

COLLEGE OF LIBERAL ARTS AND SCIENCES

Beate Schmittmann, Dean

Monic Behnken, Associate Dean

Arne Hallam, Associate Dean

Leslie Hogben, Associate Dean

Kent Kerby, Assistant 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 (LAS) 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. The breadth and depth requirements of our liberal arts and sciences degree programs prepare students for a lifetime of evolving career opportunities.

The College of Liberal Arts and Sciences offers over forty majors. Students can earn Bachelor of Arts, Bachelor of Science, Bachelor of Music, or Bachelor of Liberal Studies degrees. In collaboration with the College of Engineering, the College of Liberal Arts and Sciences also participates in a program of study leading to the Bachelor of Science in Software Engineering.

Preparation for Entering the College of Liberal Arts and Sciences

Students entering the college are expected to have high school preparation with at least 4 years of English, 3 years each of Social Studies, Mathematics and Science. Students are also encouraged to have coursework in computer applications. The study of a world language 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.

Students often enter the College of Liberal Arts and Sciences as transfer students. 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. Early planning can improve the transfer process and support a timely graduation. Details regarding the criteria for graduation with distinction and other academic honors are available under Scholastic Recognition (<http://catalog.iastate.edu/academics/#scholasticrecognitiontext>).

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/admissions/#transferinformationtext>) section of the catalog.

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 their 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 advisor during the first semester of enrollment.

Academic Advising

Each student in the College of Liberal Arts and Sciences is assigned an academic advisor in their area of study. This advisor assists the student in developing a program of study designed to meet the degree requirements while also meeting a student's goals outside of and beyond the classroom by incorporating activities such as study abroad, internships, Honors Program and undergraduate research. Advisors are a first point of contact for referral to university and college resources and services and play a crucial role in student success.

Academic advising begins during orientation programming prior to entry and continues through a student's graduation. Through the process of

advising, students will develop academic plans that reflect their unique interests and goals as well as learn about the university resources available to assist them academically, professionally, and personally. Advisors help students understand how their interests, skills and goals connect to fields of study and careers, including how a liberal arts education enhances their academic development.

Departments and Programs of the College

Majors, minors and certificates in the College of Liberal Arts and Sciences are administered by the following departments and programs.

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 and Criminal Justice
- Statistics
- World Languages and Cultures

Cross-Disciplinary and Interdisciplinary 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, certificates or minors where offered, or propose an Interdisciplinary Studies major.

- African and African American Studies Program
- American Indian Studies Program
- Bachelor of Liberal Studies Program
- Biological/Premedical Illustration Program

- Communication Studies
- Data Science
- Environmental Science and Environmental Studies
- Interdisciplinary Studies Program
- International Studies Program
- Leadership Studies
- Premedical and Preprofessional Health Programs
- Sustainability Program
- U.S. Latino/a Studies Program
- Women's and Gender Studies Program

MAJORS

Students majoring in the College of Liberal Arts and Sciences must meet College of Liberal Arts and Sciences and University-wide requirements (<http://catalog.iastate.edu/collegescurricula/>) for graduation in addition to those stated for the major.

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

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

**This program will be discontinued Fall 2023 pending Board of Regents State of Iowa approval; the Biochemistry major now has a formal program focus in biophysics.*

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

MINORS

In addition to University policies governing minors (<http://catalog.iastate.edu/academics/#degreeplanningtext>), LAS minors require

at least 6 credits in courses numbered 3000 and above, taken at ISU with a grade of C or higher. Completed minors will be recorded on the transcript.

