

ACADEMIC PLANNING GUIDE FOR NEW STUDENTS 2018-2019



COLUMBIA COLLEGE
COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK



COLUMBIA ENGINEERING
The Fu Foundation School of Engineering and Applied Science

TABLE OF CONTENTS

WELCOME FROM THE DEAN OF ADVISING 1			
1. JAMES H. AND CHRISTINE TURK BERICK CENTER FOR STUDENT ADVISING 2			
THE ADVISING PARTNERSHIP 2			
2. COLUMBIA COLLEGE 3		3. COLUMBIA ENGINEERING 15	
4. TRANSFER AND COMBINED PLAN 25			
Letter from the Dean	4	Letter from the Dean	16
Planning Your First Year	5	Planning Your First Year	17
Worksheet	6	Worksheet	18
The Core Curriculum	7	First- and Second-Year Curriculum	19
Majors and Concentrations	10	Majors and Minors	22
Placement	11	Advanced Standing	22
Advanced Standing	12		
		The Basics	26
		Transfer Credit Evaluations	26
		Course Approval	26
		Columbia College: The Core Curriculum	27
		Columbia Engineering: Selecting Your Classes	29
		Combined Plan Students	32
		Combined Plan	
		Transfer Credit Evaluation	32
5. ACADEMIC RESOURCES 35		6. CAMPUS RESOURCES 41	
7. APPENDICES 47			
Registration Tools	36	James H. and Christine Turk Berick Center for Student Advising	42
School Bulletin	36	Undergraduate Student Life	42
Directory of Classes	36	Student Conduct and Community Standards	43
Student Services Online	36	Center for Career Education	43
Vergil	36	International Students and Scholars Office	43
Academic Support	36	Student Services	43
Departmental Resources	36	Columbia Health	43
Tutoring	37	Sexual Respect	45
Planning Ahead	37	University Chaplain	45
Study Abroad	37	Public Safety	45
Fellowships	37	Columbia University Libraries	45
Preparation for Future Professional Study	37	Bookstore	45
Academic Integrity	38		
Honor Code	38		
Violations	39		
Strategies for Maintaining Academic Integrity	39		
Dean's Discipline	40		
		Foreign Language Requirement	48
		Faculty Contacts for Columbia College Science Majors	50
		Academic Calendar	50
		Directory	51

WELCOME

Dear New Students,

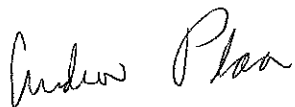
Welcome to Columbia! In the course of your time on campus, you will explore academic disciplines, hone your abilities as a critical thinker, expand your cultural interests, and discover new passions; you will engage in discussion and debate with the world's brightest minds, consider perspectives very different from your own, and be challenged to discover, grow, and change, both personally and intellectually.

We at the James H. and Christine Turk Berick Center for Student Advising (CSA) are here to help you navigate your time at Columbia. Throughout your time here, we will serve as your primary contacts for academic advising, and are available to offer advice, answer questions, help solve problems, connect you with resources, and brainstorm about courses of study, life plans, or anything else that may be on your mind. More immediately, we want to help you get ready for your first semester at college. To this end, we provide this *Academic Planning Guide for New Students*, with information on planning your schedule, required and elective courses, campus resources, and an overview of the requirements for your degree.

In mid-July you will receive an email introducing you to your adviser, who will be available—in person or by phone or email—to answer any questions you may have as the academic year approaches. You will schedule an appointment with your adviser during the New Student Orientation Program (NSOP) in late August to discuss your personal and academic goals and refine your plans for the Fall 2018 semester. Before that, as preparation for your first conversation with your adviser, we strongly urge you to look through this guide and write down ideas on the included worksheet for your first-semester schedule, potential majors, or any questions you may have.

In short, we are here for you. We look forward to meeting you and helping you make the most of your time at Columbia.

Sincerely,



Andrew Plaa, PhD
Dean of Advising
Berick Center for Student Advising

JAMES H. AND CHRISTINE TURK BERICK CENTER FOR STUDENT ADVISING

The James H. and Christine Turk Berick Center for Student Advising (CSA) guides and supports students at Columbia College and Columbia Engineering as they navigate their educations and lives at Columbia University. CSA advisers help students recognize and pursue their passions; challenge them to set realistic academic and life goals; and empower them to think and act creatively and independently.

