

COLLEGE OF LIBERAL ARTS AND SCIENCES

Beate Schmittmann, Dean

Arne Hallam, Associate Dean

Leslie Hogben, Associate Dean

Jo Anne Powell-Coffman, Associate Dean

Amy Slagell, Associate Dean

Zora D. Zimmerman, Associate Dean Emerita

www.las.iastate.edu/ (<http://www.las.iastate.edu/>)

The College of Liberal Arts and Sciences is a world-class learning and research community. Iowa State's most academically diverse college, LAS educates students to become global citizens, providing rigorous academic programs in the sciences, humanities and social sciences within a supportive, student-centered learning environment that emphasizes career readiness. The college also is home to the Open Option Program that prepares students for any curriculum at the University.

Learning Goals

The primary mission of the college is to promote learning in all its dimensions by providing students with ample opportunities to acquire the requisite knowledge, abilities, and skills to succeed in the world beyond the university. Through coursework within the major and in general education, students will develop skills in reasoning, analysis, and communication; achieve an understanding of the intellectual, historical, and artistic foundations of culture; and work to strengthen their abilities to interact with people, cultures, and the environment in an ethical and sensitive manner. To achieve these learning goals, the college asks students to acquire depth in learning within disciplines of their own choosing, and to acquire breadth through general education courses and electives.

Entering the College of Liberal Arts and Sciences

From High School

Students entering the college are expected to have high school preparation including:

- 4 years of English
- 3 years of Social Studies
- 3 years of Mathematics
- 3 years of Science

Coursework in computer applications and in world languages is highly encouraged; three or more years of a single world language in high school

meets the world language graduation requirement in the College of Liberal Arts and Sciences.

By Transfer

Students are eligible to transfer to the College of Liberal Arts and Sciences with no deficiencies by completing 24 credit hours from an accredited two or four year institution with a 2.25 minimum GPA. To graduate from the LAS College, a transfer student must complete the general requirements of the college as well as those of the university.

Early planning can improve the transfer process and support a timely graduation. For information on articulation/transfer agreements that apply to students who have earned Associate of Arts degrees from an Iowa public community college or who have satisfied general education requirements at the University of Northern Iowa or in the College of Liberal Arts at the University of Iowa, see Articulation/Transfer Agreements in the Admission Transfer Information (<http://catalog.iastate.edu/previouscatalogs/2020-2021/admissions/#transferinformationtext>) section of the catalog. Transfer students should also note that in order to graduate "with distinction" students must have completed 60 semester credits of coursework at Iowa State University at the time they graduate, including a minimum of 50 graded credits and have a 3.5 or higher GPA at the beginning of their final term.

Transfer students in the College of Liberal Arts and Sciences may choose to graduate under the catalog in effect at the time of their graduation or under one of the five immediately preceding catalogs, provided that it covers the period of his or her enrollment either at Iowa State or any other accredited school. Full requirements of the chosen catalog must be met though adjustments will be made in instances where courses are no longer available or where programs have been changed. Transfer students are responsible for reviewing their transfer credit evaluation with the academic adviser during the first semester of enrollment. Prospective transfer students are urged to contact the College of Liberal Arts and Sciences well before arriving on campus so that pre-transfer courses are appropriate to the planned major and transferable toward graduation from ISU.

Curricula of the College of Liberal Arts and Sciences

The college has four curricula: a curriculum in Liberal Arts and Sciences, leading to the Bachelor of Arts or the Bachelor of Science degree; a curriculum in music, leading to the Bachelor of Music degree; a curriculum in liberal studies, leading to the Bachelor of Liberal Studies degree; and a curriculum in Software Engineering, leading to the Bachelor of Science degree.

