

# CHEMISTRY (BA)

College of Arts and Sciences

Program Website (<https://chemistry.cornell.edu/undergraduate/>)

CIP: 40.0501 | HEGIS: 1905.00 | NYSED: 05733

## Program Description

The Department of Chemistry and Chemical Biology offers a comprehensive range of courses in physical, organic, inorganic, analytical chemistry, and chemical biology, enabling students to explore the world of chemistry and its related fields, while preparing them for a wide range of careers and professions. Courses numbered below 5000 are primarily designated for undergraduates, while those above 5000 are mainly intended for graduate students. Advanced chemistry majors are encouraged to explore graduate courses in an area of interest. Our faculty, in addition to teaching, lead active research programs that welcome involvement from undergraduate researchers. The link between teaching and research is a vital one in a continually evolving scientific subject; it ensures that students will be provided with the most advanced information and perspectives and affords opportunities for students to participate in research. There are several options for earning the Bachelor of Arts degree in Chemistry, with the two most popular pathways shown below. Students who earn a sufficiently high score on the AP (Advanced Placement & Advanced Standing) chemistry exam may take CHEM 2150 and begin on the accelerated honors track. For additional information about the department and course offerings, see the department website.

### Standard Track

- first year: general chemistry, mathematics
- second year: organic chemistry lecture(s) and laboratory, physics
- third year: physical chemistry lecture(s) and laboratory, one other advanced laboratory
- fourth year: inorganic chemistry, elective(s)

### Accelerated Track

- first year: honors general chemistry, honors organic chemistry I, mathematics
- second year: honors organic chemistry II and laboratories, honors math elective, inorganic chemistry, physics
- third year: honors physical chemistry lectures and laboratory, analytical chemistry laboratory
- fourth year: advanced courses, elective(s)

Note: In addition to the major requirements outlined below, all students must meet the college graduation requirements.

## Admission to the Major

Admission to the chemistry major requires the satisfactory completion of a number of introductory courses which, when taken together, demonstrate an interest in the different subfields of chemistry and an interest in completing the major. Students usually apply to the major in their sophomore year, at which time they should have completed the following courses.

- Introductory Chemistry: CHEM 2070 + CHEM 2071 & CHEM 2080 + CHEM 2081 or CHEM 2150

- Organic Chemistry CHEM 3570 or CHEM 3590
- Mathematics: MATH 1110
- Physics: PHYS 2207 or PHYS 1112

It is expected that students will have earned a C or better in these courses. Students with a grade of C– or lower in one of these required courses may be considered for admission to the major after the successful completion of additional coursework requested by the department. Students who are in their second term of sophomore year or later and have completed all but one of the major requirements may also be admitted, as long as they have a plan for completing the remaining requirements on schedule. To apply to the major, please visit the website at: [chemistry.cornell.edu/undergraduate](https://chemistry.cornell.edu/undergraduate) (<http://chemistry.cornell.edu/undergraduate/>).

## Honors in Chemistry

The Honors criteria described here will start for all graduates in the 2026-2027 academic year.

Students who complete the Chemistry honors curriculum with a chemistry GPA\* of 3.3 or higher at the time of degree conferral, and who submit a research proposal or thesis in the CHEM 4980 Honors Seminar Honors Capstone, will be eligible for honors recognition

Students in their junior or senior year who are on track to complete the honors curriculum and have shown exceptional performance in at least four credits (or the equivalent) of undergraduate research in chemistry or a related field, or who demonstrate interest in developing a unique research proposal, may be nominated to participate in the Honors Capstone by a research advisor or the Director of Undergraduate Studies (DUS). Students should consult with their advisor or the DUS early in the fall semester of junior or senior year, before spring enrollment begins. Admission to the Honors Capstone is at the sole discretion of the capstone instructor and/or the DUS. Students participating in the Honors Capstone attend lectures on a variety of topics not covered in conventional courses and present their findings in a written thesis or proposal, which is delivered as an oral presentation at the end of the semester. Successful completion of all honors criteria leads to the designation "Honors in Chemistry."

\* The chemistry GPA is different from the cumulative GPA. The chemistry GPA will factor in all chemistry (CHEM) courses at the 2000 level or above that are taken for a letter grade at Cornell University. The Chemistry GPA will not include Math or Physics requirements, non-chemistry electives, AP/IB credit scores, or transfer credit from other institutions.

## Program Information

- Instruction Mode: In Person
- Location: Ithaca, NY
- Minimum Credits for Degree: 120

**Note:** In addition to the major requirements outlined below, all students must meet the college graduation requirements.

