The Curriculum

The Chicago curriculum has three components: general education requirements, a major, and electives.

General education requirements, which are described below, consist of integrated, often interdisciplinary, sequences. They cannot be replaced by other courses (except in the sciences as indicated below) and they should be completed by the end of the second year. Please note that substitutes for general education courses are seldom approved either (1) to accommodate a second major or a minor or (2) to avoid curricular and scheduling conflicts that result from postponing general education requirements until a student's third or fourth year.

Majors are described in detail in the Programs of Study section of the catalog.

Electives provide scope to a student's program of study. Students choose electives to pursue interests, wherever they fall in the College catalog, that are not covered by their general education sequences and their major. Depending on other choices, electives comprise about one-third of the degree program.

Students choose courses across the curriculum in consultation with College advisers and faculty counselors. Credit for forty-two quarter courses is required for the undergraduate degree. Students may count each quarter course only once in the degree program of forty-two courses.

General Education

Humanities, Civilization Studies, and the Arts (6 quarters)

An essential component of general education is learning how to appreciate and analyze texts intellectually, historically, and aesthetically. Through this general education requirement, students at Chicago learn how to interpret literary, philosophical, and historical texts in depth; how to identify significant intellectual problems posed by those texts; and how to discuss and write about them perceptively and persuasively. They also learn how to study a visual or performing art form. Finally, students learn how to study texts and art forms within a specific cultural and chronological frame. Students may choose from many options to meet these requirements.

Students take a total of six quarters in humanities and civilization studies, selecting one of the following three options. The letters in parentheses refer to the sections below.

1. A three-quarter humanities sequence (A); a two-quarter civilization studies sequence (C); and one course in the dramatic, musical, and visual arts (B).

2. A three-quarter civilization studies sequence (C); a two-quarter humanities sequence (A); and one course in the dramatic, musical, and visual arts (B).

3. A two-quarter humanities sequence (A); a two-quarter civilization studies sequence (C); and two quarter courses in the dramatic, musical, and visual arts (B).

A. *Interpretation of Historical, Literary, and Philosophical Texts.* All humanities courses that meet general education requirements engage students in the pleasure and challenge of humanistic works through the close reading of a broad range of literary, historical, and philosophical texts. These are not survey courses; rather, they work to establish methods for appreciating and analyzing the meaning and power of exemplary texts. In combination with these courses, students take Humanities Writing Seminars (HUMA 19100-19200-19300) that introduce the analysis and practice of expert academic writing.

The core sequences give students the opportunity to focus on a range of issues and texts. Once students begin a sequence, they are expected to remain in the same sequence. A three-quarter sequence in humanities is recommended for students who are preparing for medical school or for law school.

HUMA 11000-11100-11200. Readings in World Literature
HUMA 11500-11600-11700. Philosophical Perspectives on the Humanities
HUMA 12000-12100-12200. Greek Thought and Literature
HUMA 12300-12400-12500. Human Being and Citizen
HUMA 13500-13600-13700. Introduction to the Humanities
HUMA 14000-14100-14200. Reading Cultures: Collection, Travel, Exchange
HUMA 16000-16100-16200. Media Aesthetics: Image, Sound, Text

B. *Dramatic, Musical, and Visual Arts.* These courses provide an introduction to methods for analyzing, comprehending, and appreciating works of dramatic, musical, or visual art by examining their formal vocabularies and how these vocabularies are used to create meaning. This objective is met either by the intensive study of selected masterpieces or by producing original works of art, drama, music, or performance.

The courses below are not specialized introductions to one single field or creative practice, but instead are expressly designed to broadly investigate the arts through study and practice. For that reason, only the courses on the list below can be used to satisfy the general education requirement in the dramatic, musical, or visual arts. NOTE: Substitutes will not be approved.