Liberal Arts and Sciences Curriculum

To obtain a bachelor's degree from the curriculum in liberal arts and sciences, an undergraduate student must meet all university graduation requirements:

- 120 credits or more
- minimum of 32 semester credits earned in residence at Iowa State University
- last 32 credits in residence
- GPA of 2.0 or better on courses taken at Iowa State University
- credit for LIB 160: Information Literacy
- credit for ENGL 150; credit for ENGL 250*
- U.S. diversity and international perspectives requirements

Students must also meet all college and program specific requirements for:

- General Education
- World Language
- Advanced Communication
- Advanced Credits
- Completion of the Major

**The College of Liberal Arts and Sciences aligns with the University Communication Proficiency Grade Requirement: At a minimum, students must demonstrate their communication proficiency by earning a grade of C or better in ENGL 250; some majors set higher requirements for communication proficiency.*

General Education

Requirements and Learning Goals

The central importance of a general education is reflected in the learning goals of each of three disciplinary areas. Whereas the courses in a major are designed to develop mastery of a specific field or discipline, courses in general education are designed to establish a strong, intellectual foundation to support learning for all majors.

General Education Areas

The general education areas with their minimum credit requirements for the College of Liberal Arts and Sciences are:

- Arts and Humanities—(Minimum 12 credits). The student should develop an understanding of human cultural heritage and history, and an appreciation of reasoning and the aesthetic value of human creativity.
- Mathematical Disciplines and Natural Sciences —(Minimum 11 credits, including 3 in the mathematical disciplines and 8 in the natural sciences). The student should appreciate mathematics as a valuable tool of the sciences and as an intrinsically important way

of thinking, and should experience science as a rational search for understanding the structure and behavior of the natural world.

- Social Sciences—(Minimum 9 credits). The student should develop an appreciation of the principal methods of studying human behavior and an understanding of the structure and functioning of institutions.

Lists of courses approved for the three general education areas are available on the LAS College website (<http://www.las.iastate.edu/students/academics/general-education/>). Students may not apply the same course in more than one general education area.

Because students fulfill, in part, the learning goals of the area of their first major by taking courses in their programs of study, the minimum number of general education credits required in the area of the first major is reduced from that listed above by 3 credits. Students in Liberal Studies or Interdisciplinary Studies majors must complete the minimum requirements in all three areas.

Courses from the department of the first major may not be applied to general education requirements. Courses cross-listed with a course in the student's first major may be used to satisfy either major requirements or general education requirements, but may not be used more than once.

Seminars and experimental courses may be acceptable as general education; advisers should consult with the LAS college office.

Orientation courses, independent study courses (usually numbered 290 or 490), cooperative courses, courses numbered 500 and above, and courses taken on a satisfactory-fail (S-F) or pass-not pass (P-NP) basis cannot be applied to a general education group.

World Language Requirement

The faculty of the College of Liberal Arts and Sciences believes that undergraduate students should acquire elementary practical experience in a second language, should be introduced to the theoretical study of language structure, and should begin to develop an understanding of a second culture through study of that culture's language. Students meet this expectation by satisfying a graduation requirement equivalent to the first year of university-level study in one world language.

Students may meet this requirement through several pathways:

- completing three or more years of high-school world language study in a single language
- passing the exam for credit at the 102 level
- receiving a passing grade in an ISU 102 world language or American Sign Language (ASL) course, an ISU 107 intensive world language course, or equivalent transfer course
- receiving a passing grade in a world language course taught in a language other than English at the 200-level or higher
- being a native speaker of a language other than English

- completing a major in any world language
- earning a passing grade in SPAN 097 (<http://catalog.iastate.edu/previouscatalogs/2020-2021/search/?P=SPAN%20097>) Accelerated Spanish Review.

Questions about the World Language Requirement and how to meet it should be directed to the College Academic Services office in 102 Catt Hall. Credits applied toward the World Language Requirement cannot be used to satisfy the general education requirements, but students who have fulfilled the World Language Requirement may apply approved courses in world languages toward the appropriate general education areas.

Advanced Communication Skills

The continued development of communication skills following the sophomore year is the responsibility of the student's major department. The department promotes this development by adopting measures to certify the communication proficiency of its own majors. Certification occurs upon satisfactory completion of a designated course in which communication is evaluated and is a significant component. This designated course may be either a course required in the student's program or an advanced communication course offered by the Department of English, such as:

ENGL 302	Business Communication	3
ENGL 305	Creative Writing: Nonfiction	3
ENGL 309	Proposal and Report Writing	3
ENGL 314	Technical Communication	3

Advanced Credit Requirements

To obtain a bachelor's degree from the College of Liberal Arts and Sciences, curriculum in liberal arts and sciences, a student must earn at least 45 credits at the 300 level or above taken at a four-year college. All such credits, including courses taken on a pass/not pass basis, may be used to meet this requirement.

