Natural Sciences

College Natural Sciences

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Arts and Sciences Education

The academic program offered cooperatively by the College of Natural Sciences and the College of Liberal Arts provides what is sometimes referred to as a "liberal arts" or an "arts and sciences" education. No matter what area of knowledge a student intends to specialize in, the program of study will require courses in both colleges. The colleges work together to ensure that the individual interests and needs of the students pursuing an arts and sciences program are met.

Guidelines for developing a coherent plan of study are provided by major requirements, by sequential prerequisites, and by optional patterns of emphasis. Departmental majors, areas of specialization, and interdepartmental programs are designed to enable every student to study at least one field in depth. These programs are sufficiently broad in scope to allow students in the same major to develop quite different plans of study in pursuit of their individual interests and goals. Each student should choose courses that are intellectually challenging and that contribute to his or her long-term objectives.

Arts and sciences students are required to take a certain number of courses in the natural sciences, the social and behavioral sciences, and the humanities. Consequently, whatever their fields of study, they have the opportunity to learn something about the basic differences in the ways questions are raised and answered in several fields of inquiry, and about the techniques for validating the answers and putting the results to use. At the same time, they may gain some of the philosophical and historical perspectives that illuminate and give form to general or specialized knowledge and help to reveal its relevance.

Both teachers and students sometimes make the assumption that independent and creative study is exclusively for the gifted. In fact, the primary requirement is that the student be highly motivated, although he or she must also demonstrate ability. The departments that make up the two arts and sciences colleges encourage all qualified students to work independently in special honors courses and seminars and in conference, studio, or laboratory work. The student is free to define a major, to determine whether a given assignment will be an adventure or a chore, free to develop its latent possibilities or merely satisfy its explicit demands. True creativity presupposes more than a gift for innovation; it requires an unceasing commitment to thinking and working at one's highest level.

As competence is gained in a chosen field, the mind should be progressively sharpened, disciplined, and enriched. The student who leaves arts and sciences studies with an enhanced understanding of self and humankind, of cultural and historical heritage, of the world and the universe, and of the moral values that make it possible to live a meaningful life, will have made the most of education, having gained something over and above the objective of vocational preparedness.

Financial Assistance Available through the College

A number of scholarship funds established by individuals, foundations, and industrial or research organizations are available to students in the college. Awards are made for reasons ranging from academic promise to financial need. More information about scholarships is given at http://cns.utexas.edu/honors/scholarships/scholarship-policies.

Student Services

Academic Advising

Academic advising is a responsibility shared by advisors and students. Advisors help students clarify their values and goals, assist with the selection of courses, and monitor and evaluate students' progress toward their degrees. Each student is assigned an academic advisor in his or her proposed field of study; students are expected to communicate with their advisors before registration each semester.

Career Services

Career Services is a multidisciplinary hub for students to explore the next phase of their professional or educational career. Additional information is given on the Career Services website.

Study Abroad (International Study)

Students are encouraged to incorporate an international experience into their course of study. In addition to the traditional study abroad programs, students may take advantage of programs specifically designed for science study, including faculty-led courses, May term courses, and research abroad. The Texas Institute for Discovery Education in Sciences (TIDES) provides information sessions, one-on-one advising, and resources for science students interested in these programs. For more information, see https://cns.utexas.edu/international-study.

Student Programs

The College of Natural Sciences offers additional programs to supplement the degree plans. Additional information is given at https://cns.utexas.edu/student-communities.

Actuarial Studies Program

The Actuarial Studies Program at The University of Texas at Austin has a long and distinguished history of producing well-prepared students, many of whom have become leaders of the actuarial profession. In the Society of Actuaries classification of North American actuarial programs, our program qualifies as one of about 70 advanced undergraduate programs and as one of about 30 graduate education or graduate education and research programs - thus providing a thorough preparation for entering an actuarial career. For more information, see https://sites.cns.utexas.edu/actuarial-science/home.

Biology Scholars Program

The Biology Scholars Program (BSP) is designed to provide lower-division biochemistry and biology students with a broader understanding of the study of biology and a strong sense of community as they begin their academic careers. Throughout the two-year program, BSP provides academic support, resources for peer-led study, and community service opportunities. Each semester, BSP students take a specialized critical

thinking seminar on topics that range from the study of biological sciences to graduate and professional careers in biology. These classes emphasize working in small groups and help BSP students develop strong problem-solving and study skills.

Cornerstones Program

All entering Natural Sciences majors, freshman or transfer, are eligible for participation in the Cornerstones Program. The guiding principles for students are to connect, acclimate, navigate, and explore. Each entering freshman joins a small learning community led by a faculty or staff advisor and a peer mentor. The key components of Cornerstones are creating small learning communities, gaining tools to succeed in college, learning about majors, and developing skills and experiences to launch successful careers upon graduation. Transfer students are given the option to join the program. More information is available at https://cns.utexas.edu/student-communities/cns-cornerstones-communities.

Freshman Research Initiative

The Freshman Research Initiative in the Texas Institute for Discovery Education in Science (TIDES) introduces undergraduate students to the world of scientific research at the beginning of their academic careers by integrating a three-semester research experience into coursework required for the degree. All students begin with an introductory research methods course in the first semester, followed by two semesters of work on real, cutting-edge research projects in fields like biology, biochemistry, nanotechnology, molecular biology, astronomy, physics, mathematics, and computer science. After finishing the course sequence, interested students are assisted in joining faculty or other research laboratories for further work.

Texas Interdisciplinary Plan

The Texas Interdisciplinary Plan (TIP) transforms the learning experience for its scholars by creating small academic communities that promote academic excellence and leadership. TIP offers students who have excelled in high school and are enrolled in the College of Natural Sciences a unique opportunity to continue their academic excellence through managed courses, mentoring, collaborative study, dedicated professional academic advising, and academic and social connections. More information is available from the TIP office and at https://cns.utexas.edu/tip-scholars.

Undergraduate Research

One advantage that the University offers undergraduates is the opportunity to participate in state-of-the-art research with some of the world's most respected scientists. Each department in the College of Natural Sciences supports undergraduate research programs in which students may earn University credit. Students may also earn special departmental honors for exceptional research. The college holds an annual Undergraduate Research Forum to recognize and reward students who participate in research. Additional opportunities vary from department to department; information is available in the Office for Honors, Research, and International Study.

UTeach-Natural Sciences

UTeach-Natural Sciences is an innovative teacher preparation program that allows students to pursue middle school and secondary teacher certification within a four-year mathematics, science, or computer science degree program. While learning the subject matter of their majors, students also learn how to teach. Upon completing the program, students graduate with a bachelor's degree and are recommended for a middle school or secondary teaching certificate. The UTeach-Natural Sciences program invites students to explore their interest in teaching as early as the freshman year. Through courses taught by some of Texas's most respected secondary math and science teachers, students learn quickly whether they are suited to the profession. More information about teacher certification requirements is given in the UTeach Natural Sciences Secondary Teaching Option Certificate and UTeach Teacher Certification section of this catalog. See Preparation for Teacher Certification for additional information.

Women in Natural Sciences

The Women in Natural Sciences (WINS) Honors Residential Program is designed to promote the involvement and success of women in the sciences. Students live together in an honors dormitory during their first year and participate in socially and educationally enriching activities. In their first semester they take an innovative small seminar class in which they are introduced to faculty members in their areas of interest. Through the seminar and a wide range of academic, cultural, and social events, WINS students are connected with other students and faculty members who share their interest in science.

Requirements and Policy

Foreign Language and Culture Requirement

Depending on the degree you are pursuing, you may have options in foreign language and culture.