## Program Requirements

This is an in-person, four-year program of study offered at the Ithaca campus. Students must complete a total of 60 credits in chemistry and related subjects.<sup>1</sup> These 60 credits must include the set of core courses listed below, together with a total of 8 credits of laboratory beyond what

is required for general chemistry. Credit awarded by Cornell for scores on the CEEB Advanced Placement tests in chemistry, calculus, and physics may be substituted for the appropriate core courses. Outside of the core courses, the remainder of the 60 credits must be chosen from an approved list of electives available through the department website. To receive credit toward the major, students must earn a passing grade or better within a course.

Many combinations of courses may be used to build the 60-credit chemistry major. For example, students wishing to focus on chemical biology may choose electives from the chemical biology courses offered in our department and from courses in other departments listed under Biology and Biochemistry. Students choosing to emphasize materials chemistry may choose electives from graduate level chemistry courses listed under Inorganic Chemistry, and Organic and Polymer Chemistry, as well as from courses listed under Materials Science and Engineering. Those with an interest in science policy might choose courses listed under Science and Society, and those focusing at the interface between chemistry and physics can choose from graduate level courses in physical chemistry or from courses listed under Mathematics, Computer Science, and Physics. The wide selection of approved electives allows students to broaden their exposure to the curriculum while deepening their knowledge in different areas, helping them tailor their learning to align with their future goals.

<sup>1</sup> Students graduating in the class of 2026 or 2027 will need a total of 57 approved credits in chemistry and related subjects.

## Required Core Courses

### General Chemistry

Code	Title	Hours
Select one of the following:		
<i>Sequence 1</i>		
CHEM 2070 & CHEM 2071	General Chemistry I and General Chemistry I Laboratory	4
CHEM 2080 & CHEM 2081	General Chemistry II and General Chemistry II Laboratory	4
<i>Sequence 2</i>		
CHEM 2150	Honors General and Inorganic Chemistry	4

### Organic Chemistry

Code	Title	Hours
Select one of the following:		
CHEM 3570 & CHEM 3580	Organic Chemistry for the Life Sciences and Organic Chemistry for the Life Sciences	6
CHEM 3590 & CHEM 3600	Honors Organic Chemistry I and Honors Organic Chemistry II	6

Students who are planning for graduate study in chemistry or a career as a chemist or healthcare professional are strongly advised to take a two-semester sequence. One of the two semester sequences – CHEM 3570 Organic Chemistry for the Life Sciences & CHEM 3580 Organic Chemistry for the Life Sciences or CHEM 3590 Honors Organic Chemistry I & CHEM 3600 Honors Organic Chemistry II – is required for the Honors curriculum.

### Physical Chemistry

Code	Title	Hours
Select one of the following:		
CHEM 3870 & CHEM 3880	Principles of Physical Chemistry and Basics of Biophysical Chemistry	6
CHEM 3890 & CHEM 3900	Honors Physical Chemistry I and Honors Physical Chemistry II <sup>1</sup>	8

<sup>1</sup> Students graduating in the class of 2025, 2026, and 2027 may continue to take CHEM 3870 Principles of Physical Chemistry as a one-semester course that satisfies the physical chemistry requirement.

Students planning for graduate study in chemistry or a career as a chemist are strongly advised to take CHEM 3890 Honors Physical Chemistry I & CHEM 3900 Honors Physical Chemistry II, which are required for the Honors curriculum. Students taking CHEM 3890 Honors Physical Chemistry I & CHEM 3900 Honors Physical Chemistry II are required to take a prerequisite semester of multivariable calculus from the electives below.

### Inorganic Chemistry

Code	Title	Hours
CHEM 4100	Inorganic Chemistry	3

### Core Laboratories

Code	Title	Hours
CHEM 2510	Introduction to Experimental Organic Chemistry	2
CHEM 2900	Introductory Physical Chemistry Laboratory	2
	or	5
	or CHEM 3030 Honors Experimental Chemistry III	

Students planning graduate study in chemistry or a career as a chemist are advised to take CHEM 3020 and CHEM 3030, which are required for the Honors curriculum.

### Mathematics

Code	Title	Hours
MATH 1110 & MATH 1120	Calculus I and Calculus II	8
4 AP Credits and MATH 1910		8

AP credit may be substituted for one or more of these courses.

### Physics

Code	Title	Hours
Select one of the following:		
PHYS 2207 & PHYS 2208	Fundamentals of Physics I and Fundamentals of Physics II	8
PHYS 1112 & PHYS 1110 & PHYS 2213	Physics I: Mechanics and Heat and Introduction to Experimental Physics and Physics II: Electromagnetism	8
PHYS 1116 & PHYS 2217	Physics I: Mechanics and Special Relativity and Physics II: Electricity and Magnetism	8

The non-calculus-based introductory physics courses PHYS 1101 General Physics I & PHYS 1102 General Physics II are **not** acceptable. AP credit may be substituted for one or both of these courses.