The major must contain at least 8 credits in courses taken at Iowa State University that are numbered 300 or above and in which the student's grade is C or higher.

The Major

Students must show they have achieved depth in a specialized area by completing successfully the requirements and learning goals of a major. A major is comprised of 24 to 48 credits in a specific discipline as determined by the faculty. Tracks within a major must have a common core that supports learning outcomes of the major. Some courses outside the major discipline may also be required as supporting work for the major. (See Index for page reference to individual department and

program requirements.) Courses in the first major listed on the degree program may not be counted in the general education groups.

The average grade of all courses in the major (those courses listed under major on the degree audit) must be 2.0 or higher.

Courses meeting the requirements of additional majors may be counted in the general education groups. When choosing an additional major, students must confirm that the additional major is allowable (see list under "Double Majors").

The major in Interdisciplinary Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/interdisciplinaryprograms/undergraduate/interdisciplinarystudies/>) (B.A., B.S.) is available for undergraduate students who have unique interdisciplinary educational goals. Such a major is designed by the faculty and the student and is approved only when the educational goals cannot be met by a reasonable combination of existing majors, minors, and electives.

Double Majors

Students may elect a second major from the departments and program areas in the College of Liberal Arts and Sciences, or from a major field offered for the bachelor's degree in another college of the university.

Double majors between the following are not allowed:

- Chemistry with Biochemistry and Agricultural Biochemistry;
- Biology with Animal Ecology, Agricultural Biochemistry, Biochemistry, Genetics, and Microbiology;
- Economics with Business Economics
- Any combination of Journalism and Mass Communication, Advertising, and Public Relations.

A student in the Bachelor of Liberal Studies or Bachelor of Music curricula may not add a major from the Liberal Arts and Sciences curriculum, though they may work toward a second degree in the Liberal Arts and Sciences curriculum.

To be awarded a double major both major departments must approve the degree program, and if those majors involve two colleges, both colleges must approve. Such programs must fulfill the general education requirements of the college of the primary major. If one major leads to the B.A. degree and the other to the B.S. degree, the degree awarded will be the one offered by the department of the primary major.

If the primary major may lead to either a B.A. or a B.S., a student may choose to receive either degree. In all cases, the student must satisfy the requirements of each major and of the degree that is chosen for the primary major. Students with a primary major in another college who wish to take a second major in the College of Liberal Arts and Sciences must meet all requirements of the second major, but are exempt from the

LAS College General Education, World Language and Advanced Credits requirements.

A student may earn two degrees in the Liberal Arts and Sciences curriculum with two appropriate majors and at least 30 additional credits. Any degree offered by this college may be earned together with a degree and a major in any other college of the university. For the requirements for two degrees, see Two Bachelor's Degrees in the Degree Planning (<http://catalog.iastate.edu/previouscatalogs/2020-2021/academics/#degreeplanningtext>) section of the catalog.

Minors

In addition to earning a major a student may want to add a minor to the program of study. Minors are established by programs and must consist of at least 15 credits, with at least 6 credits in courses numbered 300 and above taken at ISU with a grade of C or higher. To earn a minor students must file paperwork to declare the minor and must complete the requirements specified by the program. The minor must include at least 9 credits that are not used to meet any department, college, or university requirement other than the credit requirement for graduation and credit requirement for courses numbered 300 or above. Courses for the minor beyond those 9 standalone credits may be applied toward general education or to meet other graduation requirements. Completed minors will be recorded on the transcript.

More information and a list of minors offered by the college of Liberal Arts and Sciences can be found on the University Minors (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegescurricula/#minorstext>) page.

Bachelor of Music Curriculum

The Department of Music offers a Bachelor of Music degree (B.Mus.) as well as a Bachelor of Arts degree in music. In order to receive teacher certification in music, students must earn the Bachelor of Music degree. Bachelor of Music students must select one of the following options: music education [vocal or instrumental], performance [voice, piano, organ, string instruments, wind or percussion instrument], or composition. For details about both degrees, see Music (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/music/#undergraduatetext>), Undergraduate Study.