You will have an adviser from the CSA throughout your time at Columbia. You will receive the name and contact information of your assigned adviser in mid-July. You will meet your adviser during the New Student Orientation Program, but you are welcome to contact your adviser with any questions you may have this summer.

CSA advisers have diverse educational and professional backgrounds that complement the varied interests, goals, and backgrounds of our student population. The CSA works closely with offices across the Columbia campus to create a seamless advising experience for students as they grow intellectually, socially, and professionally at Columbia.

Your CSA adviser is your primary point of contact for a variety of issues and questions, including the following:

- General academic questions, concerns, or difficulties
- Registration questions and problems
- Choosing a major
- Connecting with faculty
- Changes in academic program, in consultation with faculty advisers
- Receiving transfer, AP/IB/GCE, or summer course credit
- Premed and prelaw requirements and other academic opportunities
- Understanding University policies and petitioning for exceptions to academic policy
- Planning to study abroad
- Progress toward and completion of requirements for the degree
- Personal problems and concerns
- Leaves of absence
- Referrals to other resources on campus
- Future life plans

Your CSA adviser is one of a community of advising resources available to you at Columbia. Our faculty are another vital source of advice, particularly once you have decided on a major. They are available to discuss research opportunities, to elucidate the finer points of course material and major requirements, and to guide you through your declared field of study.

Please see the Campus Resources section of this guide for other offices that provide support.

THE ADVISING PARTNERSHIP

Productive advising is built on a true partnership in which the student and the adviser work together. The spirit of an ideal advising partnership is mutual engagement, responsiveness, and dedication. Regular advising conversations, the fundamental building blocks of the partnership, enable an adviser to serve as a resource of knowledge and a source of referrals—so that students may plan and prepare, in the broadest sense, throughout their time at Columbia.

TO MAKE THIS PARTNERSHIP A SUCCESS:

Students should

- Actively engage in the advising relationship
- Respond to adviser outreach and be forthcoming about perceived obstacles to success
- Proactively research and plan ways to reach academic goals and share these goals with their advisers
- Be open to researching the answers to questions with advisers in order to learn ways in which to find information on their own
- Act upon referrals to other sources of information and advice
- Let advisers know when they have not been able to find needed information and advice

CSA advisers should

- Be knowledgeable, responsive, and supportive
- Reach out to advisees, especially when an advisee seems to be struggling
- Inquire about students' short- and long-term goals and ask students to consider study abroad, fellowships, scholarships, internships, research opportunities, etc.
- Research the answers to questions with students as a way to show students how and where to find information on their own
- Refer students to other sources of advice and information and connect advisees with appropriate faculty members and departments
- Follow up with students on important matters in a timely way



**COLUMBIA
COLLEGE**

Dear Students,

Each year at Convocation, I introduce the concept of “Beginner’s Mind”—the idea of engaging the world without preconceptions, as if you’re seeing everything for the very first time. As Shunryu Suzuki writes in *Zen Mind, Beginner’s Mind*: “In the beginner’s mind there are many possibilities; in the expert’s mind there are few.” This way of thinking expands the possibilities that our minds can envision. It warns us that the “expertness” that our experiences have produced can limit our perceptions, our judgments, our understandings, and our imaginations.

You are now at the beginning of a journey, one that goes beyond your major, beyond your transcript, and beyond your resume. When you enter your University Writing, Frontiers of Science, and Literature Humanities classes, the first courses in the Core Curriculum, remember that you’re not only gaining knowledge, understanding, insight, and empathy, but are also developing critical thinking and research abilities; honing your written and oral communication skills; improving your quantitative, information, and technological literacy; engaging in teamwork and collaboration; expanding your creativity and innovation; taking on civic and individual responsibility; participating in community engagement and inclusion; and building global awareness and a sense of wellness and resiliency.