ARTH 10100. Introduction to Art

ARTH 14000 through 16999. Art Surveys
ARTH 17000 through 18999. Art in Context
ARTV 10100-10200. Visual Language
MUSI 10100. Introduction to Western Art Music
MUSI 10200. Introduction to World Music
MUSI 10300. Introduction to Music: Materials and Design
MUSI 10400. Introduction to Music Analysis and Criticism
TAPS 10100. Drama: Embodiment and Transformation
TAPS 10200 through 10699. Text and Performance

C. *Civilization Studies.* Each sequence provides an in-depth examination of the development and accomplishments of one of the world's great civilizations through direct encounters with some of its most significant documents and monuments. Students who have completed (or plan to complete) three quarters of a humanities sequence and one quarter of the dramatic, musical, or visual arts and therefore need only two quarters of civilization studies, may take any of the three-quarter sequences as a two-quarter sequence. NOTE: Not all of the sequences that follow are offered every year; consult departmental course listings.

ANTH 20701-20702. Introduction to African Civilization
CRPC 24001-24002-24003. Colonizations
EALC 10800-10900-11000. Introduction to the Civilizations of East Asia
HIPS 17300-17400-17501 (or 17502). Science, Culture, and Society in Western Civilization
HIST 13001-13002 (13003). History of European Civilization
HIST 13100-13200-13300. History of Western Civilization
HIST 13500-13600-13700. America in World Civilization
HIST 16700-16800-16900. Ancient Mediterranean World
JWSC 20001-20002-20003. Jewish History and Society
JWSC 20004-20005-20006. Jewish Thought and Literature
LACS 16100-16200-16300. Introduction to Latin American Civilization
MUSI 12100-12200. Music in Western Civilization
NEHC 20001-20002-20003. Ancient Near Eastern History and Society
NEHC 20004-20005-20006. Ancient Near Eastern Thought and Literature
NEHC 20011-20012-20013. Ancient Empires
NEHC 20501-20502-20503. Islamic History and Society
NEHC 20601-20602 and/or 20603. Islamic Thought and Literature
SALC 20100-20200. Introduction to the Civilization of South Asia
SOSC 24000-24100. Introduction to Russian Civilization

Students may also complete their civilization studies requirement by participating in one of the College's study abroad programs listed below. For more information about these programs, see the Study Abroad Programs section of this catalog or visit *study-abroad.uchicago.edu.*

SOSC 20800-20900-21000. Rome: Antiquity to Baroque
(Rome, Italy; Autumn)
SOSC 21300-21400-21500. Western Mediterranean Civilization
(Barcelona, Spain; Winter)
SOSC 23004-23005-23006. South Asian Civilization in India
(Pune, India; Autumn)
SOSC 23701-23702-23703. China in East Asian Civilization
(Beijing, China; Autumn)
SOSC 24302-24402-24502. Latin American Civilization in Oaxaca
(Oaxaca, Mexico; Winter)
SOSC 24600-24700-24800. Vienna in Western Civilization
(Vienna, Austria; Autumn)
SOSC 26600-26700-26800. African Civilization in Africa
(Cape Town, South Africa; Winter)
SOSC 27500-27600-27700. France in Western Civilization
(Paris, France; Autumn or Spring)
SOSC 27501-27601-27701. Civilisation Européenne
(Paris, France; Autumn) *PQ: Advanced knowledge of French.*
SOSC 27800-27900-28000. Greek Antiquity and Its Legacy
(Athens, Greece; Spring)

Natural and Mathematical Sciences (6 quarters)

Courses and sequences in the natural sciences are designed to explore significant features of the natural universe and to examine the exciting process of scientific inquiry. These courses consider the powers and limitations of diverse forms of scientific observation, scientific reasoning, and natural laws. Mathematical sciences courses develop powers of formal reasoning through use of precise artificial languages.

Students take six quarter courses in the following areas: at least two quarters of physical sciences (see sections A and C); at least two in the biological sciences (see sections B and C); and at least one in the mathematical sciences (see section D).