Bachelor of Liberal Studies Curriculum

The LAS College administers the Bachelor of Liberal Studies (B.L.S.) degree, a bachelor's degree program established by the three Iowa Regent universities. The B.L.S. is a general studies degree in the liberal arts. There is no traditional major. Instead, students take coursework in three areas of distribution. These areas may be focused in a single discipline or diversified over several disciplines. With the assistance of a B.L.S. adviser, students can structure a program that meets their individual educational, vocational or personal goals. Students in the

B.L.S. program are not eligible to add majors to their degree program, but they may earn a Certificate or minor by completing all of the requirements of those programs.

For specific degree requirements, see Liberal Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/liberalstudies/#requirementsfortheblsdegree>).

Software Engineering Curriculum

A Bachelor of Science degree in software engineering is jointly administered by the College of Liberal Arts and Sciences and the College of Engineering. The program is aimed at creating high-quality software in a systematic, controlled, and efficient manner. The specific objective of the program is to educate students on principles, processes, techniques, and tools for producing, analyzing, specifying, designing and evolving software. A broader objective is to cultivate among students intellectual curiosity, problem solving skills, good learning habits, effective communication skills, leadership, and teamwork.

This cross-college program enables students to take a range of Software Engineering courses, as well as elective courses from both Computer Science and Computer Engineering as part of their degree program.

For specific degree requirements, see Software Engineering (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofengineering/softwareengineering/>).

Additional Curricular Policies

In addition to the policies outlined in the above discussion of the curricula of the LAS College:

- Elective courses as well as general education courses may be used to meet the requirements of a minor or of another major, provided that they are taken on a graded basis.
- Courses taken on a pass/not pass basis may be counted toward the required total of 120 credits and may be used to meet the advanced credit requirement, if appropriate, but may not be used to satisfy any other graduation requirement.
- No more than 9 credits of 490 (Independent Study) courses in a single discipline may be counted toward graduation.
- Students whose high school study of world languages meets the College World Language Requirement may not enroll in or receive credit for 101 or 102 in that language.
- Individual departments may use CLEP Subject Tests for testout of specific courses. Students in the College of Liberal Arts and Sciences may use CLEP General Test credits as free electives but not toward any of the general education area requirements.

Be sure to talk to your academic adviser and review other University policies that affect graduation in the Academics (<http://>

catalog.iastate.edu/previouscatalogs/2020-2021/academics/) section of the catalog.

The Open Option

Students who enter Iowa State University and want time to explore the best match between their academic interests and abilities, may do so as Open Option students.

The Open Option experience is designed to help students explore majors and careers, become acquainted with the entire university, and make successful adjustments to the academic expectations of Iowa State.

Open Option students are assigned academic advisers in the Liberal Arts and Sciences Student Academic Services Office and take LAS 101, an orientation class that introduces students to campus resources as well as to all of the colleges and majors on campus.

Aided by their adviser, Open Option students select courses that allow them to sample their academic interests before committing to a specific university major. Open Option students typically declare a major during their second or third semester. In addition, students who may have started in a specific field and have discovered it is not meeting their needs may transfer into Open Option for a semester or two while they decide on a new major.

Academic Enhancements in LAS Certificate Programs

The LAS College also administers certificate programs in Actuarial Science, Computing Applications, Data Science, Latin American Studies, and Leadership Studies. Students interested in pursuing these certificates are advised to consult with their academic adviser and with the relevant program that administers the certificate. Completion of a certificate will be recorded on the transcript.

Honors Program

Students enrolled in the College of Liberal Arts and Sciences are encouraged to participate in the University Honors Program (<http://catalog.iastate.edu/previouscatalogs/2020-2021/interdisciplinaryprograms/undergraduategraduate/honorsprogram/>).

Liberal Arts and Sciences Honors is designed to add depth and breadth to students' programs of study and intellectual development. Students in Liberal Arts and Sciences Honors benefit from the resources and capabilities of a large and dynamic research university along with the small class sizes and intellectual community that characterize smaller, selective liberal arts colleges. Membership in LAS Honors offers specific benefits to students such as collaborations with individual faculty members on Honors projects, extended library loan privileges, 24-hour use of the Jischke Honors Building and priority registration for classes.

LAS Honors encourages freshmen as well as more advanced students to join. Graduation in the Honors Program is recognized by a special notation on the student's diploma and permanent record. Honors students wear white Honors cords at graduation.