For B.A. Degree Candidates

Students pursuing the Bachelor of Arts (B.A.) degree cannot use foreign culture courses to fulfill their foreign language requirement. The B.A. degree will count foreign language credit gained through advanced placement or credit-by-exam. Speak with your academic advisor if you need help determining the fourth semester proficiency level in the language you wish to study.

For B.S.A. Degree Candidates

Foreign language or foreign culture is optional for the Language, Arts, and Culture requirement for B.S.A. students.

1. No minimum amount of foreign language is required to apply foreign language toward the requirement.
2. A maximum of six semester hours earned through advanced placement or credit-by-exam may count toward the Language, Arts, and Culture requirement.
3. If foreign culture is chosen, no minimum number of courses from the foreign culture categories is required.
4. If foreign culture is chosen, the courses must be taken from the pre-approved Natural Sciences Foreign Culture Category lists shown below.

For B.S. Degree Candidates

Foreign language and/or foreign culture is required for many B.S. degrees:

1. 2nd semester proficiency in a single foreign language
2. 1st semester proficiency and a foreign culture course from the same language area (e.g., Spanish and Central and South America category)
3. Two foreign culture courses from a single foreign culture category.

B.S. degree plans will count foreign language credit gained through advanced placement or credit-by-exam. If foreign culture courses are chosen, they must be taken from the pre-approved Natural Sciences Foreign Culture Category lists shown below.

The following B.S. degrees do not require foreign language/foreign culture: Biochemistry, Biology, Human Development and Family Sciences, Mathematics, Neuroscience, Nutrition, and Textiles and Apparel.

Academic Standards

Mathematics Placement

Mathematics, in the form of calculus or statistics, is required for all natural sciences degrees. To enroll in a calculus course in the college, students must first take the mathematics placement exam. Scores necessary for placement into specific mathematics courses are posted by the Student Division. More information about scores and course placement is available from academic advisors.

Repetition of a Course

Students may appeal to take a course for a third time. Third time appeals are reviewed by a student's assigned academic advisor and are considered in cases of non-academic impacts to prior attempts. A symbol of Q or W counts as an enrollment unless it has been approved by the dean's office for nonacademic reasons

Students may not repeat any course in which they have earned a grade of *C-* or better.

Departments in the college may have additional requirements for students who repeat courses.

Undergraduates in a Graduate Course

The College of Natural Sciences encourages undergraduates who excel academically and would benefit from further challenges to enroll in graduate courses. With permission, undergraduates may count graduate courses toward their undergraduate degrees or may reserve them for graduate credit. To enroll in a graduate course, undergraduates must meet the University's eligibility requirements and must receive permission from the course instructor, the graduate advisor for the field in which the course is offered, and the college. Undergraduates reserving courses for graduate credit must also receive permission from the vice provost for graduate and postdoctoral studies. More information is given in Academic Information & Policy.

Petitions for Degree Requirements

Petitions for exceptions to degree requirements, other than the University-wide core curriculum, are handled through an online petition system. Academic advisors initiate petitions on the student's behalf and route them through departmental faculty advisors. The most common reason for petitioning is to request the substitution of transfer coursework for a specific degree requirement. Final decisions on all petitions are made by the dean's office. Degree requirements are very rarely waived outright.

Personal Computing Devices

Students entering the College of Natural Sciences majors are encouraged to have access to a portable computing device as individual courses may require the device for certain lectures and/or labs.

Multiple Degrees Policy

A student may not earn more than one Bachelor of Arts, Bachelor of Science and Arts, or Bachelor of Science in Environmental Science degree from the University.

A student may earn only one undergraduate degree in a particular area of study from the College of Natural Sciences.

- Biology, biochemistry, and neuroscience are considered one area of study.
- BS Biology Ecology, Evolution, and Behavior and Environmental Science are considered one area of study.
- Computer Science and CS+Neuroscience (BSNeuCS degree), CS +History (BSHisCS degree), and CS+Linguistics (BSLinCS degree) are considered one area of study.
- Neuroscience and CS+Neuroscience (BSNeuCS degree) are considered one area of study.
- Biochemistry and Chemistry are considered one area of study.

A student who holds a Bachelor of Arts or a Bachelor of Science and Arts degree from the University may earn a second major designation in another area of study that will appear on the University transcript. A natural sciences student who wishes to add another major in the college must meet the criterion described in the Admissions tab.

Diploma Policy

The title of a graduate's degree appears on his or her diploma, but the major does not. The degree, the major, the transcript-recognized certificate, and the minor appear on the graduate's University transcript.

Concurrent Enrollment

Concurrent enrollment is enrollment simultaneously at the University and at another educational institution or in University Extension. Math and science courses may not be taken concurrently during fall, winter, spring, and may semesters and will not be counted toward a degree unless they are specifically approved in advance by the College of Natural Sciences. The college permits concurrent enrollment during summers without prior approval and during fall and spring semesters with certain restrictions. Students must see their academic advisors to petition for approval. No more than 30 percent of the semester hours required for any degree in the college may be completed online with University Extension.

Minor Policy

In the College of Natural Sciences, only one transcript-recognized minor or transcript-recognized certificate may be declared per major.

A student who wishes to pursue more than one transcript-recognized minor or transcript-recognized certificate per major must consult with his or her academic advisor to get permission from the College. When considering whether to grant an exception and allow pursuit of another transcript-recognized credential, the academic advisor will take into account the student's long-term education/professional goals and the student's ability to graduate within four years of entering the university.

Students admitted to transcript-recognized certificate and transcript-recognized minor programs must contact their academic advisors to have approved programs added to their degree audit profiles. This allows progress toward the programs to be tracked and ensures that certificates and minors are added to official transcripts upon graduation, if all requirements are met.

See Minors and Certificates policy section for more information.

Certificate Policy

See Minors and Certificates policy section for more information.

Applicability of Certain Courses

Physical Activity Courses

Physical activity (PED) courses, KIN 106C, and KIN 119 may not be counted toward a degree in the College of Natural Sciences. However,

they are counted as courses for which the student is enrolled, and the grades are included in the grade point average.

ROTC Courses

ROTC units are maintained on campus by the Departments of Air Force Science, Military Science, and Naval Science. Information about each program is available from the chair of the department.

Nine semester hours of designated University of Texas at Austin coursework in air force science, military science, or naval science may be counted toward any degree in the College of Natural Sciences.

Courses Taken on the Pass/Fail Basis

No more than 16 semester hours taken on the pass/fail basis may be counted toward the Bachelor of Arts, Plan I. No more than six semester hours taken on the pass/fail basis may be counted toward the Bachelor of Science and Arts degree and the Bachelor of Science degrees. In general, only electives may be taken on the pass/fail basis. Complete rules on registration on the pass/fail basis are given in the General Information Catalog.

Courses in a Single Field

For the Bachelor of Arts, Plan I, no more than 39 hours may be counted in any one field of study, including the major, unless major requirements state otherwise. Additionally, for the Bachelor of Arts, Plan I, no more than 39 hours may be counted in any one college or school other than the College of Liberal Arts or the College of Natural Sciences.

College Algebra

Algebra courses at the level of M 301 or the equivalent may not be counted toward a degree in the College of Natural Sciences.

Chemistry

Students seeking the degree of Bachelor of Science in Chemical Engineering or Bachelor of Science in Physics must take The University of Texas at Austin Test for Credit in CH 301 if they were admitted to the University with high school credit in chemistry. Engineering majors in areas other than chemical engineering are also encouraged to take the test. The tests are offered only in Austin. Information about them is available at https://testingservices.utexas.edu/credit.

Each student planning to register for a chemistry course should consult an advisor in his or her major area to determine whether specific courses are required.

Computer Science

An undergraduate may not enroll in any computer science course more than once without written consent of an undergraduate advisor in computer science. No student may enroll in any computer science course more than twice. No student may take more than three upper-division computer science courses in a semester without written consent of an undergraduate advisor in computer science.

