculty advisors for specific information regarding this requirement. Where appropriate, students should submit a copy of the final project materials to the campus library (via Minds@UW (https://www.library.wisc.edu/research-support/minds/) or similar).

DEGREES OFFERED

The College of Agricultural and Life Sciences offers four bachelor of science (B.S.) degree programs:

B.S. DEGREE

B.S.–AGRICULTURAL BUSINESS MANAGEMENT **(**HTTP://GUIDE.WISC.EDU/UNDERGRADUATE/AGRICULTURAL-LIFE-SCIENCES/AGRICULTURAL-APPLIED-ECONOMICS/AGRICULTURAL-BUSINESS-MANAGEMENT-BS/**)**
B.S.–BIOLOGICAL SYSTEMS ENGINEERING **(**HTTP://GUIDE.WISC.EDU/UNDERGRADUATE/AGRICULTURAL-LIFE-SCIENCES/BIOLOGICAL-SYSTEMS-ENGINEERING/BIOLOGICAL-SYSTEMS-ENGINEERING-BS/**)**
B.S.– NUTRITION AND DIETETICS **(**HTTP://GUIDE.WISC.EDU/UNDERGRADUATE/AGRICULTURAL-LIFE-SCIENCES/NUTRITIONAL-SCIENCES/NUTRITIONAL-SCIENCES-BS-NUTRITION-DIETETICS/**)**

Three of the college's majors have specialized B.S. degree programs, as listed above. The general B.S. degree program provides a broad and general foundation for the other majors in the college.

MULTIPLE DEGREES OR MAJORS

Under certain circumstances it may be possible for a student to earn more than one undergraduate major or degree. It is expected that the programs be significantly different from each other and that approval for simultaneous majors or degrees be received prior to the student having earned 86 credits. More information is available below and through the CALS Office of Academic Affairs (https://cals.wisc.edu/academics/undergraduate/current-students/).

EARNING TWO UNDERGRADUATE MAJORS SIMULTANEOUSLY

CALS permits undergraduates to pursue two CALS majors simultaneously. Both majors must be in the same degree program; two degrees must follow the policy outlined below. The following policies and procedures have been established for this program:

1. The student must complete an application form and have approval in advance from their CALS major advisor, the advisor of their desired second major, and the Associate Dean for Academic Affairs in the Office of Academic Affairs in CALS. This approval must be granted before the student has earned 86 credits.
2. The student must satisfy all requirements of both majors. The student must meet all CALS general course requirements and the degree program requirements, as well as all major field requirements.

The diploma awarded will be based on the certification of completion of the degree. The transcript will note the completion of requirements for two or more majors.

EARNING A NON-CALS MAJOR WHILE COMPLETING A DEGREE PROGRAM IN THE COLLEGE OF AGRICULTURAL AND LIFE SCIENCES

The College of Letters & Science (L&S) and the School of Education permit undergraduates currently enrolled in the College of Agricultural and Life Sciences to complete certain additional undergraduate majors offered by L&S or the School of Education and have this noted on the transcript. The following policies have been established for this program:

1. The student must complete an application form and have advance approval from their CALS major advisor, their non-CALS major advisor, and the Associate Dean for Academic Affairs in the Office of Academic Affairs in CALS. This approval must be granted before the student has earned 86 credits.
2. The non-CALS major is not to substitute for any major in CALS.
3. The student must satisfy all requirements of the non-CALS major, both the requirements established by the department (i.e., certain courses) and those established by the other school/college (e.g. for L&S, 15 credits of advanced work in the major in residence at UW–Madison), but is not required to complete the other school/college's degree requirements. The student must meet all CALS general course requirements and the degree program requirements, as well as all major field requirements for the CALS major.

EARNING A GLOBAL HEALTH ADDITIONAL MAJOR WHILE COMPLETING A DEGREE PROGRAM IN ANOTHER SCHOOL/COLLEGE AT UW-MADISON

Students in another school/college at UW-Madison are eligible to declare a Global Health major if they have fewer than 86 credits toward graduation, receive permission from their home school/college, and maintain a primary major in the home school/college. The process for obtaining special permission to declare a Global Health major is dependent on the student's home school/college. Students must also contact the Global Health major advising unit about the steps required to declare an additional major and fulfill all the Global Health major requirements.