## Required Advanced Laboratory Courses

A total of 8 credits of laboratory, including core laboratories, is required to complete the major. This requirement may be met by taking CHEM 3010 Honors Experimental Chemistry I and/or CHEM 3020 Honors Experimental Chemistry II or by taking approved laboratory elective courses outside of chemistry. Credits for independent research (CHEM 4210 Introduction to Inorganic Chemistry Research, CHEM 4330 Introduction to Analytical Chemistry Research, CHEM 4430 Introduction to Chemical Biology Research, CHEM 4610 Introduction to Organic Chemistry Research, or CHEM 4770 Introduction to Physical Chemistry Research) do not count toward the laboratory requirement. Note that Honors in Chemistry requires successful completion of CHEM 3010 Honors Experimental Chemistry I, CHEM 3020 Honors Experimental Chemistry II, and CHEM 3030 Honors Experimental Chemistry III. This advanced laboratory sequence is strongly advised for students planning graduate study in chemistry or a career as a chemist.

## Elective Courses

### Electives From Chemistry and Chemical Biology

Any course offered by the Department of Chemistry and Chemical Biology at the 4000 level or higher may be used as an elective. An approved list of electives can be downloaded from the program website.

Students who have completed the core courses are encouraged to take graduate courses at the 6000 or 7000 level in areas of interest. No more than four credits of independent research (CHEM 4210 Introduction to Inorganic Chemistry Research, CHEM 4330 Introduction to Analytical Chemistry Research, CHEM 4430 Introduction to Chemical Biology Research, CHEM 4610 Introduction to Organic Chemistry Research or CHEM 4770 Introduction to Physical Chemistry Research) may be counted as an elective.

### Electives From Other Departments

See the Chemistry Department website for the list of electives from other departments. Some courses may not be offered every year. Be aware that some courses may have additional prerequisites that do not count toward Chemistry electives credits.

## Independent Research

Chemistry majors are encouraged to participate in independent research through CHEM 4210 Introduction to Inorganic Chemistry Research, CHEM 4330 Introduction to Analytical Chemistry Research, CHEM 4430 Introduction to Chemical Biology Research, CHEM 4610 Introduction to Organic Chemistry Research, or CHEM 4770 Introduction to Physical Chemistry Research. These courses provide academic credit for research carried out in the laboratory of a departmental faculty member or in the laboratory of a faculty member in another department who is a member of the graduate field of chemistry. Students may apply up to four credits of research toward the elective requirements for completing the major. Students interested in starting a research project can contact potential faculty research supervisors to identify an advisor with an open position.

## Laboratory Course Regulations

Students and members of the teaching staff are required to wear safety goggles and lab aprons in all chemistry laboratories. Closed-toed footwear is required; no sandals are allowed. Students will be issued safety goggles and a lab apron their first day of lab. Students are reminded to bring their goggles and lab aprons with them to every subsequent laboratory session. Those who fail to cooperate with the safety program will be asked to leave the laboratory.

Students in first semester general chemistry lab courses (CHEM 1561 Introduction to General Chemistry Laboratory, CHEM 2071 General Chemistry I Laboratory, CHEM 2091 Engineering General Chemistry Laboratory, and CHEM 2150 Honors General and Inorganic Chemistry) are charged a mandatory laboratory fee and will be provided with safety goggles and lab aprons at their first laboratory session.

Students in CHEM 2080 General Chemistry II who did not take a first semester general chemistry course at Cornell (i.e., advanced or transfer credit was used) are charged a mandatory laboratory fee and will be provided with safety goggles and lab aprons at their first laboratory session.

Students in organic labs (CHEM 2510 Introduction to Experimental Organic Chemistry and CHEM 3010 Honors Experimental Chemistry I) and advanced labs (CHEM 2900 Introductory Physical Chemistry Laboratory, CHEM 3020 Honors Experimental Chemistry II and CHEM 3030 Honors Experimental Chemistry III) are required to provide their own safety goggles and lab aprons. No laboratory fees are charged for these courses. However, students in CHEM 2510 Introduction to Experimental Organic Chemistry and CHEM 3010 Honors Experimental Chemistry I are required to pay for glassware and any other items broken during the semester as well as for any items broken or missing from their laboratory desks at the end of the semester. Students who fail to inventory their desks at the appointed time in the presence of their instructor are charged an abandoned desk fee in addition to charges to replace any broken or missing items.

## University Graduation Requirements Requirements for All Students

In order to receive a Cornell degree, a student must satisfy academic and non-academic requirements.

### Academic Requirements

A student's college determines degree requirements such as residency, number of credits, distribution of credits, and grade averages. It is the student's responsibility to be aware of the specific major, degree, distribution, college, and graduation requirements for completing their chosen program of study. See the individual requirements listed by each college or school or contact the college registrar's office (<https://registrar.cornell.edu/service-resources/college-registrar-directory/>) for more information.