Our goal as a college is to encourage you to take time to *reflect* on your experiences—to think about what you like and what you don’t, what you are good at and what you aren’t, what you are learning and what you want to learn. This does not have to be an independent activity. Throughout this process, you will be supported by your Columbia College faculty, advisers, mentors, program coordinators, and friends—in the Arts and Sciences, the Berick Center for Student Advising, the Center for Career Education, the Office of Global Programs and Fellowships, Undergraduate Student Life, and in your activities and in residential halls.

We trust this reflection will guide you to make thoughtful decisions about your academic and cocurricular life, help you consider areas you would like to develop, and serve as a means to identify and pursue your interests and dreams.

Let the journey begin.

Roar, Lion(s), Roar!



James J. Valentini
Dean of Columbia College
Vice President for Undergraduate Education
Henry L. and Lucy G. Moses Professor

PLANNING YOUR FIRST YEAR: FIRST STEPS ON THE COLUMBIA COLLEGE JOURNEY

Your Columbia College experience is a journey. Each choice you make—every class, extracurricular activity, internship, residential experience, research opportunity, conversation, and interaction—is helping you grow personally, professionally, and as citizens of the world.

Our goal isn't just for you to develop skills, capacities, and capabilities, but also to understand how you developed them, where you developed them, and how the experiences fit in with your entire Columbia College journey and the journey you will take after Commencement. You may read more about your Columbia College journey at college.columbia.edu/journey.

THE BASICS

To earn the Bachelor of Arts degree from Columbia College, you must:

- Complete the Columbia College Core Curriculum
- Satisfy the specific requirements for a major or concentration
- Earn 124 credits

You are expected to complete these requirements within eight semesters of study (not including summer sessions).

You must register for at least 12 and no more than 18 credits per semester.

YOUR FIRST SEMESTER AT COLUMBIA

As an incoming first-year student, you will be preregistered in the fall for *Masterpieces of Western Literature and Philosophy* (Literature Humanities, a year-long course), and either *University Writing* or *Frontiers of Science* (each one semester). This means you have space in your schedule for two to three other classes, which can satisfy other Core requirements and explore potential majors.

The pages that follow in this section of the guide provide information about the Core Curriculum, policies regarding majors and concentrations, and placement and advanced standing in disciplines such as science, math, and foreign languages. Please review them, as well as the following online resources, which will help you as you plan your first term at Columbia College:

- *Columbia College Bulletin* (college.columbia.edu/bulletin): A list of courses and descriptions of all majors
- Directory of Classes (columbia.edu/cu/bulletin/uwb): A list of all courses offered at Columbia University. (Note that not all are available to Columbia College students. Check the “Open To” field of the relevant class, and ask your CSA adviser if you have any questions.)
- Vergil (vergil.registrar.columbia.edu): An online scheduling tool that allows you to search for courses by instructor, date and time, department, subject area, keywords, and more

Please use the worksheet **on page 6** to write down a few potential class schedules for Fall 2018 and bring it, along with any questions you may have, to your meeting with your CSA adviser during the New Student Orientation Program (NSOP).

As you create potential schedules, keep in mind the following:

- Classes at Columbia are generally worth 3–4 credits. First-year students usually register for 4–5 classes. You must register for a minimum of 12 credits and no more than 18 credits.
- If you have not yet placed out of the language requirement (by means of a standardized test score accepted by the relevant department or by a Columbia departmental placement exam, which will be offered during NSOP), you should continue or begin a language in your first year.
- If you have no idea what you want to major in, you may start to explore various disciplines by taking an elective in any department. As a rule, first-year students are encouraged to take introductory courses, which are usually at the 1000- or 2000-level. You should also plan to speak with your CSA adviser about which majors might be a good match for you, and about other resources and opportunities at Columbia that will help you explore your academic options.
- If you intend to major in a science, you should focus on the introductory math and science classes required by the prospective major department. Information about all majors may be found in the online *Columbia College Bulletin*: bulletin.columbia.edu/columbia-college.
- If you intend to go to medical school after graduation, you should plan to take general chemistry, calculus, and possibly chemistry lab in your first year.

COLUMBIA COLLEGE WORKSHEET

This worksheet is designed to help you start thinking about your first semester and potential courses of study at Columbia, as well as to prepare for your first meeting with your CSA adviser.