EARNING TWO UNDERGRADUATE DEGREES SIMULTANEOUSLY

A student who wishes to earn **two undergraduate degrees simultaneously** (in contrast to earning two undergraduate majors simultaneously) should consult with the CALS Office of Academic Affairs as early as possible in their academic career regarding feasibility.
If the two degrees to be earned are within the College of Agricultural and Life Sciences, at least 30 additional credits and all course and grade point requirements must be completed. Thus, a minimum of 150 credits (for most majors) would be required. Some courses may satisfy requirements for both degrees; however, students must complete 15 unique credits in each major. **A student must have an advisor in both major fields.** To work on two degrees simultaneously within the college, a student should seek permission as early as possible to ensure that it is feasible to complete both degrees.
If the two degrees to be earned are from two different colleges (one degree in Agricultural and Life Sciences and one degree in another school or college on this campus), the academic dean in both colleges must approve the student's plan. Note that not all colleges will allow dual degrees. Where allowed, the following academic policies shall be followed (additional policies may exist):

1. Admission into the other college or school shall be based on that particular college or school admission criteria.
2. A student may seek two baccalaureate degrees simultaneously (in contrast to two majors), each from a different college, provided that the two degree programs differ sufficiently so that the combined total requirements for the two degrees are at least 150 credits and that the student's program is **approved by both colleges before the student has earned 86 credits**. The degrees from each college will be awarded simultaneously.

Applications and additional information pertaining to the earning of two undergraduate degrees simultaneously are on the CALS website (https://cals.wisc.edu/academics/undergraduate/current-students/) and available from the Office of Academic Affairs, 116 Agricultural Hall.

SECOND BACHELOR OF SCIENCE DEGREE REQUIREMENTS

Students with a bachelor of science (B.S.) or bachelor of arts (B.A.) degree from the University of Wisconsin–Madison or other accredited institution may, if eligible, pursue a second bachelor's degree from the College of Agricultural and Life Sciences.
Students who have been out of school for one semester or more must apply for admission (or readmission) with the regular undergraduate application. Continuing UW–Madison students do not need to submit this form. All candidates need an academic dean's permission from the Office of Academic Affairs to work toward a second bachelor's degree. A minimum of a 2.0 GPA is required. Several college majors require a higher GPA.

The following requirements for the second bachelor's degree must be met:

- Students must complete a minimum of **30 credits in residence**, of which 15 or more must be in the major field as specified by the major department. These credits are in **addition** to credits earned for the first degree.
- Candidates must **complete all university, college, major, and curricular degree program requirements.** Credits earned for the first degree will apply toward appropriate requirements for the second. However, students must take at least 30 additional credits, as noted above. Students with their first B.S. degree from the college must select a new major or degree program.

All second-degree candidates must be accepted by the department offering their program of interest and have their program approved by the college before beginning the program.

RESOURCES

STUDENT SERVICES

Regardless of major, CALS professionals can help students navigate their UW–Madison educational experience. As the academic dean's office for CALS, the Office of Academic Affairs (https://cals.wisc.edu/academics/undergraduate/student-life/advising-and-services/) assists all CALS and CALS-interested students with questions or concerns around academics, major exploration, careers, scholarships, study abroad, or other areas of student life. Individual advising is tailored to fit students' specific

needs and circumstances. CALS also offers programs for students from underrepresented populations.

ACADEMIC ADVISING

Every student has an assigned advisor, and students are encouraged to consult with them regularly. In CALS, all students are assigned an advisor in their major field of study, or for undecided students in the Office of Academic Affairs. These advisors assist students with choosing courses to match their interests and fulfill all requirements for graduation. Advisors also talk with students about achieving their educational objectives, engaging in the full Wisconsin Experience, and planning for the future.

Students are also encouraged to seek advice from other university faculty and staff. There are many people on campus who are willing and able to help students who proactively seek advice.

CAREER SERVICES

CALS Career Services (https://cals.wisc.edu/academics/undergraduate-students/career-services/) provides resources and guidance for students to explore career interests and develop skills as they seek employment, internships, or admission to graduate or professional programs. Academic advisors and faculty in every CALS major also provide specialized career and pre-professional advising. CALS students and alumni have access to Handshake (https://careers.wisc.edu/handshake/), an online job and internship posting tool that includes thousands of listings. The Center for Pre-Health Advising (https://prehealth.wisc.edu/) is an excellent resource for CALS students interested in exploring professional careers in medicine, including human health and veterinary medicine.

DEAN ON CALL

"Dean On Call" is a drop-in service that provides the opportunity for all CALS students to have a one-on-one session with an academic affairs professional to discuss an academic policy or problem, seek advice about a personal issue, or receive assistance when confronted with a special situation. See the CALS Office of Academic Affairs website (https://cals.wisc.edu/academics/undergraduate/student-life/advising-and-services/) for more information.