### Non-academic Requirements

**Conduct Matters.** Students must satisfy any outstanding sanctions, penalties or remedies imposed or agreed to under the Student Code of Conduct (Code) or Policy 6.4. Where a formal complaint under the Code or Policy 6.4 is pending, the University will withhold awarding a degree otherwise earned until the adjudication process set forth in those procedures is complete, including the satisfaction of any sanctions, penalties or remedies imposed.

**Financial Obligations.** Outstanding financial obligations will not impact the awarding of a degree otherwise earned or a student's ability to access their official transcript. However, the University may withhold issuing a diploma until any outstanding financial obligations owing to the University are satisfied.

## Additional Requirements for Undergraduate Students

The University has two requirements for graduation that must be fulfilled by all undergraduate students: the swim requirement, and completion of two physical education courses. For additional information about fulfilling University Graduation Requirements, see the Physical Education website (<https://scl.cornell.edu/pe/>).

### Physical Education

All incoming undergraduate students are required to take two credits (two courses) of Physical Education prior to graduation. It is recommended they complete the two courses during their first year at Cornell. Credit in Physical Education may be earned by participating in courses offered by the Department of Athletics and Physical Education ([https://courses.cornell.edu/preview\\_program.php?catoid=60&poid=30232](https://courses.cornell.edu/preview_program.php?catoid=60&poid=30232)) and Cornell Outdoor Education, by being a registered participant on a varsity athletic team, or performing in the marching band.

Students with medical concerns should contact the Office of Student Disability Services (<http://sds.cornell.edu/>).

### Swim Requirement

The Faculty Advisory Committee on Athletics and Physical Education has established a basic swimming and water safety competency requirement for all undergraduate students. Normally, the requirement is taken during the Fall Orientation process at Helen Newman Hall or Teagle Hall pools. The requirement consists of the following: jump or step feet-first into the deep end of the pool, float or tread for one minute, turn around in a full circle, swim 25 yards using any stroke(s) of choice without touching the bottom or holding on to the sides (there is no time limit) and exit from the water. Students who do not complete the swim requirement during their first year, during a PE swim class or during orientation subsequent years, will have to pay a \$100 fee. Any student who cannot meet this requirement must register for PE 1100 Beginning Swimming as their physical education course before electives can be chosen.

If a student does not pass the swim requirement in their first Beginning Swimming PE class, then the student must take a second Beginning Swimming PE class (PE 1100 or PE 1101). Successful completion of two Beginning Swimming classes (based on attendance requirements) with the instructor's recommendation will fulfill the University's swim requirement.

Students unable to meet the swim requirement because of medical reasons should contact the Office of Student Disability Services (<http://sds.cornell.edu/>). When a waiver is granted by the Faculty Committee on Physical Education, an alternate requirement is imposed. The alternate requirement substitute is set by the Director of Physical Education.

## College of Arts and Sciences Graduation Requirements

### Undergraduate Degrees

#### Graduation Requirements for the Bachelor of Arts Degree

**Credit Requirement:** 120 academic credits are required, 100 of which must be taken in the College of Arts & Sciences. 100 credits in Arts & Sciences is a minimum number, as is the 120 credit total. A minimum of 80 credits must be in courses for which a letter grade was received. AP, IB, CASE and A-Level credits count toward the 120 total credits but not toward the 100 A&S credits. Transfer credits for non-transfer students cannot count towards the 100 A&S credits. (See list of courses ([\[as.cornell.edu/registrar/courses-that-dont-count/\]\(https://as.cornell.edu/registrar/courses-that-dont-count/\)\) that do not count as academic credit.\)](https://</a></p>
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**Residency Requirement:** eight full-time semesters in residence (in person) are expected to complete degree requirements with a minimum of six full-time semesters being required. External transfer students must complete a minimum of four full-time residence semesters.

**First-year Writing Seminar (FWS) Requirement:** two courses are required. A 5 on either the AP English Composition or Literature exam, or a 7 on the IB HL English Literature or Language exam will count towards one of these seminars. First-year students should take an FWS during their first semester at Cornell and are required to complete two by the end of their sophomore year.

**Foreign Language Requirement:** a student must either pass an intermediate Cornell language course at the 2000-level or above (Option 1) or complete at least 11 credits in a single foreign language at Cornell (Option 2). AP and IB credits cannot complete this requirement, but usually indicate that a student can place into a higher level course. Note: Native speakers of a foreign language may be exempted from this requirement. For a list of language offerings and placement, see Language Study at Cornell.