- Advertising (<http://catalog.iastate.edu/collegeofliberalartsandsciences/advertising/>)
- African and African American Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/africanandafricanamericanstudies/>)
- American Indian Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/americanindianstudies/>)
- Anthropology (<http://catalog.iastate.edu/collegeofliberalartsandsciences/anthropology/#undergraduatestudy>)
- Astronomy (<http://catalog.iastate.edu/collegeofliberalartsandsciences/physicsandastronomy/#undergraduatestudy>)
- Biochemistry (http://catalog.iastate.edu/collegeofliberalartsandsciences/biochemistry_biophysics_andmolecularbiology/#undergraduatestudy)
- Bioinformatics and Computational Biology (http://catalog.iastate.edu/collegeofliberalartsandsciences/bioinformaticsandcomputationalbiology_undergraduate/)
- Biological/Pre-Medical Illustration (<http://catalog.iastate.edu/collegeofliberalartsandsciences/biopremedillustration/#minor>)
- Biology (<http://catalog.iastate.edu/collegeofliberalartsandsciences/biology/#minor>)
- Chemistry (<http://catalog.iastate.edu/collegeofliberalartsandsciences/chemistry/>)
- Chinese Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/worldlanguagesandcultures/#chinesestudiesminoroption1chinesestudies>)
- Classical Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/classicalstudies/>)
- Communication Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/communicationstudies/>)
- Computer Science (<http://catalog.iastate.edu/collegeofliberalartsandsciences/computerscience/>)
- Criminal Justice (<http://catalog.iastate.edu/collegeofliberalartsandsciences/criminaljustice/>)
- Data Science (<http://catalog.iastate.edu/collegeofliberalartsandsciences/datascience/>)
- Economics (<http://catalog.iastate.edu/collegeofliberalartsandsciences/economics/#minor-economics>)
- English (<http://catalog.iastate.edu/collegeofliberalartsandsciences/english/>)
- Entrepreneurship (<http://catalog.iastate.edu/interdisciplinaryprograms/entrepreneurship/>)*
- Environmental Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/environmentalstudies/>)
- Ethics (<http://catalog.iastate.edu/collegeofliberalartsandsciences/philosophy/#ethicsminortext>)
- French (<http://catalog.iastate.edu/collegeofliberalartsandsciences/worldlanguagesandcultures/#frenchfrnch>)
- Genetics (<http://catalog.iastate.edu/collegeofliberalartsandsciences/genetics/>)
- Geology (<http://catalog.iastate.edu/collegeofliberalartsandsciences/geology/>)
- German (<http://catalog.iastate.edu/collegeofliberalartsandsciences/worldlanguagesandcultures/#germanger>)
- Gerontology (<http://catalog.iastate.edu/collegeofhumansciences/gerontology/>)*
- History (<http://catalog.iastate.edu/collegeofliberalartsandsciences/history/>)
- International Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/internationalstudies/>)
- Journalism and Mass Communication (http://catalog.iastate.edu/collegeofliberalartsandsciences/journalism_and_mass_communication/)
- Leadership Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/leadershipstudies/>)
- Linguistics (<http://catalog.iastate.edu/collegeofliberalartsandsciences/linguistics/>)
- Mathematics (<http://catalog.iastate.edu/collegeofliberalartsandsciences/mathematics/>)
- Meteorology (<http://catalog.iastate.edu/collegeofliberalartsandsciences/meteorology/>)
- Middle Eastern Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/middleeasternstudiesminor/>)
- Military Studies (Army Reserve Officers' Training Corps)* (<http://catalog.iastate.edu/collegeofliberalartsandsciences/militarystudies/>)
- Music (<http://catalog.iastate.edu/collegeofliberalartsandsciences/music/>)
- Music Technology (<http://catalog.iastate.edu/collegeofliberalartsandsciences/music/>)
- Performing Arts (<http://catalog.iastate.edu/collegeofliberalartsandsciences/theatreandperformingarts/>)
- Philosophy (<http://catalog.iastate.edu/collegeofliberalartsandsciences/philosophy/>)
- Physics (<http://catalog.iastate.edu/collegeofliberalartsandsciences/physicsandastronomy/>)