Students may meet the natural sciences requirement with a two- or three-quarter sequence in the physical sciences and a two- or three-quarter sequence in the biological sciences, or with a four-quarter natural science sequence that integrates the physical and biological sciences requirements. Students meet the mathematical sciences requirement with one or two quarters of computer science, mathematics, or statistics. Students should choose among the following options based on their major and/or preparation for the health professions.

A. *Physical Sciences Sequences*

1. Students majoring in physical sciences (except statistics majors), students majoring in biological sciences, and students preparing for the health professions must complete chemistry or physics. The third quarter of these yearlong sequences is applied to a student's major or electives.

   CHEM 11101-11201/11102-11202 (11301/11302). General Chemistry
   CHEM AP/PT*-12200 (12300). Honors General Chemistry
   PHYS 12100-12200 (12300). General Physics (Variant A)
   PHYS 13100-13200 (13300). General Physics (Variant B)
   PHYS 14100-14200 (14300). General Physics (Honors)

   * *For information, see the Chemistry, Placement Tests, and Advanced Placement Credit sections elsewhere in this catalog.*

2. These sequences are designed for students who do not plan to major in the physical or biological sciences. Enrollment in sequences with an asterisk (*) is limited to first- and second-year students and entering transfer students.

   PHSC 10900-11000. Science and the Earth*
   PHSC 10900-13400. Past and Future Climate of Earth*
   PHSC 11100-11200. Foundations of Modern Physics
   PHSC 11900-12000. Introduction to Astrophysics
   PHSC 13200-13300. Paleoclimate, Earth Systems, and the Emergence of Humankind
   PHSC 13400-13500. The Science of Global Environmental Change
   PHSC 13500-11000. The Earth's Chemical and Physical Environments

B. *Biological Sciences Sequences*

1. Biological sciences majors must complete a five-quarter Fundamentals Sequence. The final three quarters of the sequence are applied to the major. Nonmajors preparing for the health professions must complete three quarters of a Fundamentals Sequence; these students apply the third quarter to electives.

   BIOS 20181-20182 (20183). Cell and Molecular Biology/Genetics*
   BIOS 20191-20192 (20193). Cell and Molecular Biology/Genetics*

   * *Each of these sequences includes two additional courses. For descriptions, see the Biological Sciences section elsewhere in this catalog.*

2. First- and second-year students who do not plan to major in the biological sciences or prepare for the health professions have two options: (1) register for BIOS 10110 (Biological Issues and Paradigms) followed by a "topics" course(s) (BIOS 10111 to 19999); or (2) register for BIOS 20184 (Biological Diversity) and 20185 (Ecology and Evolution).

C. Natural Sciences Sequence

NTSC 10100-10200-10300-10400 (Evolution of the Natural World) is a four-quarter sequence that students in the humanities and social sciences can choose to meet the general education requirements in the physical and biological sciences. (These requirements can be met separately, of course.) This sequence is open only to first- and second-year students and to entering transfer students, with preference given to first-year students. Courses must be taken in sequence. If this sequence is chosen, students must also register for two appropriate courses in the mathematical sciences.

D. Mathematical Sciences Courses and Sequences

These courses develop the powers of formal reasoning through use of precise artificial languages found in mathematics, computer science, statistics, or formal logic. They present broadly applicable techniques for formulating, analyzing, and solving problems, and for evaluating proposed solutions.

Only courses beyond the level of precalculus may be used to meet the mathematical sciences requirement. Students must first register for MATH 10500-10600, or place into MATH 13100, 15100, 16100, or 11200, before taking any of the courses below. NOTE: Both precalculus courses together will be counted as one elective credit.

Students must meet this requirement with the first two quarters of a calculus sequence if they are preparing for the health professions or if they anticipate majors in the physical or biological sciences, economics, psychology, or public policy studies. Other restrictions may apply. Students should consult their College adviser or departmental counselor about course choices.