**Distribution Requirement:** Must take a minimum of 8 courses of at least 3 credits to fulfill 10 distribution categories. How an individual course is categorized is indicated with the appropriate abbreviation in its course description. It is important to recognize that only courses with the proper designation in the catalog can be used toward fulfilling the distribution requirements in Arts and Sciences. Unless otherwise specified, variable credit courses, including independent study courses, may not be used for distribution credit.

#### Arts & Sciences Distribution Requirement Categories:

- Arts, Literature, and Culture (ALC-AS)
- Biological Sciences (BIO-AS)
- Ethics and the Mind (ETM-AS)
- Global Citizenship (GLC-AS)
- Historical Analysis (HST-AS)
- Physical Sciences (PHS-AS)
- Social Difference (SCD-AS)
- Social Sciences (SSC-AS)
- Statistics and Data Science (SDS-AS)
- Symbolic and Mathematical Reasoning (SMR-AS)

#### Distribution Requirement Definitions

##### Arts, Literature, and Culture (ALC-AS)

Courses in this area examine arts, literature, and culture in various contexts. Students gain insights into the interplay of individual or collaborative creativity and social practice, and understand the complexities of the expression of the human condition. Topics include the analysis of artworks and literary texts, and the belief systems of social groups, cultures, and civilizations; they also focus on artistic expression itself (in creative writing, performing arts, and media such as film and video).

##### Biological Sciences (BIO-AS)

Courses in this area focus on understanding a wide range of life forms, from single cells to plants, animals, and their ecosystems. Topics include the molecular and biochemical makeup of life, the sub-cellular, cellular and organismal structures of life, and the evolutionary relatedness of all life forms. Students learn to describe how organisms are connected



to each other and to their physical environment. Many courses address how genetic information is expressed from DNA, and how this expression leads to complex function and behavior.

#### **Ethics and the Mind (ETM-AS)**

Courses in this area investigate the human mind and its capacities, ranging from cognitive faculties shared by humans and animals such as perception, to language and abstract reasoning, to the ability to form and justify ethical values. Courses investigating the mind may use the methodologies of psychology, linguistics, or philosophy. Those focusing on ethics explore ways of reflecting on questions that concern the nature of justice, the good life, or human values in general. Many courses combine these topics and methodologies.

#### **Global Citizenship (GLC-AS)**

Courses in this area examine the history, culture, politics, religion, and social relations of peoples in different parts of the world, as well as their interactions. They encourage students to think broadly about the global community and their place within it, beyond the boundaries of their particular national or cultural group, and cultivate skills of intercultural engagement that are vital to their role as global citizens. These courses introduce students to global challenges such as war and peace, social and economic inequalities, international migration, and environmental sustainability, and encourage students to think critically about international responses to these challenges.

#### **Historical Analysis (HST-AS)**

Courses in this area train students in the analysis of documentary, material, and oral evidence about social phenomena, institutions, events and ideas of the past. Students learn to evaluate and critically assess differing analyses and interpretations of former times so that they may acquire a better understanding of the origins and evolution of the present. Questions addressed in HA courses include why and under what circumstances changes have occurred in how people have interacted with one another and with the environments in which they live.

#### **Physical Sciences (PHS-AS)**

Courses satisfying this requirement provide an appreciation of how science generates and categorizes enduring knowledge of our physical world. This includes the physics, chemistry, and technology involved, of everything from light to atoms, DNA molecules, Earth science, our Solar system, and to the Cosmos. These courses expose students to both the process and some of the substance of science. By learning the universal aspects of scientific enquiry, students will be better equipped to form opinions on scientific issues that affect the world.

#### **Social Difference (SCD-AS)**

Courses in this area examine social differences relevant to the human experience. Social categories include class, race, ethnicity, indigeneity, nationality, language, religion, gender, sexuality, and ability as objects of study. Students develop a deeper understanding of these categories and their intersections. Topics may include: how hierarchies in power and status shape social differences; how social, economic and political systems can impact the interpretation of social differences; and how differences attributed to various groups are explained.

#### **Social Sciences (SSC-AS)**

Courses in this area examine social, economic, political, psychological, demographic, linguistic, and relational processes. Topics include understanding how different social contexts, for example neighborhoods, families, markets, networks, or political organizations, shape social life. Students learn to identify, describe, and explain the causes and consequences of social phenomena using quantitative and/or qualitative

evidence based on systematic observation of the social world. They also learn to link evidence to theory through rigorous and transparent reasoning, and/or reflect critically on the concepts through which people make sense of the social world.

#### **Statistics and Data Science (SDS-AS)**

Courses in this area develop data literacy, essential to be an informed citizen in today's world. Students learn and apply statistical and computational techniques to effectively collect, visualize, analyze and interpret data, and present conclusions. Applications span a wide variety of contexts: providing a better understanding of the communities in which we live, guiding and enriching our lives, and driving forward scientific inquiry. Students gain an appreciation of how to ask the right questions, and how statistics can depend on the context, assumptions, and limitations of data.