- Political Science (<http://catalog.iastate.edu/collegeofliberalartsandsciences/politicalscience/>)
- Psychology (<http://catalog.iastate.edu/collegeofliberalartsandsciences/psychology/>)
- Public Relations (<http://catalog.iastate.edu/collegeofliberalartsandsciences/publicrelations/#undergraduateminortext>)
- Religious Studies (http://catalog.iastate.edu/collegeofliberalartsandsciences/religious_studies/)
- Russian Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/worldlanguagesandcultures/#russianstudiesrus>)
- Sociology (<http://catalog.iastate.edu/collegeofliberalartsandsciences/sociology/>)
- Spanish (<http://catalog.iastate.edu/collegeofliberalartsandsciences/worldlanguagesandcultures/#minor-spanish>)
- Spanish Translation and Interpretation Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/worldlanguagesandcultures/#spanishtext>)
- Speech Communication (<http://catalog.iastate.edu/collegeofliberalartsandsciences/speechcommunication/>)
- Statistics (<http://catalog.iastate.edu/collegeofliberalartsandsciences/statistics/>)
- Sustainability* (<http://catalog.iastate.edu/interdisciplinaryprograms/sustainability/>)
- Teaching English as a Second Language (<http://catalog.iastate.edu/collegeofliberalartsandsciences/teachingenglishsecondlanguage/>)
- Technical Communication (<http://catalog.iastate.edu/collegeofliberalartsandsciences/technicalcommunication/#undergraduateminortext>)
- U.S. Latino/a Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/uslatino-a-studies/>)
- Women's and Gender Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/womensandgenderstudies/>)
- World Film Studies (<http://catalog.iastate.edu/collegeofliberalartsandsciences/worldfilmstudiesminor/>)
- Actuarial Science Certificate (<http://catalog.iastate.edu/collegeofbusiness/actuarialscience/#certificatetext>)
- Computing Applications Certificate (<http://catalog.iastate.edu/collegeofliberalartsandsciences/computingapplicationscertificate/>)
- Data Science Certificate (<http://catalog.iastate.edu/collegeofliberalartsandsciences/datascience/>)
- Latin American Studies Certificate (<http://catalog.iastate.edu/collegeofliberalartsandsciences/latinamericanstudies/>)
- Leadership Studies Certificate (<http://catalog.iastate.edu/collegeofliberalartsandsciences/leadershipstudies/>)
- Science Communication Certificate (<http://catalog.iastate.edu/collegeofliberalartsandsciences/sciencecommcertificate/#text>)

LAS College Requirements

To obtain a bachelor's degree in any program offered by the College of Liberal Arts and Sciences, an undergraduate student must meet all university graduation requirements including:

- minimum of 120 credits
- 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
- Information Literacy Requirement (credit for LIB 1600 Introduction to College Level Research)
- Communication Proficiency Requirement (credit for ENGL 1500, ENGL 2500*, and upper-level coursework)
- U.S. diversity and international perspectives requirements

**The College of Liberal Arts and Sciences aligns with the University Communication Proficiency Grade Requirement (<http://catalog.iastate.edu/academics/#communicationproficiencypolicytext>). At a minimum, students must demonstrate their communication proficiency by earning a grade of C or better in ENGL 2500; some majors set higher requirements for communication proficiency. For other university policies governing ISU degree programs, see Academics (<http://catalog.iastate.edu/academics/>).*

Students with majors leading to Bachelor of Science or Bachelor of Arts degrees, must also meet all college and program specific requirements including:

- General Education
- World Language
- Advanced Credits
- Career Proficiency
- Completion of the Major

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

Certificate Programs

University policies governing Certificate Programs (<http://catalog.iastate.edu/collegescurricula/#undergraduatecertificatetext>) are found in the Degree Planning (<http://catalog.iastate.edu/academics/#degreeplanningtext>) section of the catalog.

General Education

Requirements in a major are designed to develop depth, or mastery of a specific field or discipline, while courses in general education are designed to establish breadth, or a strong, intellectual foundation to support learning for all majors.

General Education Requirements and Learning Goals

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.

Consistent with its breadth goal, courses with the designator of a student's 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. Courses taken to meet the requirements of a second major, third major or certificate may be counted in the general education groups.

Seminars and experimental courses may be acceptable as general education; advisors should consult with the LAS college office. Orientation courses, independent study courses (usually numbered 2900 or 4900), cooperative courses, courses numbered 5000 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 1020 level.
- Receiving a passing grade in an ISU 1020 world language or American Sign Language (ASL) course, an approved ISU intensive or accelerated 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 2000-level or higher.
- Being a native speaker of a language other than English.
- Completing a major in any world language.

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 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 3000 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.

Career Proficiency Requirement

Students will demonstrate knowledge of foundational career preparation topics such as internship and job search resources and processes, identifying and developing personal strengths and experiences, preparing application materials, interviewing, negotiating offers, and understanding ISU career services resources.

The minimum expectations of this career-readiness requirement will be met by successful completion of LAS 2030 Professional Career Preparation.

Students are expected to complete the minimum requirement before their third year (before their third semester at ISU for transfer students) and are encouraged to continue developing their career proficiency beyond the minimum through internships, co-ops, research, entrepreneurial activities and other professional development experiences and coursework during their Junior and Senior years.