SCHOLARSHIPS AND FINANCIAL RESOURCES

CALS has an extensive scholarship program (https://cals.wisc.edu/academics/undergraduate/funding-your-education/cals-scholarships/) with more than $1.2 million in awards available to CALS students annually, including first-year students. This is in addition to university scholarships, grants, loans, and employment available at the Office of Student Financial Aid (https://financialaid.wisc.edu/). One yearly application allows students to be considered for any scholarships administered by the college. Scholarships that are awarded based on financial need require a current Free Application for Federal Student Aid (FAFSA (https://studentaid.gov/)) on file with the university.

STUDY ABROAD

Today's college graduates must be prepared for the international community in which they will live and work. Study and research abroad programs offer students unique opportunities to enrich their education by experiencing other cultures and broadening their understanding of agricultural and life sciences outside the United States. CALS offers more than 34 short- and long-term programs in more than 20 countries, led by CALS faculty and administered by CALS Study Abroad (https://cals.wisc.edu/academics/undergraduate-students/studyabroad/). Additionally, CALS students can choose from more than 250 UW-Madison study abroad programs (https://studyabroad.wisc.edu/programs/). All programs carry UW-Madison academic credit, and many fulfill academic and major requirements (https://studyabroad.wisc.edu/academics/major-advising-pages-maps/). CALS offers scholarships to CALS students for study abroad to reduce any financial barriers to participation.

HONORS

The CALS Honors Program (p. 8) allows highly motivated students to continue challenging themselves through research and coursework. The objective of the Honors Program is to help students develop critical thinking and problem-solving abilities and to provide students the challenge of designing, conducting, and reporting research in collaboration with faculty from one of the world's leading research institutions.

STUDENT ORGANIZATIONS

Student organizations (https://cals.wisc.edu/academics/undergraduate/student-life/student-organizations/) provide a vehicle for students to gain leadership experience, develop professional skills, and build on personal interests. CALS sponsors more than 20 organizations that help students meet their professional and personal interests.

HONORS

HONORS PROGRAM

The CALS Honors Program allows highly motivated students to continue challenging themselves through research and coursework. The objective of the Honors Program is to help students develop critical thinking and problem-solving abilities through specialized courses and to provide students the challenge of designing, conducting, and reporting research in collaboration with faculty from one of the world's leading research institutions.

HONORS

CALS has two different avenues to earn an Honors degree designation. Students may complete either based on their interests and goals. Students are not allowed to complete both types of honors. In either option, a student must successfully complete a Senior Honors Thesis approved by the research mentor or committee.

Honors in Research

Students engage in the university's great research tradition through the completion of two research projects: an introductory project and a senior thesis project. Students identify a faculty mentor to oversee their research efforts and support their progression through the program. In addition to the hands-on research experience, students are required to enroll in coursework directed at furthering their knowledge in quality and ethical scientific discovery. Students who successfully complete Honors in Research (https://cals.wisc.edu/academics/undergraduate/current-students/honors-program/honors-research/) will receive an Honors designation on their diploma.

Honors in the Major

Students complete a specified number of Honors credits in a designated set of courses to gain advanced knowledge and inquiry within their major field of interest. A limited number of CALS majors offer this program option; more information is located on the Requirements tab for the major.

Students who successfully complete Honors in the Major will receive an Honors designation on their transcript.

For complete information contact the Office of Academic Affairs, 116 Agricultural Hall, at 608-262-3003 or academicaffairs@cals.wisc.edu.

DEAN'S LIST

Students who achieve at a high level academically are recognized by the dean. Selections to the Dean's List are announced at the close of each semester. The student's achievement for only the single semester is considered and is noted on the transcript. To be placed on the Dean's List, a student must have achieved at least a 3.5 GPA or above for *the semester's study load of not less than 12 credits, on a regular grade basis* (A, AB, B, BC, C, D, F), regardless of overall grade point average, and must not have received a grade of F or an Incomplete for any course, or a U (for a pass/fail course) or an N (for Credit/No Credit graded course that was not passed).

GRADUATION WITH DISTINCTION OR HIGHEST DISTINCTION

Students who graduate with a cumulative GPA that places them in the top 20 percent of the graduating class in the college will graduate with "Distinction"; those in the upper 5 percent, with "Highest Distinction." These students must have at least 60 credits on the UW–Madison campus. The notations on the student's transcript will read "Graduated with Distinction" or "Graduated with Highest Distinction" in the “Degrees Awarded” section of the transcript. The registrar makes these calculations and updates final transcripts approximately 45 days after the grading deadline for each semester.

DISTINCTIVE SCHOLASTIC ACHIEVEMENT

A *preliminary* list of those degree candidates who may be eligible for Graduation with Distinction is prepared by the registrar prior to commencement. These students are eligible to wear a cardinal stole with their caps and gowns at commencement. Inclusion on the Distinctive Scholastic Achievement list does not guarantee Graduation with Distinction, which is determined after final grades are awarded.