#### **Symbolic and Mathematical Reasoning (SMR-AS)**

Courses satisfying this requirement help students develop the skills to solve problems through understanding abstract, logical relationships. Such skills include mathematical analysis of patterns and phenomena, modeling natural and technological systems, and creating algorithms essential to computation. These courses explore specific quantitative and symbolic methods, strategies for applying logical reasoning in diverse areas, and the intrinsic elegance of mathematics.

**Major Requirement:** students must complete the requirements for at least one major in A&S. See individual major listings for major requirements.

**Physical Education Requirement:** completion of the university requirement of two PE courses and passing the swim test. Note: physical education credit is not academic credit and does not count toward the 120 credits needed to graduate.

#### **Policies on Applying Cornell and Non-Cornell Courses and Credits to Distribution Requirements**

##### **Restrictions on Applying AP/Test Credit and Courses from Other Institutions to the Distribution Requirements**

- Students may not apply AP/test credit or transfer credit from another institution to the distribution requirements.
- Students who transfer to the college from another institution are under the above rules for advanced placement credit, but are eligible to have credit for post-high school course work taken during regular full-time semesters (not summer terms) at their previous institution count toward all distribution requirements. Transfer students receive a detailed credit evaluation when they are accepted for admission.

##### **Restrictions on Applying Cornell Courses to the Distribution Requirements**

- First-year writing seminars and ENGL 2880 Expository Writing or ENGL 2890 taken to satisfy a first-year writing seminar requirement may not count toward any other college or major requirement.
- Only courses with the proper designation in the Courses of Study can be used toward fulfilling the distribution requirements in Arts and Sciences.
- Students may not petition to change the category of any given course, nor may any faculty member change the category of a course for an individual student. Faculty members wishing to change the category for a course in which they are the primary instructor must petition the Educational Policy Committee for a change in category. If

granted, the new category must be applied to the course as a whole and not for an individual student.

### Courses That May Fulfill More Than One Requirement

- A course may fulfill more than one college requirement in any of the following situations:
- A course may be used to fulfill distribution and a major requirement (except if prohibited by one of the restrictions noted on applying AP/test credit, transfer credit, and Cornell courses to distribution requirements).
- A course may satisfy a maximum of two distribution categories. Students can only double-count distribution requirements on a maximum of two courses.
- A one-semester course in foreign literature (not language) or culture that is acceptable for certifying option 1 in that language may also be applied to the relevant distribution requirement.
- Courses may count toward any other requirement except first-year writing seminars.

## Credit Requirement

**Credits and Courses:** Students must earn a minimum of 120 academic credits (which may include AP/test credits). Of the 120, a minimum of 100 must be from courses taken in the College of Arts and Sciences at Cornell.

**Courses that do not count toward the 120 credits required for the degree.** The College of Arts and Sciences does not grant credit toward the degree for every course offered by the university. Courses in military training, service as a teaching assistant, physical education, remedial or developmental training, precalculus mathematics, supplemental science and mathematics, offered by the Learning Strategies Center, and English as a second language are among those for which degree credit is not awarded. Students can view the list of courses that do not count for academic credit here (<https://as.cornell.edu/registrar/courses-that-dont-count/>).

Other cases in which a course may not receive credit include the following:

- A course identified as a prerequisite for a subsequent course may not be taken for credit once a student completes that subsequent course.
- A repeated course. (For more information, see "Repeating courses," below.)
- A "forbidden overlap," that is, a course with material that significantly overlaps with material in a course a student has already taken. Students should consult the list of Forbidden Overlaps for more information.

**Courses that count toward the 100 required Arts and Sciences credits** may include liberal arts courses approved for study abroad during a semester or academic year of full-time study (not summer abroad study), courses taken in certain off-campus Cornell residential programs, and a maximum of three courses that majors may accept from other colleges at Cornell as fulfilling major requirements. A&S courses taken in Cornell's summer session may count towards the 100 A&S credits.

**Courses that do not count toward the 100 required Arts and Sciences credits** include credits earned in other colleges at Cornell (except in the cases specifically noted in this section), transfer credits earned in any subject at institutions other than Cornell, and advanced placement/test credits. AP/test credits count as part of the 120 credits required for the

degree but not as part of the 100 Arts and Sciences credits and may not be applied to distribution requirements. AP credits are posted on the transcript. If, subsequently, a student takes the course out of which they had placed, the AP credit will be removed because of the overlap in content.