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 comprises 24 to 50 credits in a program of study 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 Majors, Minors and Certificates to find individual department and program requirements.)

The average grade of all courses in the major (those courses listed under major on the degree audit) must be 2.0 or higher. The major must contain at least 8 credits in courses taken at Iowa State University that are numbered 3000 or above and in which the student's grade is C or higher. Some majors have specific GPA requirements for key courses or groups of courses.

Courses with the designator of the first major listed on the degree program may not be counted in the general education groups.

The major in Interdisciplinary Studies (<http://catalog.iastate.edu/interdisciplinaryprograms/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 certificates.

Additional Majors

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

When choosing an additional major, students must confirm that the additional major is allowable; currently the following combinations of majors are not allowed, as multiple majors or multiple degrees:

- Economics with Business Economics
- Any combination of Journalism and Mass Communication, Advertising, and Public Relations.

Students interested in pursuing multiple majors should talk to their advisor about the process. 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 the general education and other degree requirements 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, Career Proficiency and Advanced Credits requirements.

University policies for students wishing to double major or earn two bachelor's degrees are found in the Degree Planning (<http://catalog.iastate.edu/academics/#degreeplanningtext>) section of the catalog.

Minors and Certificates

In addition to earning a major a student may want to complete a minor or certificate to indicate a special concentration of study. University policies related to minors and certificates and lists of all minors and certificates are available in the catalog. See the Degrees, Majors, Minors and Certificates tab in the LAS section of the catalog for all minors and certificates offered by the college. In addition to University policies governing minors (<http://catalog.iastate.edu/academics/#degreeplanningtext>), LAS minors require at least 6 credits in courses numbered 3000 and above, taken at ISU with a grade of C or higher. Completed minors and certificates will be recorded on the transcript.

Bachelor of Music Curriculum

In addition to the major in music leading to a Bachelor of Arts degree, the LAS College offers a Bachelor of Music degree (B.Mus.). In order to pursue teacher certification and recommendation for licensure in music, students must earn the Bachelor of Music degree. Bachelor of Music students 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/collegeofliberalartsandsciences/music/#undergraduatetext>), Degree Requirements.

Bachelor of Liberal Studies Curriculum

The LAS College also administers the Bachelor of Liberal Studies (B.L.S.) degree, a bachelor's degree program established by Iowa Board of Regents and offered by all three Regents institutions. The B.L.S. is a general studies degree. While the B.L.S. does not have traditional majors focused on a specific discipline, students may choose to pursue the Liberal Studies Major, taking coursework in three areas of distribution, or the Professional Studies Major, taking coursework aimed to develop broad professional competencies in critical thinking, communication, leadership/teamwork, and technology. With the assistance of a B.L.S. advisor, students can structure a program that meets their individual educational, vocational or personal goals. Students in the B.L.S. program

are not eligible for additional majors, but they may earn a Certificate or minor by completing all of the requirements of those programs. Criteria for graduating with distinction and other academic honors with a B.L.S. degree are available under Scholastic Recognition (<http://catalog.iastate.edu/academics/#scholasticrecognitiontext>).

For specific degree requirements, see Bachelor of L (<http://catalog.iastate.edu/collegeofliberalartsandsciences/liberalstudies/>) liberal Studies (<http://catalog.iastate.edu/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/collegeofliberalartsandsciences/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, certificate or additional 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 4900 (Independent Study) courses may be counted toward graduation.
- Criteria for graduating with distinction and other academic honors are available under Scholastic Recognition (<http://catalog.iastate.edu/academics/#scholasticrecognitiontext>).
- Students whose high school study of world languages meets the College World Language Requirement may not enroll in or receive credit for 1010 or 1020 in that language.

- Students are responsible for talking to their academic advisors, using the degree audit, and reviewing other University policies. See the Academics (<http://catalog.iastate.edu/academics/>) section of the catalog.

Open Option

Students who enter Iowa State University and want time to explore the best match between their academic interests, abilities, and career goals 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 advisors who specialize in working with students who have not declared a major. First-year Open Option students take LAS 1010 and participate in the HOME learning community. This orientation experience introduces students to campus resources as well as to all of the colleges and majors on campus.