CMSC 10200. Introduction to Programming for the World Wide Web
CMSC 10500-10600-10700. Fundamentals of Computer Programming
CMSC 11000-11100. Multimedia Programming as an Interdisciplinary Art
CMSC 15100-15200. Introduction to Computer Science
CMSC 16100-16200. Honors Introduction to Computer Science
MATH 11200-11300. Studies in Mathematics
MATH 13100-13200. Elementary Functions and Calculus
MATH 15100-15200. Calculus
MATH 16100-16200. Honors Calculus
STAT 20000. Basic Concepts in Statistics

NOTE: MATH 13100, 15100, and 16100 may be used to meet the mathematical sciences requirement only if MATH 13200, 15200, or 16200 is also taken.

Social Sciences (3 quarters)

These sequences cultivate an understanding of fundamental concepts, theories, and philosophies in the social sciences and demonstrate how the social sciences formulate basic questions and inquire about the nature of social life through acts of imagination as well as through systematic analysis. All of the sequences present some of the main ideas, theories, and inquiries of the social sciences, and show how they enhance our understanding of central issues facing the world. Classical social-scientific texts and methodologies are given close attention in discussion and lecture settings. Courses must be taken in sequence.

"Power, Identity, and Resistance" concentrates on various aspects of power, from the roles of markets and states to the social structures that determine individual, class, and gender inequalities.

"Self, Culture, and Society" studies problems basic to human existence. The sequence starts with the conceptual foundations of political economy, as well as theories of capitalism and modern society. Students then consider the relation of culture, society, and lived experience. Finally, students consider the social and cultural constitution of the person, with examination of race, gender, and sexuality.

"Democracy and Social Science" examines the public role of empirical social science, using a combination of classic texts, quantitative data, and computer resources. These themes are developed through a detailed examination of a major empirical study and applied to a specific policy domain, such as education or urban policy.

"Mind" draws from psychology, anthropology, philosophy, and linguistics to consider how the human mind functions, focusing on rationality, learning, and language.

"Classics of Social and Political Thought" reads classical texts to investigate criteria for understanding and judging political, social, and economic institutions.

SOSC 11100-11200-11300. Power, Identity, and Resistance
SOSC 12100-12200-12300. Self, Culture, and Society
SOSC 13100-13200-13300. Democracy and Social Science
SOSC 14100-14200-14300. Mind
SOSC 15100-15200-15300. Classics of Social and Political Thought

Major Programs (9 to 19 quarter courses)

Majors complement the breadth of the Chicago general education requirements with an opportunity to come to grips with the depth of knowledge and the complexities of developing knowledge in a particular area of inquiry. More than a set of course credits, a sound major is an effort to understand the methods and experience of a discipline or interdisciplinary field. Majors range from nine to thirteen courses, and in special cases up to nineteen courses.

The number of courses required for a major determines the number of electives; together they total twenty-seven courses. Programs that specify thirteen courses require fourteen electives; programs that specify twelve courses require fifteen electives, and so on.

More than half of the requirements for a major must be met by registering for courses bearing University of Chicago course numbers. Courses used to meet general education requirements cannot also be counted toward a major. *Students declare a major by meeting with their College adviser and with the director of undergraduate studies in the department. Unless otherwise specified by the department, the deadline for declaring a major is Spring Quarter of a student's third year.*

The following major programs are available.

In the Biological Sciences Collegiate Division (BSCD):

Biological Sciences
- *Biological Sciences*
- *Biological Sciences with Specialization in Cellular and Molecular Biology*
- *Biological Sciences with Specialization in Ecology and Evolution*
- *Biological Sciences with Specialization in Endocrinology*
- *Biological Sciences with Specialization in Genetics*
- *Biological Sciences with Specialization in Immunology*
- *Biological Sciences with Specialization in Microbiology*
- *Biological Sciences with Specialization in Neuroscience*

In the Humanities Collegiate Division (HCD):