Mathematics

The Department of Mathematics offers a wide variety of courses both for math majors and for non-majors. Students interested in mathematics as a first or second major should consult the advisors in the Mathematics, Physics, and Astronomy Advising Center, in RLM 4.101.

Course prerequisites are enforced. Most entry-level mathematics courses have an appropriate score on the mathematics placement exam as a prerequisite. In such courses, students must be prepared to present proof of their score immediately after classes have begun; those unable to meet the score will be dropped.

Students may check the current *Course Schedule* or go to the Department of Mathematics website for details about the prerequisite required for their course.

Students who plan to use transfer credit to meet the prerequisite of a mathematics course must submit an official transcript to the Office of Admissions so that the credit may be added to their official university record. In addition to sending a transcript, students are encouraged to retain hard copies of their grade reports for proof of prerequisite until their transcripts are processed.

Students who wish to enroll in conference courses in the Department of Mathematics must submit consent of instructor forms to the department before registering. Forms are available in the Advising Center.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in the General Information Catalog.

Graduation

Special Requirements of the College

All students must fulfill the General Requirements for graduation. Students in the College of Natural Sciences must also fulfill the following requirements:

1. The University requires that the student complete in residence at least 60 semester hours of the coursework counted toward the degree. For the Bachelor of Arts, Plan I, and the Bachelor of Science and Arts, these 60 hours must include at least 18 hours in the major.
2. The University requires that at least six semester hours of advanced coursework in the major be completed in residence. Additional hours in the professional or major sequence in many cases are required by individual natural sciences degree programs.
3. A candidate for a degree must be registered in the College of Natural Sciences either in residence or in absentia the semester the degree is to be awarded. Graduation applications must be submitted no later than the date given in the academic calendar. The application and supplemental in absentia instructions are available via the College of Natural Sciences website.

Applying for Graduation

An electronic degree audit is created for each student each semester. The student should view the audit through IDA, the University's Interactive Degree Audit system. The degree audit tells the student the courses he or she must take and the requirements he or she must fulfill to receive the degree. The degree audit normally provides an accurate statement of requirements, but the student is responsible for knowing the requirements for the degree as stated in a catalog under which he or she is eligible to graduate and for registering so as to fulfill all these requirements. The student should speak with his or her assigned academic advisor before registering if in doubt about any requirement.

In the semester in which the degree is to be conferred, the candidate must be registered at the University and must file an online graduation application form via the graduation section of the College of Natural Sciences website. This should be done during the first week of classes, if possible, but in no event later than the deadline to apply for an undergraduate degree; this date is given in the official academic

calendar. No degree will be conferred unless the graduation application form has been filed on time.

Admission

Admission Policies of the College

Admission and readmission of undergraduate students to the University is the responsibility of the director of admissions. Information about admission to the University is given in the General Information Catalog.

Freshman and transfer students wishing to enter the College of Natural Sciences must apply for admission with the Office of Admissions. The College of Natural Sciences works jointly with the Office of Admissions to identify applicants who have demonstrated preparation and interest in mathematics and sciences. A student must be admitted to the college to pursue a degree program described in this section. A student who is denied admission to the college may seek to enter another college or school.

Freshman Admission

Applicants should be prepared to make the necessary placements scores on the placement exams for calculus or statistics upon admission into the college. Mathematics, in the form of calculus or statistics, is required for all natural sciences degrees. To enroll in a calculus or statistics course in college, students must first take the mathematics placement exam. Information about scores necessary for placement are posted by the Student Division.

The Entry-Level Major

All new freshman and transfer students are admitted into the College of Natural Sciences in an entry-level major. After completing a specified set of entry-level mathematics and science courses required for the degree with a grade of at least *C-* in each course, students are admitted to the major and option they plan to pursue unless the major or option has special admission-to-major requirements. The computer science and statistics and data science entry-level majors are restricted to students who are admitted to these majors by the Office of Admissions.

Students admitted into the College of Natural Sciences through freshman admission or external transfer may change from one entry-level major into the other, with the exception of the computer science, neuroscience, and statistics and data science entry-level majors. The computer science, neuroscience, and statistics and data science entry-level majors are restricted to students who are admitted by the Office of Admissions or through internal transfer.

Transfer Admission

Internal Transfer

Students enrolled in other colleges or schools at the University may apply by April 15 to be considered for admission into an entry-level major in the following fall semester. If April 15 falls on a weekend or an official university holiday, the application is due on the next business day.

Admission to the college is limited and competitive. To be competitive, students should:

1. Complete a minimum of 24 semester hours in residence
2. Achieve a grade point average of at least 3.00 in residence
3. Complete one of the following courses in residence with a grade of at least *B-*: M 408C, M 408D, M 408K, M 408L, M 408M, M 408N, M 408Q, M 408R, M 408S, or SDS 302F.
4. Complete two of the following courses in residence with grades of at least *B-*: BIO 311C, CH 301, CH 301C, CH 302, CH 302C, PHY 303K, and PHY 303L, or majors level equivalents.
5. Submit an essay describing how the intended major would impact achievement of the educational and career goals.

Students admitted through internal transfer who wish to change to a different major in the college must apply through internal transfer and be accepted in order to change majors. Public Health entry-level majors admitted through internal transfer who are not admitted to the Bachelor of Science in Public Health degree during its admission process may transfer into any Natural Sciences entry-level major other than computer science, neuroscience, and statistics and data science.

External Transfer

Students enrolled at other universities or colleges who wish to enter the College of Natural Sciences must apply for transfer admission through the Office of Admissions. Students must meet transfer admission deadlines and requirements.
The college seeks applicants with excellent past performance in mathematics and science courses. Admission to the college is limited and competitive, and varies each year based on the applicant pool. Meeting all of the following criteria does not guarantee admission, and failing to meet all criteria does not eliminate applicants from consideration. All students are welcome to apply.
To be competitive, it is recommended that students:

1. Complete or be in progress to complete a minimum of 24 transferable semester hours when submitting the application;
2. Achieve a grade point average of at least 3.0, however, the GPA to be competitive for admission is generally higher;
3. Transfer one of the following with a grade of at least *B-*: M 408C, M 408D, M 408K, M 408L, M 408M, M 408N, M 408Q, M 408R, M 408S, SDS 302F;
4. Transfer two of the following with a grade of at least *B-*: BIO 311C, BIO 311D CH 301, CH 301C, CH 302, CH 302C, C S 311, C S 312, PHY 303K, PHY 303L or majors level equivalents;
5. Utilize all aspects of the admissions application, including essays, resume, and optional letters of recommendation to express interest in the intended academic and career path in the sciences.

The University of Texas prioritizes transfer students who have completed fewer than 70 semester hours and who are able to remain on track to complete a degree in four years, including time spent at previous institutions.

Statistics regarding past admissions cycles are available at cns.utexas.edu/students/future/external-transfer#transfer-statistics.

Adding a Simultaneous Major or Changing Majors

Students interested in declaring a simultaneous major must first discuss the impact of the simultaneous major on their progress toward degree and develop a timely graduation plan with their academic advisors. Students eligible to pursue a simultaneous major must follow the application procedure and meet admission requirements that have been established for the simultaneous major. At minimum, students must complete 30 semester hours of coursework in residence at the University. Students interested in changing majors must meet the entry-level or admission requirements of the major they wish to enter. Students admitted through internal transfer may not add a simultaneous major in the College of Natural Sciences unless they are admitted into the simultaneous major through internal transfer.

Admission-to-Major Requirements

The Major in Computer Science

Several programs are available to undergraduates who wish to major in computer science. Each program involves an admission process in addition to the student's application for admission to the University. All students may apply to the University as entry-level computer science majors and later seek admission to one of the computer science programs as described in this section; those seeking admission to the Turing Scholars program may also apply to that program when they apply for admission to the University.