Aided by their advisor, Open Option students select courses that allow them to explore 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.

For more information, visit the Open Option webpage (<https://openoption.iastate.edu/>).

Opportunities for Students

The College of Liberal Arts and Sciences provides many opportunities for students to enhance their knowledge, skills and credentials beyond traditional academic work in their majors, minors or certificate programs.

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/interdisciplinaryprograms/honorsprogram/>).

Liberal Arts and Sciences Honors is designed to add depth, breadth and challenge to enrich 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 intellectual community that characterizes 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 apply. Upon graduation, students who fulfill all of the requirements of the Honors Program are recognized by a special notation on their diploma and permanent record. Honors students wear white Honors cords at graduation.

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.

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
- Political Science
- World Languages and Cultures (Endorsements are available in French, German, and Spanish.)

Students may also prepare for recommendation for additional endorsements. For further information, see Educator Preparation (<http://catalog.iastate.edu/collegeofhumansciences/schoolofeducation/#teachereducationtext>).

*Students in the College of Liberal Arts and Sciences who complete the approved teacher preparation program in music education (B.Mus.

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.

Preprofessional Programs

Any major in the College of Liberal Arts and Sciences provides excellent preparation for entry to professional schools. Students may enter the college with a designation of Pre-Med, Pre-Law or Preprofessional Health. Most students will earn a bachelor's degree in the major of their choosing while also completing the courses required for admission to professional schools. Some students will spend one to three years as students in the college before transferring to a professional school where they have been accepted to complete their studies.

Preprofessional students are encouraged to pursue a major that interests them and where they excel. Advisors work with students to develop a program of study within their major that meets admission requirements to professional school and develops a student's credentials for the competitive application process to professional schools. For further information, see Opportunities for Preprofessional Study (<http://catalog.iastate.edu/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 which allows qualified students to complete three years at Iowa State and transfer coursework from the first year of law school to complete their bachelor's degree requirements. Visit the Liberal Arts and Sciences Student 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 (Air Force, Space Force). See Officer Education Programs (<http://catalog.iastate.edu/collegeofliberalartsandsciences/officereducationprograms/>) 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.

LAS Study Abroad provides international study, work, and service opportunities for all Iowa State students. LAS supports faculty and staff to facilitate learning opportunities abroad, and partners with organizations to offer a breadth of program options.

International learning opportunities for LAS students come in varied formats, from semester-long experiences focused on language immersion to three-week long global seminars that focus on interdisciplinary subjects. Faculty-led programs are among the most sought-after by our undergraduates, as they pair faculty expertise and ISU credit with the opportunity to explore other lands and cultures. Other program types available to students are exchanges, direct-enroll and affiliate programs.

LAS students can also work with the ISU National Student Exchange program to explore options to study out-of-state at one of more than 200 universities within the United States, US Territories, and Canada.

Visit LAS Study Abroad (<https://abroad.las.iastate.edu/>) or the National Student Exchange website (<https://www.nse.dso.iastate.edu/>) for more information.

Undergraduate Research

The LAS College has hundreds of faculty members 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.

LAS Innovation and Entrepreneurship Academy

The College of Liberal Arts and Sciences I+E Academy (<https://las.iastate.edu/students/lasinnovates/>) offers a two-year program open to all LAS majors, where students engage in online, face-to-face, and interactive activities to experience and develop an innovative and entrepreneurial mindset. The program matches students with a mentor in the second year and connects students with other on campus opportunities such as ISU's Pappajohn Center for Entrepreneurship (<https://www.isupjcenter.org/>) and Student Innovation Center offerings (<https://sict.r.iastate.edu/>) where students can further develop their innovative ideas.

Career Services and Internships

LAS Career Services supports students' career exploration, career development, and professional career search assistance. The career development process requires students to proactively plan and engage with applied learning experiences, such as internships, research, and leadership positions, throughout their time on campus. LAS Career Services strongly recommends students have 1-2 internships before entering the workforce.

LAS Career Services offers career advising, internship and job search resources, and organizes events such as career fairs that connect students with employers. Services are available to undergraduates,

graduate students, and alumni. Academic credit may be available for internships/co-op through departments and LAS Career Services.

For additional information, explore the LAS Career Services website (<https://careers.las.iastate.edu/>) or visit their office on the first floor of Carver Hall.