- Ancient Studies
- Art History
- Cinema and Media Studies
- Classical Studies
- Comparative Literature
- Early Christian Literature
- East Asian Languages and Civilizations
- English Language and Literature
- Gender Studies
- Germanic Studies
- Interdisciplinary Studies in the Humanities
  - *Inclusive Option*
  - *Theater and Performance Studies Option*
- Jewish Studies
- Linguistics
- Medieval Studies
- Music
- Near Eastern Languages and Civilizations
- Philosophy
  - *Philosophy*
  - *Philosophy and Allied Fields*
- Religion and the Humanities
- Romance Languages and Literatures
- Slavic Languages and Literatures
- South Asian Languages and Civilizations
- Visual Arts

In the New Collegiate Division (NCD):

- Fundamentals: Issues and Texts
- Law, Letters, and Society
- Religious Studies
- Tutorial Studies

In the Physical Sciences Collegiate Division (PSCD):

- Biological Chemistry
- Chemistry
- Computer Science
- Geophysical Sciences
  - *Environmental Science*
  - *Geophysical Sciences*
- Mathematics
  - *Applied Mathematics*
  - *Mathematics*
- Physics
  - *Physics*
  - *Physics with Specialization in Astrophysics*
- Statistics

Mathematics with
Specialization in Economics

In the Social Sciences Collegiate Division (SSCD):

African and African-American Studies
Anthropology
Comparative Human Development
Economics
Environmental Studies
Geographical Studies
History
History, Philosophy, and Social Studies of Science and Medicine
International Studies
Latin American Studies
Political Science
Psychology
Public Policy Studies
Russian Civilization
Sociology

Minor Programs

Some majors offer minors to students in other fields of study. For requirements, see descriptions elsewhere in this catalog of programs listed below. A minor requires five to seven courses. Courses in a minor *cannot be* (1) double counted with the student's major(s) or with other minors or (2) counted toward general education requirements. Courses in a minor must be taken for quality grades, and more than half of the requirements for a minor must be met by registering for courses bearing University of Chicago course numbers. Courses taken to complete a minor are counted toward electives. Students declare a minor by meeting with their College adviser and with the director of undergraduate studies in the department. Students submit to their College adviser the director's approval for the minor on a form obtained from the adviser. The deadline for declaring a minor is Spring Quarter of a student's third year.

Minor programs are offered in the following areas:

African and African-American Studies
Art History
Biological Sciences
Biological Sciences
Computational Neuroscience
Interdisciplinary Quantitative Studies in the Natural Sciences
Classical Studies
Computer Science

East Asian Languages and Civilizations
English and Creative Writing
Environmental Studies
Gender Studies
Germanic Studies
History, Philosophy, and Social Studies of Science and Medicine
Latin American Studies
Linguistics
Mathematics
Music
Near Eastern Languages and Civilizations
Philosophy
Physics
Romance Languages and Literatures
Slavic Languages and Literatures
South Asian Languages and Civilizations
Visual Arts

Electives (8 to 18 quarter courses)

Elective courses may be taken in any subject matter or discipline, including the same discipline as the student's major. They provide each student the opportunity to shape their studies toward their distinctive curiosities and interests. At their broadest, they provide an opportunity to explore freely across the richness of opportunities for learning at Chicago.

Courses taken in exploration of alternative majors and in study abroad programs, as well as course requirements completed by examination, are often included in electives. Some students also choose to use groups of electives to create minors or second majors. These options, though suitable ways to formalize students' interests outside their major, should not be undertaken in the mistaken belief that they necessarily enhance a student's transcript. Courses taken as electives should not displace courses in, and should not displace attention to, the student's general education program and major.

When MATH 10500-10600 are required, both precalculus courses together will be counted as only one elective. Language credit, whether it is earned by course registration or examination, is usually counted toward electives, unless a major requires or permits language courses or credit as part of the major. Courses taken to complete a minor are counted toward electives.

Up to six credits earned by examination (Advanced Placement and International Baccalaureate Programme tests taken in high school, and placement tests taken during Orientation) may be used as electives. For more information, see the Examination Credit and Transfer Credit section elsewhere in this catalog.