Name: _____

Using the online resources listed below, please create two possible schedules for the fall term. Be sure to include at least two or three courses that may lead to a major or concentration. Please keep in mind that you will be pre-enrolled in Literature Humanities and either *University Writing* or *Frontiers of Science*.

- *Columbia College Bulletin* (college.columbia.edu/bulletin): A list of courses and descriptions of all majors
- Directory of Classes (columbia.edu/cu/bulletin/uwb): A list of all courses offered at Columbia University*
- Vergil (vergil.registrar.columbia.edu): An online scheduling tool that allows you to search for courses by instructor, date and time, department, subject area, keywords, and more

FALL 2018 OPTION 1

1. Lit Hum _____
2. University Writing or Frontiers of Science _____
3. _____
4. _____
5. _____

FALL 2018 OPTION 2

1. Lit Hum _____
2. University Writing or Frontiers of Science _____
3. _____
4. _____
5. _____

QUESTIONS?

Use the space below to write down any questions or concerns you would like to discuss with your CSA adviser. These may be academic or nonacademic, and they may pertain to the transition to college, the role of your CSA adviser, registration details, personal long- and short-term goals, extracurricular interests, etc.

**Not all classes are open to Columbia College students. Check the "Open To" field for the relevant class in the online directory, and ask your CSA adviser if you have any questions.*

REGISTRATION ADVICE

During the New Student Orientation Program (NSOP), you will meet with your CSA adviser and ask any questions you may have about courses of study, life at Columbia, potential majors and anything else. After you have met, you will register for classes on August 31, the Friday of NSOP. By then you will have received an assigned UNI (Columbia login and email address) and password, which you will use to create an email account and to log into Student Services Online (SSOL) at ssol.columbia.edu. To see when and where your preregistered classes meet, click on “Schedule.” Your registration appointments are listed under “Reg Appts.”

Do not worry if your schedule is not complete at the end of the first registration times. You will have the opportunity to finalize your schedule during the first two weeks of classes, when there is a lot of movement in enrollment. Please continue to direct any questions and concerns to your CSA adviser, who is there for you as you find your footing at Columbia.

THE CORE CURRICULUM

Since 1919, the Core Curriculum has provided students with wide-ranging perspectives on significant ideas and achievements in literature, philosophy, history, music, art, and science. Though celebrated for their content, Core Curriculum courses are equally important for their small-class format. Taught in seminars of approximately 22 students, these courses ensure that education at Columbia begins with an emphasis on active intellectual engagement. The small class sizes provide students with opportunities to develop intellectual relationships with faculty early on in their College career and to participate in a shared process of intellectual inquiry. In the Core Curriculum, the pursuit of better questions is every bit as important as the pursuit of better answers. The skills and habits honed by the Core—observation, analysis, argument, imaginative comparison, respect for ideas, nuances, and differences—provide a rigorous preparation for life as an engaged citizen in today’s complex and changing world.

In your first year, you will be required to complete *Masterpieces of Western Literature and Philosophy* (Literature Humanities), *University Writing*, and *Frontiers of Science*. Students complete *Introduction to Contemporary Civilization in the West* (Contemporary Civilization) in their second year. You should aim to complete *Masterpieces of Western Art* (Art Humanities) and *Masterpieces of Western Music* (Music Humanities) by the end of your third year. Plan the rest of your program according to your own academic goals: the College envisions that the Core will arc across your years of study, introducing you to new disciplines and

paralleling or converging with your major. The complete Core requirements are listed below, along with brief descriptions of each course. For a more in-depth look, please visit the Core website at college.columbia.edu/core.

The Core:

- *Masterpieces of Western Literature and Philosophy* (HUMA CC1001-CC1002) (two semesters)
- *University Writing* (ENGL CC1010)
- Foreign language (four semesters or the equivalent)
- Science (*SCNC CC1000: Frontiers of Science* plus two one-semester courses from an approved course list)
- *Introduction to Contemporary Civilization in the West* (COCI CC1101-CC1102) (two semesters)
- *Masterpieces of Western Art* (HUMA UN1121) (one semester)
- *Masterpieces of Western Music* (HUMA UN1123) (one semester)
- Global Core (two one-semester courses from an approved course list)
- Physical education (two one-semester courses, plus swim test)

LITERATURE HUMANITIES

What is required? HUMA CC1001-CC1002:
Masterpieces of Western Literature and Philosophy

When? Fall and spring semester of the first year.