Teacher Preparation

Teaching licenses are issued by the Iowa Board of Educational Examiners. The Recommending Officer for the ISU University Teacher Education Program submits each candidate file after that candidate is determined to be eligible for recommendation. Recommendations for teaching licensure are issued for a specific teaching level, e.g., grades 5-12. Subject area endorsements are listed on the candidate's license. The College of Liberal Arts and Sciences collaborates with the School of Education to prepare students for recommendations for licensure in approved programs. Students who plan to teach in secondary schools (grades 5-12) may work toward completing an approved teacher preparation program in one of the following majors:

- Biology
- Chemistry
- Earth Science
- English
- History
- Mathematics
- Music (through the Bachelor of Music curriculum)*
- Physics
- World Languages and Cultures (Endorsements are available in French, German, and Spanish.)

Students may also prepare for recommendation for additional endorsements to their primary license in:

- English as a Second Language
- General Science
- Physical Science
- Social Studies
- Speech Communication
- World Languages and Cultures (Chinese, Latin, and Russian)

*Students in the College of Liberal Arts and Sciences who complete the approved teacher preparation program in music education (BM degree with Vocal K-12 option or Instrumental K-12 option) and meet all other requirements may be recommended for a teaching license that allows them to teach music in grades K-12.

For further information, see Teacher Education (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofhumansciences/schoolofeducation/#teachereducationtext>).

Preprofessional Programs

Students in the College of Liberal Arts and Sciences may participate in preprofessional programs by taking the courses required for admission to professional schools. Students may enter the college with the designation Premed, Prelaw, or Preprofessional Health Programs. Most will earn a bachelor's degree by choosing a major and meeting the requirements for the major while taking the preprofessional courses.

Others will spend one to three years as students in the college before transferring to a professional school to which they have applied and been accepted. For further information, see Opportunities for Preprofessional Study (<http://catalog.iastate.edu/previouscatalogs/2020-2021/preprofessionalstudy/>).

The College of Liberal Arts and Sciences participates in a 3+3 program with the Law Schools at Drake University and at the University of Iowa. Visit the Liberal Arts and Sciences Student Academic Services office for details.

Reserve Officers' Training Corps Programs (ROTC)

The College of Liberal Arts and Sciences also offers students the opportunity to combine their academic programs with ROTC programs in Military Science (Army), Naval Science (Navy, Marine Corps), and Air Force Aerospace Studies.

Learning Communities

Students in the LAS College can participate in a variety of learning community options that support student success by supporting the transition to college life. There are various kinds of learning communities both within and across majors. Most learning communities involve small groups of students who take one or more classes in common and have a staff person or peer mentor who supports students as they make connections and get engaged at ISU.

See <http://www.lc.iastate.edu/> for more information.

Study Abroad and National Student Exchange

The LAS College offers many study abroad and domestic exchange program options to enhance the undergraduate experience. Every year hundreds of students expand their horizons through these programs while they stay on track for graduation. Visit the LAS Study Abroad office in Catt Hall or the National Student Exchange office in 1080 Hixson-Lied for more information.

Undergraduate Research

The LAS College has hundreds of faculty actively engaged in research and most majors have designated independent study and/or research courses. Students are encouraged to talk to faculty about how they can be involved in the process of discovery.

Career Services, Internships and Co-ops

LAS Career Services assists students in gaining career-related experience while going to school. Internships/Co-ops provide students with the opportunity to gain specific skills, apply academic knowledge in practical situations, pretest their career choice, and establish a network of professional contacts. Internships may be paid or unpaid.

Most internships last for a semester or a summer. Students wishing to receive academic credit for their internship must work with their departments and programs in advance of their internship experience to establish a plan to connect their work experience to the curriculum. Official ISU sanctioned co-op arrangements allow students to work full-time on an extended basis (such as working two semesters) or on an alternating basis (work, school, work, etc.) during any semester (fall, spring, summer) while keeping their student status.

Gaining work experience while in college is highly recommended. Students can find internship opportunities through the University CYHIRE system and through participation in any of the career fairs held on campus each Fall and Spring semester. Students must visit with their adviser to make plans for an internship experience and to understand what impact, if any, it may have on their four-year graduation plan.