Other College Requirements

Language Competence

Students in the College are required to possess understanding of more than one culture and to demonstrate competence in a language other than English. The language competence requirement must be met by demonstrating reading, writing, listening, and (where appropriate) speaking skills equivalent to one year of college-level study.

Students who matriculate after September 1999 may meet the language competence requirement in one of the following ways:

- receiving a score of 3 or higher on an AP language or literature examination in French, German, Latin, or Spanish or receiving a score of 5 or higher on an Higher-Level International Baccalaureate Second Language Examination;
- placing into the second year or higher in a foreign language offered at the University of Chicago and passing the speaking competency exam in that language (visit *www.college.uchicago.edu/academics/language.shtml* for more information);
- participating in a College-approved one-quarter or summer intensive foreign language study abroad program, including FLAG-supported study (visit *study-abroad.uchicago.edu* for more information); or
- passing a College-administered competency examination or completing (with a quality grade) a first-year language sequence or higher offered at the University of Chicago.

Students who are foreign nationals may meet the language competence requirement if their formal schooling experience in a country other than the United States enables them to demonstrate the criteria of cultural understanding and language competence described above. They must submit a petition (available at *http://www.college.uchicago.edu/academics/lang-petition.pdf*) and provide supporting documentation.

Students who matriculated before September 1999 must complete at least the first year of a language or its equivalent.

NOTE: Students are strongly urged to complete the language competence requirement in their first two years in the College.

Courses and examinations are offered in the following languages:

Akkadian
Albanian
American Sign Language
Arabic
Armenian
Assyrian
Babylonian
Bangla (Bengali)
Bosnian/Croatian/Serbian
Catalan
Chinese (literary and modern)
Czech
Ancient Egyptian
French
German
Greek (classical)
Hebrew (modern and classical)
Hindi
Hittite
Italian
Japanese
Kazakh
Korean
Latin
Macedonian
Malayalam
Marathi
Norwegian
Pali
Persian
Polish
Portuguese
Russian
Sanskrit
Spanish
Swahili
Tamil
Telugu
Tibetan
Turkish
Urdu
Uzbek
Yiddish

After meeting the language competency requirement, students are urged to work toward an Advanced Foreign Language Proficiency Certificate. To qualify to sit for the three-hour proficiency examination, students are required to complete a minimum of intermediate and advanced language study at levels set by the departments and spend a quarter abroad in an intensive language program approved by the University of Chicago. Details are available online at *www.college.uchicago.edu/academics/language_advanced.shtml.*

Physical Education (3 credits)

The physical education program is designed to cultivate physical fitness as well as to provide experiences in, and promote appreciation for, recreational physical activity. Courses available to meet the physical education requirement or to complete as electives include:

Archery
Badminton
Ballet (elementary and intermediate)
Conditioning*†
CPR/AED for the Professional Rescuer
Emergency Response
First Aid/CPR/AED
Free Weight Training*
Golf (Introduction to the Swing)
Jazz Dance (elementary and intermediate)
Jogging*
Lifeguard Training†
Modern Dance (elementary and intermediate)
Pilates
Racquetball
Social Dance (elementary and intermediate)
Step Aerobics*
Swimming (elementary)
Tennis (elementary and intermediate)
Water Aerobics*
Weight Training*
Yoga

* *Course meets the personal fitness requirement.*
† *Two-credit course.*

In order to earn a degree from the College of the University of Chicago, students must complete three credits in physical education. Students are advised to meet this requirement during their first year. Students must complete at least one of the three required credits by taking a personal fitness course (designated by an asterisk [*] in the preceding list). One, two, or three credits of physical education may be conferred on entering students based on the results of a fitness classification test offered during Orientation. Students who do not pass a swimming test that is also offered during Orientation must complete a one-credit course in swimming. Physical education courses are not included among the forty-two academic courses counted toward a degree, and they are not counted toward the number of courses that determine full- or part-time status. For course descriptions and further information on the physical education program, visit the Department of Physical Education and Athletics Web site at *athletics.uchicago.edu.*