Can I test out? No.

Special notes: You should be prepared to discuss the first six books of *The Iliad* at the introductory lecture, which meets during the week of the New Student Orientation Program.

You will be presented with a copy of *The Iliad*, a gift from the Columbia College Alumni Association, when you arrive on campus in August. To prepare for the first day of class, we suggest you read either an electronic version of *The Iliad*, to be provided via email in the summer, or a copy borrowed from a local library.

The edition used in Literature Humanities classes is the Lattimore (2011) translation.

Masterpieces of Western Literature and Philosophy, popularly known as “Literature Humanities” or “Lit Hum,” is a year-long course that offers Columbia College students the opportunity to engage in intensive study and discussion of some of the most significant texts of Western culture. The course is not a survey, but a series of careful readings of literary works that reward both first encounters and long study. Whether classwork focuses on the importance of the text to literary history or on its significance to our contemporary culture, the goal is to consider particular conceptions of what it means to be human as well as the place of such conceptions in the development of critical thought.

The principal objectives of *Literature Humanities* are to teach students to analyze literary texts and to construct well-reasoned arguments. An interdepartmental staff of professorial and preceptorial faculty meets with groups of approximately 22 students for four hours a week in order to discuss texts by Homer, Aeschylus, Sophocles, Euripides, Herodotus, Thucydides, Aristophanes, Plato, Vergil, Augustine, Dante, Boccaccio, Montaigne, Shakespeare, Austen, Dostoevsky, and Woolf, as well as Hebrew Scriptures and New Testament writings.

UNIVERSITY WRITING

What is required? *ENGL CC1010: University Writing*

When? You must take this course in the first year. Half of the first-year class will take it in the fall, the other half in the spring.

Can I test out? No.

University Writing is designed to help undergraduates read and write essays in order to participate in the academic conversations that form Columbia’s intellectual community. The course gives special attention to the practices of close reading, rhetorical analysis, research, collaboration, and substantive revision. By writing multiple drafts of essays typically ranging 3–10 pages, students will learn that writing is a process of forming and refining their ideas and their prose. Rather than approaching writing as an innate talent, the course teaches writing as a unique skill that can be practiced and developed.

You must complete *University Writing* during the first year. Credit from Advanced Placement exams in English does not exempt students from this requirement.

FOREIGN LANGUAGE

What is required? Proficiency at the intermediate level of a foreign language, typically Intermediate Level II

When? It is recommended that you start in the first year.

Can I test out? Yes. Exemption or placement level can be determined by AP scores, SAT II scores, or departmental placement tests. See Appendix A.

Special notes: See Appendix A for more information on satisfying the language requirement.

You may choose to begin studying a new language or continue to study a language with which you are familiar. If you wish to continue learning a language, you must take a placement exam offered by the relevant foreign language department in order to determine the appropriate course level for you at Columbia. Departmental placement exams in many languages will be given during the New Student Orientation Program. Students who can place themselves in an appropriate level based on AP or SAT II scores do not have to take a Columbia placement test. All language instruction courses must be taken for a letter grade. Students who wish to test out of the language requirement with a language not taught at Columbia should contact the Language Resource Center: lrc.columbia.edu.

SCIENCE

What is required? The science Core course, *SCNC CC1000: Frontiers of Science*, and *SCNC CC1100: Frontiers of Science: Discussion*, plus two one-semester courses from an approved course list

When? *Frontiers of Science* in the first year. Additional courses at any time.

Can I test out? No.

Special notes: You may not use Barnard College courses to fulfill the science requirement unless otherwise noted. A list of courses approved for the science requirement is here: bulletin.columbia.edu/columbia-college/core-curriculum/science-requirement

Frontiers of Science is a one-semester course that integrates modern science into the Core Curriculum. The course includes lectures and seminar sections. On Mondays throughout the

semester, Columbia's leading scientists present a miniseries of lectures. During the rest of the week, senior faculty and Columbia post-doctoral science fellows (research scientists selected for their teaching abilities) lead seminar sections limited to 22 students to discuss the lecture and its associated readings, and to debate the implications of the most recent scientific discoveries. *Frontiers of Science* is one of the three required courses of the science requirement for Columbia College.