## Repeating Courses

Students occasionally need to repeat courses. Some courses, such as independent study, some music and performance courses, and specific topical seminars, in which content is significantly different, do grant credit when the course is taken more than once. For all repeated courses, both grades appear on the transcript and are included in both the term and cumulative GPA. For repeated courses that do not grant credit more than once, only one instance counts toward degree credits and requirements.

## Residency Requirement

The College of Arts & Sciences is a residential community and students typically spend eight semesters of full-time study in residence to earn the B.A. degree.

The completion of a fall or spring term as a full-time registered student at Cornell counts as a semester in residence. Summer and winter terms at Cornell, study in Cornell's School of Continuing Education and at other institutions do not count as semesters of residence.

The residency requirement has two components: a minimum number of semesters in residence and a requirement to spend the last full-time semester of study in residence.

Students matriculating into the College of Arts & Sciences as first-year students must have a minimum of six semesters in residence before graduating. First-year matriculants into A&S can count up to two semesters in an approved off-campus program as semesters in residence. Approved off-campus programs include A&S approved study abroad programs, Cornell in Washington, Cornell in Rome, and the Cornell-China & Asia-Pacific Studies (CAPS) Program.

Students who transfer into the College of Arts & Sciences after matriculating in their first-year in another Cornell college (internal transfers) must have a minimum of six semesters in residence, and a minimum of two semesters in the College of Arts and Sciences before graduating. Internal transfers can count up to two semesters in an approved off-campus program as semesters in residence.

Students who transfer into Cornell from another institution (external transfers) must have a minimum of four semesters in residence, and a minimum of two semesters in the College of Arts & Sciences, before graduating. External transfers can count up to one semester in an approved off-campus program as a semester in residence.

In addition to the minimum number of semesters in residence, all students must complete their final full-time semester of study (i.e., the last semester in which at least 9 academic credits are needed to meet graduation requirements) in residence. Students who have fewer than 9 credits to complete degree requirements, and have met the minimum number of semesters residency requirement, may elect to complete their degree requirements during Cornell summer and winter terms registered as an A&S student or at another institution with approved transfer credit. Students cannot meet final degree requirements registered as an extramural student at Cornell.

Exceptions to the residency requirement are not petitionable.

## Foreign Language Requirement

The faculty considers competence in a foreign language essential for an educated person. Studying a language other than one's own helps students understand the dynamics of language, our fundamental intellectual tool, and enables students to understand another culture. The sooner a student acquires this competence, the sooner it will be useful. Hence, work toward the foreign language requirement should be undertaken in the first two years. Students postponing the language requirement for junior and senior years risk not graduating on time. Courses in foreign languages and/or literature are taught in the College of Arts and Sciences by the following departments: Africana Studies and Research Center, Asian Studies, Classics, Comparative Literature, German Studies, Linguistics, Near Eastern Studies, and Romance Studies. For a list of languages and placement see Language Study at Cornell.

The language requirement may be satisfied in one of the following ways:

**Option 1 (FLOPI):** Passing (a) a non-introductory foreign language course of 3 or more credits at Cornell at the 2000-level or above or (b) any other non-introductory course at the 2000-level or above conducted in a foreign language at Cornell. OR

**Option 2:** Passing at least 11 credits of study in a single foreign language (taken in the appropriate sequence) at Cornell.

Any exceptions to these rules will be noted elsewhere in individual department descriptions.

Students whose speaking, reading, and writing competence in a language other than English is at the same level we would expect our entering first-year students to have in English (as shown by completing high school in that language or by special examination during their first year here at Cornell) are exempt from the college's language requirement.

## Major Requirement

Most departments and programs specify certain prerequisites for admission to the major; they are found on the pages for each department and program available at Degree Programs.

Students may apply for acceptance into the major as soon as they have completed the prerequisites and are confident of their choice. This may be as early as the second semester of their first year, and must be no later than the end of the second semester of sophomore year. A student without a major at the beginning of the junior year is not making satisfactory progress toward the degree and risks not being allowed to continue in the college. Undeclared first-term juniors must file a Late Declaration of Major form with Student Services and may be placed on a leave of absence during their junior year if they have not yet declared a major.

### Double Majors

Completion of one major is required for graduation. Some students choose to complete more than one major. No special permission or procedure is required; students simply become accepted into multiple majors and are assigned to an advisor in each department. All completed majors are posted on the official transcript. Students are not allowed to continue their studies past their eighth semester to complete additional majors.

## Early and Delayed Graduation

### Graduating Early

A student may elect to graduate early if they are able to complete all graduation requirements in fewer than eight semesters.

Students must still satisfy the college's residency requirement as part of the graduation requirements. This residency requirement requires that students who are first-year matriculants into Cornell spend a minimum of six semesters in residence, external transfers must spend a minimum of four. To request an early graduation, students must notify the A&S Registrar's Office in KG 17 Klarman Hall or at [as-studentservices@cornell.edu](mailto:as-studentservices@cornell.edu) (as-studentservices@cornell.edu?subject=Early%20Graduation%20Request).