Admission requirements for the Bachelor of Science and Arts with a major in computer science, the Bachelor of Science in Computer Science, and the Integrated BS/MS Programs are given below. Those for the Bachelor of Science in Computer Science, Turing Scholars Honors, and Computer Science Honors, are given in the H (p. 8)onors tab (p. 8).

Bachelor of Science and Arts; and the Bachelor of Science in Computer Science

To apply for admission to the Bachelor of Science and Arts with a major in computer science, or the Bachelor of Science in Computer Science degree programs, the student must earn a grade of at least *C-* in each of three entry-level courses: C S 311 or C S 311H, C S 312, and C S 314 or C S 314H. A student may attempt two of the three entry-level courses no more than twice. The third course may be attempted only once. Symbols of *CR*, *Q*, and *W* count as course attempts.

It is recommended that students complete all of the entry-level courses in residence at the University. However, students may request that transfer courses taken prior to enrollment at The University of Texas at Austin be approved as substitutes for the entry-level courses. Upon enrollment at The University of Texas at Austin, all remaining entry-level courses must be taken in residence. The letter grades for approved transfer courses will be used in combination with entry-level courses taken in residence to calculate the grade point average required for admission to the major. Students must earn a grade point average of at least 2.00 in all courses taken in residence, and a C- or better in C S 312, C S 311/C S 311H, and C S 314/C S 314H.

A student who is not admitted to the major may submit an appeal to the department through their advisor.

Students should consult advisors in the College of Natural Sciences Department of Computer Science for information about admission to the major.

A student admitted to the major who cannot complete C S 429, C S 439, and C S 331 with grades of at least a *C-* within two attempts may be removed from the major and placed into the natural sciences undeclared major. Symbols of *CR*, *Q*, or *W* from the university count as course attempts. A third and final attempt may be granted if the student is given a non-academic drop or non-academic withdrawal during the semester in which the course is taken.

The Integrated BS/MS Programs in Computer Science

The Integrated BS/MS Programs is a curriculum of undergraduate and graduate coursework that allows the student to earn the Bachelor of Science in Computer Science and the Master of Science in Computer Science, the Master of Science in Information Studies, or the Master of Science in Computational Science, Engineering, and Mathematics degrees at the same time. The integrated Master of Science in Computer Science includes the same coursework as the traditional master's degree program, including the opportunity for research. The integrated Master of Science in Information Studies allows students to choose a pathway for completing a capstone and electronic portfolio comprised of a professional experience project, a master's report, or a thesis. The integrated Master of Science in Computational Science, Engineering, and Mathematics includes the same coursework as the traditional computational sciences, engineering and mathematics master's degree program and also offers opportunity for research.

Undergraduates typically follow one of the BS in Computer Science degrees for their first three years, then enter the Integrated BS/MS Programs in their fourth year. Admission is granted only for the fall semester. By the end of the spring semester in which they apply, students must have completed at least 60 semester hours of coursework, including C S 429 or C S 429H, C S 439 or C S 439H, and C S 331 or C S 331H.

Admission is based on the applicant's grade point average, letters of recommendation, statement of purpose, and remaining coursework, as well as other relevant examples of academic ability and leadership. An applicant with a University grade point average of less than 3.50 is unlikely to be admitted. Admission may be restricted by the availability of instructional resources. Application materials and information about deadlines are published by the Department of Computer Science, available at http://www.cs.utexas.edu/.

Before beginning their fifth year, students in the Integrated BS/MS Programs must be admitted to the Office of Graduate and Postdoctoral Studies and the graduate program in the Department of Computer Science, the School of Information, or the Institute of Computational Science, Engineering, and Mathematics.

Integrated Coordinated Program Dietetics

Students interested in the Integrated Coordinated Program in Dietetics (ICPD) must apply for admission after completing 60 semester hours of prerequisite coursework. Applicants to the ICPD must meet the requirements for admission to the Office of Graduate and Postdoctoral Studies. Upon completing the ICPD, which includes approximately 1,200 hours of supervised practice and required graduate level course work, graduates will attain both a Bachelor of Science in Nutrition and a Master of Science in Nutritional Sciences and immediately qualify for active membership in the Academy of Nutrition and Dietetics and are eligible to write the examination to become a Registered Dietitian.

Students who are admitted to the ICPD should consult the faculty advisor each semester regarding order and choice of work. During the fourth year, the following courses must be taken in the indicated term: Fall semester – NTR 245C, NTR 380K (Topic 3), NTR 390 (Topic 1) (Note: NTR 380K (Topic 3) and NTR 390 (Topic 1) will be reserved for graduate credit.); Spring semester – NTR 345M, NTR 372C, NTR 372F, NTR 373S; Summer session – NTR 374C and NTR 374P. Because these courses are taught only once a year, a student who does not take them at the indicated time may be unable to complete the program. Students must successfully complete NTR 380K (Topic 3) and NTR 390 (Topic 1) with a grade of "B" or higher in both courses to be admitted to the graduate program. Students who fail to attain a "B" or higher in NTR 380K (Topic 3) and NTR 390 (Topic 1) will complete the Bachelor of Science in Nutrition, Didactic Program in Dietetics option.

The Bachelor of Science in Environmental Science

Admission to the Environmental Science Program

This information is given on the program page.

The Bachelor of Human Development and Family Sciences

All Human Development and Family Sciences (HDF) majors must complete six hours of a research or field practicum taken from HDF 352, HDF 652F, HDF 352L, HDF 652P, HDF 359, and HDF 355R. Registration for HDF 352, HDF 652F, HDF 352L, HDF 652P, HDF 359 and HDF 355R is restricted to students whose practicum applications have been approved. Applications, as well as application deadlines, are all available online and through the practicum coordinator.

The Bachelor of Science in Neuroscience, Option I

Prior to applying for admission to the Bachelor of Science in Neuroscience, Option I, degree program, the student must earn a grade of at least *B-* in NEU 330, and either NEU 335 or NEU 340. NEU 330, NEU 335 and NEU 340 must be taken in residence. The student must also complete any of the four following courses, with grades of at least *C-*: BIO 311C, BIO 311D, BIO 315H, BIO 325H; CH 301, CH 301C, CH 302, CH 302C, and CH 204; M 408C, M 408N, M 408R, M 408S; and PHY 301, PHY 316, PHY 303K, PHY 303L, PHY 317K, and PHY 317L. To be competitive for admission, the student should have a combined grade point average of at least 3.0, and preferably 3.5 in the six courses required for admission.

To apply, the student should consult advisors in the Center for First-Year Advising for information about the application process and deadlines. Applications are evaluated after the end of each fall and spring semester by the Department of Neuroscience. Students whose applications are denied may reapply twice through the supplemental admission process. Admission decisions are based on a number of factors including, but not limited to, the student's grade point average, course load difficulty, and written statement about their commitment to a future in the field of neuroscience.

The Bachelor of Science in Public Health, Option I

Freshman and external transfer students who wish to become Public Health Majors are evaluated and admitted into the major by University Admissions in the Fall and Spring. Applications from internal transfer students who wish to become Public Health Majors are evaluated once yearly by the College of Natural Sciences in the Spring, for admission the following Fall. Admission decisions for internal transfers are evaluated by the public health faculty and by administrators in CNS, and admissions is based on the student's grade point average in the basic sequence science and mathematics courses, his or her University grade point average, and other factors; these factors include, but are not limited to, the difficulty of the student's course load, course repetitions, and proven mathematical ability. To be competitive for admission into the Public Health Major, the student should have a grade point average of at least 2.75 or greater. Students should consult advisors in the College of Natural Sciences Center for First-Year Advising for information about the application process and application deadlines.