The two additional semesters in specific disciplines will allow you to study a natural science in greater depth. You can take these courses in the same department or in different departments. However, at least one course must be taken in one of the following departments: Astronomy; Biological Sciences; Chemistry; Earth and Environmental Sciences; Ecology, Evolution and Environmental Biology; Physics; or Psychology. The other can be a Mathematics, Statistics, or Computer Science course.

CONTEMPORARY CIVILIZATION

What is required? *COCI CC1101-CC1102: Introduction to Contemporary Civilization in the West, I and II*

When? This two-semester sequence is usually taken in the sophomore year.

Can I test out? No.

The central purpose of *Introduction to Contemporary Civilization in the West*, also known as "Contemporary Civilization" or "CC," is to introduce students to a range of issues concerning the kinds of communities—political, social, moral, and religious—that human beings construct for themselves and the values that inform and define such communities, in order to prepare students to become active and informed citizens. Among the readings currently required in the course are the Bible, the Qur'an, and works by Plato, Aristotle, Augustine, Machiavelli, Descartes, Hobbes, Locke, Hume, Smith, Rousseau, Kant, Burke, Tocqueville, Mill, Hegel, Marx, Darwin, Nietzsche, Du Bois, Freud, and Woolf. Like Lit Hum, CC focuses on developing critical thinking skills through rigorous class discussions and written assignments. First-year students are not permitted to take CC.

ART HUMANITIES

What is required? *HUMA UN1121: Masterpieces of Western Art*

When? By the end of your junior year.

Can I test out? No.

Masterpieces of Western Art, or "Art Humanities," teaches students how to look at, think about, and engage in critical discussion of the visual arts. It is not a historical survey, but an analytical study of a limited number of monuments and artists. The course focuses on the formal structure of works of architecture, sculpture, painting, and other media, as well as the historical contexts in which these works were made and understood. Among the topics included in the syllabus are the Parthenon, Amiens Cathedral, and works by Raphael, Michelangelo, Bruegel, Bernini, Rembrandt, Goya, Monet, Picasso, Wright, Le Corbusier, Pollock, and Warhol. In addition to discussion-based class meetings, all sections of Art Humanities make extensive use of the vast resources of New York City through field trips to museums, buildings, and monuments.

If you are interested in majoring in art history, architecture, or visual arts, you should take Art Humanities as soon as possible.

MUSIC HUMANITIES

What is required? *HUMA UN1123: Masterpieces of Western Music*

When? By the end of your junior year.

Can I test out? Yes. Exemption from Music Humanities may be obtained by passing an exemption exam. The exemption exam is usually offered on the first Friday of the fall semester and may be taken only once, at the beginning of a student's first semester at Columbia.

Masterpieces of Western Music, or “Music Humanities,” aims to instill in students a basic comprehension of the many forms of the Western musical imagination. Its specific goals are to awaken and encourage in students an appreciation of music in the Western world, to help them learn to respond intelligently to a variety of musical idioms, and to engage them in the issues of various debates about the character and purposes of music that have occupied composers and musical thinkers since ancient times. The course attempts to involve students actively in the process of critical listening, both in the classroom and at concerts that the students attend and write about. The extraordinary richness of musical life in New York is thus an integral part of the course. Although not a history of Western music, the course is taught in a chronological format and includes masterpieces by Josquin des Prez, Monteverdi, Bach, Handel, Mozart, Haydn, Beethoven, Verdi, Wagner, Schoenberg, and Stravinsky, among others. Since 2004, the works of jazz composers and improvisers such as Louis Armstrong, Duke Ellington, and Charlie Parker have been added to the list of masterpieces to be studied in this class.

GLOBAL CORE

What is required? Two courses

When? Recommended in sophomore and junior years.

Can I test out? No.

Special notes: The Global Core list of approved courses is here: bulletin.columbia.edu/columbia-college/core-curriculum/global-core-requirement

The Global Core requirement consists of courses that examine areas that are not the primary focus of Literature Humanities and Contemporary Civilization, and that, like other Core courses, are broadly introductory, interdisciplinary, and temporally or spatially expansive.