The earliest a student can request to graduate early and officially change their graduation date is immediately following the pre-enrollment period for their anticipated final semester. The student should have pre-enrolled in the classes required to meet the graduation requirements by the requested graduation date. The student must then complete Part I in DUST and have Part II completed by their major advisor.

### Graduating Late: Ninth Term Enrollment

The Bachelor of Arts degree is expected to be completed in eight terms. If degree requirements cannot be completed in eight terms, students may seek permission to continue their studies. Requests will only be granted for students who have found themselves in emergent circumstances beyond their control which have prevented them from completing the degree in eight terms. Requests cannot be made until a student's final expected graduation term and will not be reviewed and approved until after the university drop deadline for that semester. Study beyond the eighth term is not automatically granted for the purposes of changing a major. Such requests must be discussed with a college academic advisor and require registrar approval. Requests to add an additional major or minor will not be approved for study beyond the eighth term.

If approved, students in the ninth and tenth term will be on a conditional status and will have restrictions placed on their enrollment to ensure successful completion of their degree. To request a ninth term, students must have their faculty advisor update Part II for any remaining major requirements. They will also need to submit a study plan to their college advisor listing the specific courses that will meet degree requirements for one major.

Student may elect to prorate credits if enrolling in 9 or fewer credits or take a full-time load if they desire. However, enrollment will be limited to 18 credits for the term so students can focus on their remaining required courses. In the rare case where a student may need to enroll in a tenth term to complete their degree, they will be required to prorate tuition and their enrollment will be limited to only the courses/credits needed for successful completion of one major. Additional enrollments will not be allowed.

## Graduation Procedures

### Application to Graduate

In the first semester of their senior year, students are prompted by Arts & Sciences Student Services to complete an online application to graduate. The application is intended to help seniors identify problems early enough in the final year to make any necessary changes in course selection to satisfy those requirements. Nonetheless, ensuring graduation requirements are fully met is the student's responsibility and any problems that are discovered, even late in the final semester, must be resolved by the student before the degree can be granted. Students are responsible for checking their DUST (<https://data.arts.cornell.edu/>

as-stus/degree\_reqts.cfm) reports and transcripts each term and alerting Student Services of any problems with their academic record. To check on their progress in the major, students should consult with their major advisors.

### Degree Dates

Cornell has three official degree conferral dates in the year: December, May, and August. Students who plan to graduate in August may attend commencement ceremonies in the preceding or subsequent May. Students graduating in December are invited to a special recognition ceremony in December and may also attend Commencement the following May. All academic work must be complete by the official conferral date in order to receive a degree on that date. Incomplete academic work will result in a later conferral date.

### Honors

*Notice: beginning with the December 2026 conferral date, Cornell University will institute a standardized Latin Honors system based solely on final cumulative undergraduate GPA. The Latin Honors categories include: Summa Cum Laude (top 5%), Magna Cum Laude (next 10%), and Cum Laude (next 15%).*

*The student's cumulative undergraduate GPA percentile at the time of degree conferral will be computed with respect to the student's particular college. Existing college-specific Latin Honors systems not based upon the new standardized criteria will be discontinued at the end of Summer 2026. This will apply to all major honors in Arts & Sciences as they will no longer use Latin Honors and will award "Honors in X" (e.g. Honors in Chemistry, Honors in English, etc.) Please see Graduation and Academic Honors for more information.*

### Bachelor of Arts with Honors

Almost all departments offer honors programs for students who have demonstrated exceptional accomplishment in the major and succeeded in research. The conferring of honors, and the requirements for conferral (cum laude, magna cum laude, or summa cum laude) are set by the departments for each major, the Independent Major Program, or the College Scholar Program. Minors do not offer honors programs. Students should contact the Director of Undergraduate Studies (<https://as.cornell.edu/about/directors-undergraduate-study/>) with questions about honors in the respective program.

### Bachelor of Arts with Distinction

The degree of Bachelor of Arts with distinction in all subjects will be conferred on students who have completed the requirements for the degree of Bachelor of Arts, if they have met the following requirements by the end of their final semester:

1. completed at least 60 credits while registered in regular sessions at Cornell;
2. achieved a GPA in the upper 30 percent of their class at the end of the seventh semester, or next-to-last semester for transfers and accelerants;
3. received a grade below C– in no more than one course;
4. received no failing grade (excluding PE);
5. have no frozen Incompletes on their records; and
6. maintained good academic standing, including completing a full schedule of at least 12 academic credits, in each of their last four semesters. (Students who have been approved to have prorated tuition for their final semester are considered to be in good academic standing).