The Bachelor of Science in Public Health, Option II - Public Health Honors

Students who plan to follow Option II, Public Health Honors, must first be admitted to the Dean's Scholars Honors Program.

The Bachelor of Science in Public Health, Option III - Advanced Program

The Option I student may apply for admission to Option III upon completion of the sixth semester with a grade point average of at least 3.40. The Option III student follows the admission schedule and policies of the School of Public Health at the University of Texas Health Sciences Center at Houston.

The Major in Textiles and Apparel

Admission to the TXA Internship

All textiles and apparel students must complete an internship alongside the TXA Internship course, TXA 356. The internship experience facilitates learning through the blending of theory and practice. The program is a cooperative effort involving three major participants: the student, the sponsoring firm or site supervisor, and the faculty coordinator.

The primary purpose of the program is to provide students with a realistic view of their profession through actual work experience in a professional environment. Experiences in the field setting challenge the student developmentally by providing an opportunity for both cognitive and effective learning.

Before beginning the internship, students will need to join the TXA Internship Canvas site, find then secure an internship opportunity. The Internship Director must approve all sites prior to a student's acceptance of the internship. Once a student accepts an approved internship, the placement is binding. Depending on the policy of the host site, the intern may or may not receive compensation. During the internship, the student is responsible for all assignments given by the faculty coordinator and the internship site. The interning student is also responsible for housing, relocation arrangements, and expenses.

Materials, information about deadlines, and directions for application are available from the Director of Internships in Textiles and Apparel and the TXA Internship Canvas.

Internship Semester

TXA 356. Students may opt to take additional coursework during this semester.

Licensure

UTeach-Natural Sciences Teacher Certification

UTeach-Natural Sciences prepares students in the College of Natural Sciences, the Jackson School of Geosciences, and Cockrell School of Engineering for secondary teacher certification in Science, Technology, Engineering, and Mathematics (STEM). However, students in any major at the University may seek STEM teacher certification through UTeach-Natural Sciences.

There are two ways undergraduate students can seek STEM teacher certification through UTeach-Natural Sciences:

1. Undergraduates can complete the courses for certification as electives within a standard bachelor's degree program.
   - Lists of the required content courses and additional certification requirements, are available in the UTeach-Natural Sciences office and online.
2. Undergraduates can consider the teaching options in biology, chemistry, geological sciences, mathematics, and physics degree programs.
   - This option is strongly encouraged because these majors incorporate all courses required for teacher certification.

Degree holders and qualifying seniors may apply for the UTeach Accelerate track to teacher certification. This track has the same requirements as the undergraduate track, but in a more compressed form with class sections offered at non-traditional times. UTeach Accelerate is limited to degree-holders and seniors with no more than two (2) long semesters left to earn the undergraduate degree. In addition

to admission to The University of Texas at Austin, students must be accepted into the UTeach Accelerate track.

The application requires the following:

- application form
- resume
- two letters of recommendation
- transcript
- essay
- interview

The courses required for teacher certification include a minimum of 30 field-based experience (FBE) hours prior to the clinical teaching experience. All students in these field experience courses, UTS 101, UTS 110, UTS 211 (restricted to students on the Accelerate track), EDC 365C, EDC 365D, EDC 365E, EDC 665 (restricted to students on the Accelerate track), which are part of the Professional Development Sequence, are observed by and receive feedback from highly-qualified Professors of Practice and select in-service educators throughout each semester. Students must pass the field experience in order to pass these courses. During clinical teaching, UTS 170, EDC 651S, and UTS 171 (2nd semester interns only) supervision and feedback are provided by Professors of Practice, field supervisors, and the cooperating teacher.

Upon transcript review, students on the Accelerate track may be required to take additional content courses so that they are prepared to pass the State-required certification exams and so that they meet State standards for secondary educators in the classroom. This review is conducted by faculty in the specific disciplines.

To complete the UTeach program and be recommended for teacher certification at the secondary level in the State of Texas, the student must have a University grade point average of at least 2.50. The student must have earned a grade of at least *C-* in each of the professional development courses and supporting courses listed below and must pass the final teaching portfolio review. Students on the Accelerate track must pass the UTeach Observation Protocol (UTOP) evaluation.

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

Undergraduate Professional Development Sequence

All students seeking teacher certification must complete the following courses:

Code	Title	Hours
UTS 101	Secondary Teacher Education Preparation: Step 1	1
UTS 110	Secondary Teacher Education Preparation: STEP 2	1
UTS 170	Student Teaching Seminar	1
EDC 651S	Topics in Secondary School Teaching Practicum	6
EDC 365C	Knowing and Learning in Math and Science	3
or UTS 350	Knowing and Learning in Math and Science	
EDC 365D	Classroom Interactions	3
or UTS 355	Classroom Interactions	
EDC 365E	Project-Based Instruction	3
or UTS 360	Project-Based Instruction	

Supporting Courses

Code	Title	Hours
Select one of the following:		3
BIO X37.2	Research Methods: UTeach (Topic 2: Research Methods: UTeach)	
CH 368.1	Research Methods: UTeach (Topic 1: Research Methods: UTeach)	
PHY 341.7	Research Methods: UTeach (Topic 7: Research Methods: UTeach)	
Select one of the following:		3
HIS 329U	Perspectives on Science and Mathematics	
PHL 329U	Perspectives on Science and Mathematics	

UTeach Accelerate Professional Development Sequence

All students seeking teacher certification must complete the following courses:

Code	Title	Hours
UTS 211	Secondary Teacher Education Prep: Advanced Steps	2
EDC 365C	Knowing and Learning in Math and Science	3
EDC 665	Classroom Interactions and Project Based Instruction	6
UTS 170	Student Teaching Seminar	1
EDC 651S	Topics in Secondary School Teaching Practicum	6

Supporting Courses

Code	Title	Hours
Select one of the following:		3
BIO X37.2	Research Methods: UTeach (Topic 2: Research Methods: UTeach)	
CH 368.1	Research Methods: UTeach (Topic 1: Research Methods: UTeach)	
PHY 341.7	Research Methods: UTeach (Topic 7: Research Methods: UTeach)	
Select one of the following:		3
HIS 329U	Perspectives on Science and Mathematics	
PHL 329U	Perspectives on Science and Mathematics	

Interested undergraduate students are encouraged to start the program at any time during their undergraduate careers. Students must be considering a teaching career in secondary science, computer science, mathematics, and/or engineering, and must meet grade point average requirements. Students interested in the Accelerate track are encouraged to make an advising appointment by calling 512-232-2770 to review eligibility requirements. Students interested in teaching earlier grades should consult the College of Education. See Preparation for Teacher Certification for additional information.

Honors

There are several avenues available for undergraduates to achieve honors recognition for exemplary academic ability and performance. They include: University Honors, graduation with University Honors, college-wide honors programs, departmental honors degree options, and completion of departmental honors.

The College of Natural Sciences offers Bachelor of Science honors degree options in three programs that serve majors in the College of Natural Sciences: Dean's Scholars, Health Science Scholars, and

Polymathic Scholars. Information about admission and requirements for each is available at the CNS Honors Center.

Honors degree options that are sponsored by departments include: Turing Scholars in Computer Science; and the Honors in Advanced Human Development and Family Sciences Program.

Lastly, students may earn departmental honors upon graduation through completion and approval of an undergraduate thesis.

University Honors

University honors are earned on a semester by semester basis. Information relating to University Honors can be found in the General Information Catalog.

Graduation with University Honors

The University recognizes no more than the top 20 percent of each college's May graduating class as graduating with University Honors. To be eligible, an undergraduate must have completed at least 60 semester hours of coursework in residence at the University. Graduation with University Honors is based on the average of all grades earned in courses taken in residence at the University, whether the courses were passed, failed, or repeated. Courses taken pass/fail are counted in the 60-hour minimum, but only letter grades (including *F* in pass/fail courses) are used to determine the grade point average.