For additional information, contact Liberal Arts and Sciences Career Services on the first floor of Carver Hall.

Academic Advising Planning the Program of Study

Careful, comprehensive planning is important for meeting graduation requirements and taking advantage of the resources offered by the university. Each student is encouraged to work with his or her academic adviser in developing a four year plan as soon as possible after declaration of the major. A degree audit listing all completed courses and those remaining to be taken for fulfillment of the degree requirements in the student's chosen major is available to the student and the adviser through AccessPlus. The student should review the audit each semester and consult with the adviser when changes are required. Any changes to the audit must be approved by the academic adviser and by the dean's office. Students are responsible for reviewing and updating their degree audits in a timely fashion in order to avoid delays in graduation.

During the first two years, students should meet proficiency requirements in ISU Comm Foundations (English 150,250) and Information Literacy (LIB 160) and make progress toward meeting the general education requirements. The third and fourth years should emphasize completion of the major (and minor, if elected) and general education requirements, and should give the student an opportunity to take electives. Students seeking the enhanced academic opportunities provided by Study Abroad, National Student Exchange, Honors, Undergraduate Research and

Internships will want to engage in careful planning of the Program of Study.

Academic Advising Learning Outcomes

Through their experience with academic advising, students will:

- Develop an understanding of the structure, application, and goals of a liberal arts education in relation to their academic development.
- Be able to formulate appropriate questions, seek information, and evaluate and apply academic advice.
- Know the requirements, policies and protocol of the university, college, and department as they relate to their educational experience.
- Understand how degree programs can be enhanced by study and experiences tailored to their intellectual and personal goals.

Students will also be able to identify and use university resources effectively to:

- Satisfy degree requirements
- Plan programs of study, including selection of appropriate courses and registration
- Discover how interests, skills and goals connect to fields of study and careers
- Link curricular and co-curricular activities
- Research and prepare for advanced study and/or careers
- Share responsibility for a mentor-mentee relationship between advisee and adviser.

Departments of the College

Majors and minors (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegescurricula/>) in the College of Liberal Arts and Sciences are administered by the following departments:

- Air Force Aerospace Studies
- Biochemistry, Biophysics, and Molecular Biology
- Chemistry
- Computer Science
- Ecology, Evolution, and Organismal Biology
- Economics
- English
- Genetics, Development, and Cellular Biology
- Geological and Atmospheric Sciences
- Greenlee School of Journalism and Communication
- History
- Mathematics
- Military Science (Army Reserve Officers' Training Corps)

- Music and Theatre
- Naval Science
- Philosophy and Religious Studies
- Physics and Astronomy
- Political Science
- Psychology
- Sociology
- Statistics
- World Languages and Cultures

MAJORS

- Advertising, B.A. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/advertising/>)
- Anthropology, B.A., B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/anthropology/>)
- Biochemistry, B.S. (http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/biochemistry_biophysics_andmolecularbiology/#biochemistryorbiophysicmajorsinthecollegeofliberalartsandsciences)
- Bioinformatics and Computational Biology B.S. (http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/bioinformaticsandcomputationalbiology_undergraduate/)
- Biological/Pre-Medical Illustration, B.A. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/biopremedillustration/>)
- Biology, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofagricultureandlifesciences/biology/>)
- Biophysics, B.S. (http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/biochemistry_biophysics_andmolecularbiology/#biochemistryorbiophysicmajorsinthecollegeofliberalartsandsciences)
- Chemistry, B.A., B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/chemistry/>)
- Communication Studies, B.A. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/communicationstudies/>)
- Computer Science, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/computerscience/>)