Detailed requirements for graduation from the College of Natural Sciences with University Honors are given in the General Information Catalog.

Dean's Scholars Program

Dean's Scholars is a four-year honors degree program for highly motivated and talented students with a demonstrated interest in mathematics and/or scientific research. Students earn a Bachelor of Science degree with an honors option. This option is available in all majors offered by the College of Natural Sciences.

The key features of the program are a first-semester research methods course; a breadth requirement, usually completed during the first four semesters, that exposes students to various forms of scientific inquiry; and at least two semesters of supervised research and writing that culminate in an honors thesis.

Application to the Dean's Scholars Honors Program is separate from, and in addition to, application to the University. Application materials and information about deadlines are available in the program office and on the Dean's Scholars website. Students may enter the program as freshmen or as college transfers prior to their fourth long semester of enrollment at the University.

Factors in the admission decision are the student's high school and/or University grades, class rank, the rigor of the courses the student has taken, the quality of the required application essays, a strong recommendation from a mathematics or science instructor, and the student's interest in mathematics and/or scientific research as demonstrated by extracurricular activities.

To remain in good standing in the Dean's Scholars Honors Program, students are expected to maintain a minimum grade point average of 3.50. Students who do not may be dismissed from the program by the faculty director.

Health Science Scholars Program

Health Science Scholars is a four-year honors degree program for exceptional students who are interested in the health professions and committed to community service. Students earn a Bachelor of Science degree with an honors major. An honors option is available in all majors offered under this degree by the College of Natural Sciences.

The key features of the program are a first-semester research methods course; a six-credit-hour requirement in honors-level coursework in one or more science; a substantive health or service-related learning experience or laboratory research, undertaken in the third year; and an honors thesis based on their third-year project, written in the final year.

Application to the Health Science Scholars Program is separate from, and in addition to, application to the University. Application materials and information about deadlines are available on the Health Science Scholars website. Students may enter the program as freshmen or as college transfers prior to their fourth long semester of enrollment at the University.

Factors in the admission decision are the student's high school and/or college grades, class rank, the rigor of the courses the student has taken, the quality of the required application essays, a strong recommendation from a mathematics or science instructor, and the student's interest in science, health and services as demonstrated by extracurricular activities.

To remain in good standing in the program, students are expected to maintain a minimum grade point average of 3.50. Students who do not may be dismissed from the program by the faculty director.

Polymathic Scholars Program

Polymathic Scholars is a four-year honors degree program for exceptional science majors who have compelling interests or talents beyond the natural sciences and wish to make them part of their undergraduate degree. Students earn a Bachelor of Science degree with an honors major. An honors option is available in all majors offered under this degree by the College of Natural Sciences.

The key features of the program are a first-semester research methods course; a six-credit-hour requirement in honors-level coursework in one or more science; a multidisciplinary field of study outside the student's major, conceived and designed by the student and including no fewer than four courses; and an honors thesis on a question within that field, written in the final year.

Application to the Polymathic Scholars Program is separate from, and in addition to, application to the University. Application materials and information about deadlines are available on the Polymathic Scholars website. Students may enter the program as freshmen or as college transfers prior to their fourth long semester of enrollment at the University.

Factors in the admission decision are the student's high school and/or college grades, class rank, the rigor of the courses the student has taken, the quality of the required application essays, a strong recommendation from a mathematics or science instructor, and the student's investment in science as well as in one or more areas beyond science, as demonstrated by extracurricular activities.

To remain in good standing in the program, students are expected to maintain a minimum grade point average of 3.50. Students who do not may be dismissed from the program by the faculty director.

Turing Scholars in Computer Science

The Department of Computer Science offers a comprehensive honors degree program for highly motivated and talented students. The key features of the program are an intensive, accelerated freshman- and sophomore-year program; special Turing Scholars sections of many

advanced computer science courses; a second-semester freshman-year course that introduces students to the research activities of the department; and at least two semesters of supervised research and writing. Upon completion of both a sequence of Turing Scholars courses, approved by the program director, and an approved thesis, students graduate as Turing Scholars in Computer Science.

Students in the Turing Scholars program pursue the Bachelor of Science in Computer Science, option II. Application to the program is separate from, and in addition to, application to the University. Application materials and information about deadlines are available in the Department of Computer Science and on the Turing Scholars website. Students may enter the program either as freshmen or after they have enrolled at the University. Factors in the admission decision are the student's high school grades and class rank, the rigor of the courses the student has taken, the quality of the required application essays, and the student's interest and aptitude in math, science, and computing as demonstrated by extracurricular activities.

More information about the degree program is given in the program page.

Honors In Advanced Human Development and Family Sciences Program

The Department of Human Development and Family Sciences offers a comprehensive honors degree program for highly motivated and talented students. The key features of the program are a core of small, select Human Development and Family Sciences courses that expose students to the research activities of the department, and at least two semesters of supervised research and writing that culminates in an honors thesis and presentation of student research in an approved public forum. Application to the Human Development and Family Sciences Honors Program is separate from, and in addition to, application to the University. Application materials and information about deadlines are available in the Department of Human Development and Family Sciences and online. Students may enter the program as freshmen, as transfer students, or after they have enrolled at the University. Factors in the admission decision are the student's high school and/or University grades, class rank, the rigor of the courses the student has taken, faculty recommendations, standardized test scores and the student's interest and aptitude in math and science as demonstrated by relevant extracurricular activities.

More information about the degree program is given in the program page.

College Honors

Departmental Honors

Most departments in the College of Natural Sciences offer departmental honors programs to their majors. Minimum requirements for the completion of all such programs include (1) a University grade point average of at least 3.00; (2) a three-semester-hour thesis or research project, or a reasonable equivalent, with a grade of at least *B-*; some programs may require a higher grade; (3) completion, with a grade point average of at least 3.50, of the coursework required for a major in the field in which the student seeks honors; and (4) completion at the University of at least 60 semester hours of coursework counted toward the degree.

The statement "Special Honors in (name of field)" appears on the transcript of each graduate certified as having completed the honors program.

Astronomy Departmental Honors

It is highly recommended that majors who plan to seek special honors in astronomy apply to the honors advisor for admission to the program by the end of the third year, and absolutely no later than the beginning of the fourth year; A University grade point average of at least 3.00 and a grade point average in physics and astronomy of at least 3.50 are required for admission to the honors program.

The requirements for graduation with departmental honors are (1) AST 379H, NSC 371, T C 660H, or an alternative astronomy course approved by the faculty advisor, in which the student completes a supervised research project; (2) a written report and an oral or poster presentation of the research project approved by the research supervisor and the honors advisor; (3) a final University grade point average of at least 3.00 and a grade point average in physics and astronomy of at least 3.50; (4) completion at the University of at least 60 semester hours of coursework counted toward the degree.

Biochemistry Departmental Honors

Majors who plan to seek special departmental honors in biochemistry should apply to the departmental honors advisor for admission to the honors program no later than the beginning of the senior year. A University grade point average of at least 3.00 and a grade point average in biochemistry and chemistry of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of Bachelor of Science in Biochemistry; (2) two semesters of BCH 379H; (3) a thesis and a presentation based on research; the research topic and the thesis must be approved by the supervising faculty member and the departmental honors advisor; (4) a University grade point average of at least 3.00 and a grade point average in biochemistry and chemistry of at least 3.50; (5) completion at the University of at least 60 semester hours of coursework counted toward the degree; and (6) approval of the honors advisor.

Biology Departmental Honors

Majors who plan to seek special departmental honors in biology should have a research mentor and apply to the departmental honors advisor no later than the beginning of the senior year. A University grade point average of at least 3.00 and a grade point average in biology of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors, which are in addition to the requirements of the major, are (1) two semesters of BIO 379H; (2) a presentation and a thesis based on original research and approved by the supervising faculty member and the honors advisor; (3) a University grade point average of at least 3.00 and a grade point average in biology of at least 3.50; and (4) completion at the University of at least 60 semester hours of coursework counted toward the degree.

Chemistry Departmental Honors

Majors who plan to seek special departmental honors in chemistry should apply to the honors advisor for admission to the honors program no later than the beginning of the senior year. A University grade point average of at least 3.00 and a grade point average in chemistry of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of Bachelor of Science in Chemistry; (2) two semesters of CH 379H; (3) a thesis and a presentation based on research; the research topic and the thesis must be approved by the supervising faculty member and the undergraduate faculty advisor; (4) a University grade point average of at least 3.00 and a grade point average

in chemistry of at least 3.50; (5) completion at the University of at least 60 semester hours of coursework counted toward the degree; and (6) approval of the honors advisor.

Computer Science Departmental Honors

Students seeking special departmental honors must meet with a faculty advisor at least two semesters before they plan to graduate to discuss potential research topics and the requirements for receiving special departmental honors.

The requirements for graduation with special departmental honors are (1) C S 379H, with a grade of at least *B-*; (2) a University grade point average of at least 3.00 and a grade point average in computer science of at least 3.50; (3) a thesis and presentation based on research and approved by three faculty members, including the honors advisor; and (4) completion at the University of at least 60 semester hours of coursework counted toward the degree.

Human Development and Family Sciences Departmental Honors

Majors who plan to seek special departmental honors in human development and family sciences should apply to the Departmental Honors Committee for admission to the honors program no later than the beginning of the senior year. The requirements for admission are a University grade point average of at least 3.00 and a grade point average of at least 3.50 in coursework in the School of Health and Human Sciences that is required for the degree.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of Bachelor of Science in Human Development and Family Sciences; (2) HDF 379H; (3) completion of an honors thesis and an accompanying presentation, both of which must be approved by a committee consisting of the research supervisor and another faculty member; (4) a University grade point average of at least 3.00, a grade point average in HDF 379H of at least 3.00, and a grade point average of at least 3.50 in coursework in the School of Health and Human Sciences that is required for the degree and for honors; and (5) completion at the University of at least 60 semester hours of coursework counted toward the degree.

Human Ecology Departmental Honors

Majors who plan to seek special departmental honors in human ecology must follow the requirements of the departmental honors program in human development and family sciences, nutrition, or textiles and apparel.

Informatics Departmental Honors

Students wishing to pursue special departmental honors in informatics must meet all Bachelor of Arts or Bachelor of Science in Informatics degree requirements as well as the following:

- Minimum grade point average of 3.5 across all Informatics coursework
- Complete an Honors Thesis in Informatics in lieu of the traditional Capstone
- Complete an additional three hours of Informatics elective coursework

The statement "Special Honors in Informatics" appears on the transcript of each student who completes the honors program.

Mathematics Departmental Honors

Majors who plan to seek special departmental honors in mathematics should apply to the honors advisor for admission to the honors program at least two semesters before their expected graduation. A University grade point average of at least 3.00 and a grade point average in mathematics of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) M 379H; (2) a thesis on the subject of the student's research or project approved in comprehensive examination by a committee consisting of at least three faculty members; (3) a University grade point average of at least 3.00 and a grade point average in mathematics of at least 3.50; and (4) completion at the University of at least 60 semester hours of coursework counted toward the degree. In order to fulfill the first requirement, students must meet the prerequisite of M 379H—M 365C, M 367K, M 373K, or M 374G with a grade of at least *A-*, and another of these courses with a grade of at least *B-*; and consent of the honors advisor.

Neuroscience Departmental Honors

Majors who plan to seek special departmental honors in neuroscience should apply to the honors advisor for admission to the honors program no later than the beginning of their senior year. A University grade point average of at least 3.00 and a grade point average in neuroscience of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) two semesters of neuroscience research coursework, including NEU 379H; (2) a thesis based on original research and approved by the supervising faculty member and the honors advisor; (3) a University grade point average of at least 3.00 and a grade point average in neuroscience of at least 3.50; and (4) completion at the University of at least 60 semester hours of coursework counted toward the degree.

Neuroscience and Computer Science Honors

Bachelor of Science in Neuroscience and Computer Science (BSNeuCS) students are eligible for transcript-recognized Neuroscience and Computer Science honors. Students seeking Special Honors in Neuroscience and Computer Science must meet with the Neuroscience +CS faculty advisor at least two semesters before they plan to graduate to discuss potential topics and the requirements for receiving special Neuroscience+CS honors.

Requirements

1. C S 379H Computer Science Honors Thesis, with a grade of at least B-;
2. a University grade point average of at least 3.00 and a grade point average in coursework required for their major of at least 3.50;
3. a thesis and presentation based on the intersection of the Neuroscience+CS degree and approved by a committee of three faculty members with both Neuroscience and Computer Science represented, as approved by the Neuroscience+CS honors advisor; and
4. completion at the University of at least 60 semester hours of coursework counted toward the degree.

Nutrition Departmental Honors

Majors who plan to seek special departmental honors in nutrition should apply to the Departmental Honors Committee for admission to the honors program no later than the beginning of the senior year. The requirements for admission are a University grade point average of at least 3.00 and a grade point average of at least 3.50 in coursework in the School of Health and Human Sciences that is required for the degree.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of Bachelor of Science in Nutrition; (2) NTR 355H and NTR 379H; this course may be repeated once for credit; (3) completion of an honors thesis and an accompanying

presentation, both of which must be approved by a committee consisting of the research supervisor and another faculty member; (4) a University grade point average of at least 3.00, a grade point average in NTR 379H of at least 3.00, and a grade point average of at least 3.50 in coursework in the School of Health and Human Sciences that is required for the degree and for honors; and (5) completion at the University of at least 60 semester hours of coursework counted toward the degree.

Physics Departmental Honors

Majors who plan to seek special departmental honors in physics should apply to the honors advisor for admission to the honors program near the end of the third year. A University grade point average of at least 3.00 and a grade point average in physics of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) PHY 379H; (2) a written honors thesis approved by faculty readers assigned by the department; (3) a University grade point average of at least 3.00 and a grade point average in physics of at least 3.50; and (4) completion at the University of at least 60 semester hours of coursework counted toward the degree.

Public Health Departmental Honors

Majors who plan to seek departmental honors in public health should apply to the honors advisor for admission to the honors program no later than the beginning of the senior year. Students are encouraged to apply as early as the beginning of the junior year. A University grade point average of at least 3.00 and a grade point average in public health of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of the Bachelor of Science in Public Health; (2) two semesters of PBH 379H; (3) a thesis and presentation based on research and approved by the research supervisor and the honors advisor; (4) a University grade point average of at least 3.00, a grade point average in public health of at least 3.50, and grades of at least a B in PBH 379H; and (5) completion at the University of at least 60 semester hours of coursework counted toward the degree.

Textiles and Apparel Departmental Honors

Majors who plan to seek special departmental honors in textiles and apparel should apply to the Departmental Honors Committee for admission to the honors program no later than the beginning of the senior year. The requirements for admission are a University grade point average of at least 3.00 and a grade point average of at least 3.50 in coursework in the School of Health and Human Sciences that is required for the degree.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of Bachelor of Science in Textiles and Apparel; (2) TXA 379H; this course may be repeated once for credit; (3) completion of an honors thesis and an accompanying presentation, both of which must be approved by a committee consisting of the research supervisor and another faculty member; (4) a University grade point average of at least 3.00, a grade point average in TXA 379H of at least 3.00, and a grade point average of at least 3.50 in coursework in the School of Health and Human Sciences that is required for the degree and for honors; and (5) completion at the University of at least 60 semester hours of coursework counted toward the degree.