- Criminal Justice Studies, B.A. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/criminaljusticestudies/>)
- Data Science, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/datascience/>)
- Earth Science, B.A., B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/earthscience/>)
- Economics, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/economics/>)
- English, B.A., B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/english/>)
- Environmental Science, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofagricultureandlifesciences/environmentalscience/>)
- Environmental Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/environmentalstudies/>) (secondary major only)
- French (see World Languages and Cultures, below)
- Genetics, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofagricultureandlifesciences/genetics/>)
- Geology, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/geology/>)
- German (see World Languages and Cultures, below)
- History, B.A., B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/history/>)
- Interdisciplinary Studies, B.A., B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/interdisciplinaryprograms/undergraduate/interdisciplinarystudies/>)
- International Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/internationalstudies/>) (secondary major only)
- Journalism and Mass Communication, B.S. (http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/journalism_and_mass_communication/)
- Liberal Studies, B.L.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/liberalstudies/>) (a general studies degree)
- Linguistics, B.A. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/linguistics/>)
- Mathematics, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/mathematics/>)
- Meteorology, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/meteorology/>)
- Music, B.A., B.Mus. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/music/>)
- Performing Arts, B.A. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/theatreandperformingarts/#bachelorofarts-performingartsmajorperf>)
- Philosophy, B.A. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/philosophy/>)
- Physics, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/physicsandastronomy/>)
- Political Science, B.A. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/politicalscience/>)
- Psychology, B.A., B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/psychology/>)
- Public Relations, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/publicrelations/>)
- Religious Studies, B.A. (http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/religious_studies/)
- Sociology, B.A., B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/sociology/>)
- Software Engineering, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofengineering/softwareengineering/>)
- Spanish (See World Languages and Cultures, below)
- Speech Communication, B.A. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/speechcommunication/>)
- Statistics, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/statistics/>)

- Technical Communication, B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/english/#technicalcommunicationmajorrequirements>)
- Women's and Gender Studies, B.A., B.S. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/womensandgenderstudies/>)
- World Languages and Cultures B.A. (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/worldlanguagesandcultures/>):
 - French (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/worldlanguagesandcultures/#frenchfrnch>)
 - German (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/worldlanguagesandcultures/#germanger>)
 - Spanish (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/worldlanguagesandcultures/#spanishspan>)
- Biochemistry, Biophysics, and Molecular Biology (http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/biochemistry_biophysics_andmolecularbiology/#undergraduatestudy)
- Bioinformatics and Computational Biology (http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/bioinformaticsandcomputationalbiology_undergraduate/)
- Biological Illustration (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/biopremedillustration/#minor>)
- Biology (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/biology/#minor>)
- Chemistry (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/chemistry/>)
- Chinese Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/worldlanguagesandcultures/#chinesestudiesminoroption1chinesestudies>)
- Classical Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/classicalstudies/>)
- Communication Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/communicationstudies/>)
- Computer Science (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/computerscience/>)
- Criminal Justice Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/criminaljusticestudies/>)
- Data Science (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/datascience/>)
- Economics (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/economics/#minor-economics>)
- Emerging Global Disease (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofagricultureandlifesciences/entomology/>)*
- English (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/english/>)
- Entrepreneurial Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/interdisciplinaryprograms/minor/entrepreneurialstudies/>)*
- Environmental Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/environmentalstudies/>)

A secondary major must be taken in conjunction with a primary major.

MINORS

To earn a minor students must file paperwork to declare the minor and must complete the requirements specified by the program. Minors consist of at least 15 credits, with at least 6 credits in courses numbered 300 and above taken at ISU with a grade of C or higher. Minors must also include at least 9 credits that are not used to meet any department, college, or university requirement other than the credit requirement for graduation and credit requirement for courses numbered 300 or above. Completed minors will be recorded on the transcript.

- Advertising (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/advertising/>)
- African and African American Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/africanandafricanamericanstudies/>)
- American Indian Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/americanindianstudies/>)
- Anthropology (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/anthropology/#undergraduatestudy>)
- Astronomy (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/physicsandastronomy/#undergraduatestudy>)
- Biochemistry (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/>)