Facilities

The Department of Information provides students with a wide variety of workspaces, labs, and equipment. Some labs are open regular hours and others require a reservation, but all are available for student use and students are encouraged to make full use of them.

AI Health Lab

The AI Health Lab is composed of scholars and students from different fields and disciplines. Their research includes, but is not limited to: AI in Health, AI in Medicine, and Data-Driven Science.

Artificial Intelligence and Human-Centered Computing Lab

The Artificial Intelligence and Human-Centered Computing (AI&HCC) Lab research spans artificial Intelligence (AI) modeling and human-computer interaction (HCI) design.#When automated AI falls short, we design human-in-the-loop approaches supported by AI model explanations and creative user interfaces. To promote fair AI, we design better ways to annotate data without bias and modeling techniques to mitigate dataset biases.

Collaborative Institute for Rural Communities & Librarianship (CIRCL)

CIRCL is a think tank by, for, and of the rural library community and aligned partners. It is a coordinated network developing participatory research, policy recommendations, and culturally-responsive advocacy strategies to amplify rural libraries and promote sustainable rural librarianship.

Human-AI Interaction Lab

The Human-AI Interaction lab aims to build just and empowering workplaces and cities by creating technology that supports and strengthens individual and collective human decision-making. We explore psychological understandings of AI and develop human-centered methods and systems for better AI-integrated workplaces, smart communities and cities, and online information.

The Information eXperience (IX) Lab

The Information eXperience Lab (IX Lab) is a state-of-the-art research facility dedicated to advancing our understanding of human-computer interaction (HCI), human-information processing, user experience (UX), usability, accessibility, and the interactions between humans and information sources. The lab is dedicated to the science of information studies, the empirically-based design of human-information interaction, and the education of students in the process of both.

The Kilgarlin Information Preservation Lab

The Kilgarlin Information Preservation Lab contains a large variety of tools and equipment for examination, analysis, photo documentation, and conservation treatment of books and paper. A thorough sample collection, including more than 10,000 photographs and many other materials, is available for student use.

Information Commons

The Information Commons is a team of undergraduates, graduate students, and staff who provide resources and services that support learning, research, and community-building activities at the School of Information. Commons facilities are located within all iSchool locations and feature collaboration stations, access to a variety of computing hardware/software, meeting spaces, printing services and equipment check-outs. Support staff are available in all iSchool learning spaces

to provide technical assistance, training, and additional access to resources.

Digitization Suite

The Digitization Suite is used in digitization coursework. It can also serve as a small classroom for specialized course sessions, and provides a cross section of current and legacy digitization equipment for text, slides, audio, and video.

Sound Rooms

The sound rooms are small individual rooms with higher-end equipment where people can record and edit audio, edit movies, create tutorials, or experiment with the latest voice recognition software.

Course Lists

Foreign Culture Categories

All courses below are for BSA and BS 2nd semester foreign language proficiency:

Code	Title	Hours
Africa		
YOR 507	First-Year Yoruba II	5
Americas		
ASL 601C	Accelerated First-Year American Sign Language	6
or ASL 610D	American Sign Language II: Beginning	
Asia-East		
KOR 504	Accelerated First-Year Korean	5
or KOR 507	First-Year Korean II	
CHI 504	Accelerated First-Year Chinese	5
or CHI 507	First-Year Chinese II	
JPN 510D	Japanese II	5
or JPN 507	First-Year Japanese II	
Asia-South		
BEN 507	First-Year Bengali II	5
HIN 504	Accelerated First-Year Hindi	5
or HIN 507	First-Year Hindi II	
MAL 507	First-Year Malayalam II	5
SAN 507	First-Year Sanskrit II	5
TAM 604	Accelerated First-Year Tamil	6
TEL 504	Accelerated First-Year Telugu	5
or TEL 507	First-Year Telugu II	
URD 504	Accelerated First-Year Urdu	5
or URD 507	First-Year Urdu II	
Classical Antiquity		
GK 804	Intensive Beginning Greek (or one of the following)	8
GK 601C	Beginning Greek	
GK 602C	Beginning Modern Greek	
GK 503	First-Year Modern Greek II	
GK 507	First-Year Greek II	
GK 412	Intensive Greek	
LAT 501C	Beginning Latin	5
or LAT 507	First-Year Latin II	
Europe-Eastern		
CZ 501C	Intensive Czech I	5
or CZ 507	First-Year Czech II	
POL 501C	Intensive Polish I	5
or POL 507	First-Year Polish II	
RUS 501C	Intensive Russian I	5
or RUS 507	First-Year Russian II	
Europe-Northern		
DAN 604	Accelerated First-Year Danish	6
DCH 604	Accelerated First-Year Dutch	6
GER 604	Accelerated First-Year German	6
OR		
GER 507	First-Year German II	
NOR 604	Accelerated First-Year Norwegian	6
SWE 604	Accelerated First-Year Swedish	6
YID 604	Accelerated First-Year Yiddish	6
Europe-Western		
FR 601C	Beginning French	6
OR		
FR 407	Introductory French II	
ITL 601C	Beginning Italian	6
or ITL 604	Accelerated First-Year Italian	
POR 610D	First-Year Portuguese II	6
SPN 604	Accelerated Introductory Spanish for Heritage Learners	6
or SPN 610D	First-Year Spanish II	
Middle East		
ARA 601C	Intensive Arabic I (or one of the following)	6
ARA 507	First-Year Arabic II	
ARA 509	Modern Standard Arabic II	
HEB 601C	Intensive Hebrew I (or one of the following)	6
HEB 602C	Intensive Biblical Hebrew I	
HEB 507	First-Year Hebrew II	
PRS 601C	Intensive Persian I	6
OR		
PRS 507	First-Year Persian II	
TUR 601C	Intensive Turkish I	6
OR		
TUR 507	First-Year Turkish II	

Foreign Culture Master Lists

Please see these documents for further details.

American Sign Foreign Culture Master List

Africa Foreign Culture Master List

Central and South American - Iberia Foreign Culture Master List

China Foreign Culture Master List

French Foreign Culture Master List

Germany & Scandinavian Foreign Culture Master List

Greek Foreign Culture Master List

Italian Foreign Culture Master List

Japan Foreign Culture Master List

Korea Foreign Culture Master List

Latin & Roman Foreign Culture Master List

Middle East Foreign Culture Master List

Russia & Slavic Countries Foreign Culture Master List

South Asia Foreign Culture Master List

Inquiry-Based Learning (IBL)

The goal of inquiry-based learning (IBL) is to help students change from being purely consumers of mathematics to producers of mathematical concepts and proofs. IBL classes give students experience with some aspects of independent research, number theory, analysis, discrete mathematics, introduction to abstract mathematics, geometry, and topology. In IBL classes, students are doing mathematics themselves, including proving mathematical statements, presenting their solutions, critiquing solutions, asking questions, and making conjectures, all of which help students develop deeper learning, persistence, problem-solving skills, and effective thinking skills. Mathematics IBL classes are noted as "Inquiry-based learning format" in the Course Schedule; search for "learning format" using the Course Schedule keyword search to identify mathematics IBL classes. Some sections of the following courses are taught in an IBL format:

Code	Title	Hours
M 325K	Discrete Mathematics	3
M 328K	Introduction to Number Theory	3
M 329F	Theory of Interest	3
M 339U	Actuarial Contingent Payments I	3
M 339V	Actuarial Contingent Payments II	3
M 361K	Introduction to Real Analysis	3
M 362K	Probability I	3
M 367K	Topology I	3
M 378K	Introduction to Mathematical Statistics	3