- French (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/worldlanguagesandcultures/#frenchfrnch>)
- Genetics (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/genetics/>)
- Geology (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/geology/>)
- German (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/worldlanguagesandcultures/#germanger>)
- Gerontology (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofhumansciences/gerontology/>)
- History (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/history/>)
- International Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/internationalstudies/>)
- Journalism and Mass Communication (http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/journalism_and_mass_communication/)
- Latin (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/worldlanguagesandcultures/#latinlatin>)
- Leadership Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/leadershipstudies/>)
- Linguistics (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/linguistics/>)
- Mathematics (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/mathematics/>)
- Meteorology (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/meteorology/>)
- Middle Eastern Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/middleeasternstudiesminor/>)
- Military Studies (Army Reserve Officers' Training Corps)* (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/militarystudies/>)
- Music (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/music/>)
- Music Technology (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/music/>)
- Performing Arts (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/theatreandperformingarts/>)
- Philosophy (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/philosophy/>)
- Physics (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/physicsandastronomy/>)
- Political Science (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/politicalscience/>)
- Psychology (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/psychology/>)
- Public Relations (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/publicrelations/#undergraduateminortext>)
- Religious Studies (http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/religious_studies/)
- Russian Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/worldlanguagesandcultures/#russianstudiesrus>)
- Sociology (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/sociology/>)
- Spanish (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/worldlanguagesandcultures/#minor-spanish>)
- Speech Communication (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/speechcommunication/>)
- Statistics (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/statistics/>)
- Sustainability* (<http://catalog.iastate.edu/previouscatalogs/2020-2021/interdisciplinaryprograms/minor/sustainability/>)
- Teaching English as a Second Language (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/teachingenglishsecondlanguage/>)
- Technical Communication (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/english/#technicalcommunicationminorrequirements>)
- U.S. Latino/a Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/uslatino-a-studies/>)
- Wind Energy* (<http://catalog.iastate.edu/previouscatalogs/2020-2021/interdisciplinaryprograms/minor/windenergy/>)

- Women's and Gender Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/womensandgenderstudies/>)
- World Film Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/worldlanguagesandcultures/>)

*The College of Liberal Arts and Sciences participates in these interdepartmental minors.

Certificate Programs

- Actuarial Science Certificate (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofbusiness/actuarialscience/#certificatetext>)
- Computing Applications Certificate (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/computingapplicationscertificate/>)
- Data Science Certificate (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/datascience/>)
- Latin American Studies Certificate (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/latinamericanstudies/>)
- Leadership Studies Certificate (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/leadershipstudies/>)

Cross-Disciplinary Programs

The College of Liberal Arts and Sciences has a variety of interdisciplinary and cross-disciplinary programs that draw on faculty expertise across multiple departments. Students may enroll in courses offered by these programs, declare majors or minors where offered, or propose an Interdisciplinary Studies major.

Cross-Disciplinary Programs

African and African American Studies Program

(Minor only) African and African American Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/africanandafricanamericanstudies/>)

American Indian Studies Program

(Minor only) American Indian Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/americanindianstudies/>)

Biological/Premedical Illustration Program

(Major or minor) Biological/Pre-Medical Illustration (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/biopremedillustration/>)

Communication Studies

(Major or minor) Communication Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/communicationstudies/>)

Data Science

(Major, Minor or Certificate) Data Science (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/datascience/>)

Environmental Science

(Major) Environmental Science (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/environmentalscience/>)

Environmental Studies

(Secondary major or minor) Environmental Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/environmentalstudies/>)

Interdisciplinary Studies Program

(Major only; Degree Tracks: Classical Studies; U.S. Latino/a Studies) Interdisciplinary Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/interdisciplinaryprograms/undergraduate/interdisciplinarystudies/>)

International Studies Program

(Second major or minor) International Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/internationalstudies/>)

Leadership Studies

(Minor or Certificate) Leadership Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/leadershipstudies/>)

Premedical and Preprofessional Health Programs

Preprofessional Study (<http://catalog.iastate.edu/previouscatalogs/2020-2021/preprofessionalstudy/>)

Sustainability Program

(Minor only) Interdisciplinary Minor in Sustainability (<http://catalog.iastate.edu/previouscatalogs/2020-2021/interdisciplinaryprograms/minor/sustainability/>)

U.S. Latino/a Studies Program

(Minor) U.S. Latino/a Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/uslatino-a-studies/>)

Women's and Gender Studies Program

(Major or minor) Women's and Gender Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/womensandgenderstudies/>)

Other Program Collaborations

Bachelor of Liberal Studies Program

Liberal Studies (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofliberalartsandsciences/liberalstudies/>)

Honors Program in Liberal Arts and Sciences

Honors Program (<http://catalog.iastate.edu/previouscatalogs/2020-2021/interdisciplinaryprograms/undergraduategraduate/honorsprogram/>)

Teacher Education Program

Teacher Education (<http://catalog.iastate.edu/previouscatalogs/2020-2021/collegeofhumansciences/schoolofeducation/#teachereducationtext>)