Courses in the Global Core typically explore the cultures of Africa, Asia, the Americas, and the Middle East in an historical context. These courses are organized around a set of primary materials produced in these traditions and may draw from texts or other forms of media, as well as from oral sources or performance, broadly defined.

PHYSICAL EDUCATION

What is required? Two courses and a swim test

When? Before graduation.

Can I test out? No.

Special notes: Students unable to complete the swim requirement due to physical restrictions should obtain a waiver from Columbia Health before contacting the Physical Education Department. Students may also request waivers and accommodations on the grounds of religious observance or gender identity/expression. All requests for waivers and accommodations are reviewed by the Director of Physical Education.

Successful completion of two terms of physical education (*PHED UN1001* or *UN1002*) is required for the degree. All students are also required to pass a swimming test or take beginning swimming for one term to fulfill the swimming requirement. One point of the Physical Education requirement may be a Barnard Physical Education course or a Barnard Dance technique course. No more than 4 points of physical education courses may be counted toward the degree.

Students who participate in an intercollegiate sport may receive physical education credit by registering for the appropriate team section of *PHED UN1005: Intercollegiate Athletics*.

MAJORS AND CONCENTRATIONS

You must complete at least one major or concentration to fulfill the degree requirements; students may select a second major, concentration, or special concentration, in addition to the first selection. Selecting only a special concentration or special program will not fulfill the requirements for the Bachelor of Arts degree.

Double Majors/Concentrations: You are permitted to declare a maximum of two programs of study (a “program of study” being defined as a major, a concentration, or a special concentration). Students who pursue two programs of study may be able to count some courses toward both programs. Please consult your CSA adviser or the *Columbia College Bulletin* (college.columbia.edu/bulletin) for more information about this policy.

Premedical Students: You must complete a regular concentration or major while fulfilling the premedical curriculum.

Columbia College students declare their major and/or concentration during the spring of sophomore year. For more information on the requirements for a particular major, please consult the *Columbia College Bulletin* online (bulletin.columbia.edu/columbia-college). Some programs do require an early start, and this may impact course selection in your first year.

Students who are undecided as to a major should talk to their CSA adviser about choosing classes that will help them explore potential majors. Each department and academic program has a Director of Undergraduate Studies, a faculty member who can answer your questions about requirements for the major or concentration, guide your choices about placement level, discuss opportunities to study abroad, and assist you in planning your program. You can find a list of all Directors of Undergraduate Studies at college.columbia.edu/academics/dus.

PLACEMENT

If you believe that you can demonstrate proficiency beyond the introductory level in chemistry, physics, or a foreign language and wish to take an advanced class in one or more of these subjects, you must take a placement exam during the New Student Orientation Program (NSOP). Read below for advice on course selection.

LANGUAGES

If you are interested in continuing with a language you have already studied, you may need to take a placement exam during NSOP. Some language departments, including French, German, Hebrew, Italian, Japanese, Korean, Latin, and Spanish, can place students into the correct course level based on SAT II or AP scores. Please see Appendix A for more information.

Note: If you are beginning a new language, you may register for an Elementary Level I (1101) section without taking a placement exam.

CALCULUS

Placement in Columbia's Calculus or Honors Math sequence is determined by AP, IB, and A-level scores. Information about equivalencies and placement is available at the Math Department website: math.columbia.edu/programs-math/undergraduate-program/calculus-classes.

CHEMISTRY

If you wish to take a chemistry course at a level higher than UN1403-UN1404, you must attend an information session and take a placement exam given during the New Student Orientation Program. The chemistry class you take will be determined by the results of this exam. There are three different first-year tracks. In Track 1, students take *CHEM UN1403-UN1404*, a one-year course in general chemistry, with *CHEM UN1500*, a one-term laboratory course. Calculus I or the equivalent is a corequisite.

In Track 2, students take *CHEM UN1604*, a one-term intensive course in general chemistry. Calculus II or the equivalent is a corequisite. The accompanying lab can be either *CHEM UN1500* or *CHEM UN1507*, depending on placement.

In Track 3, students take *CHEM UN2045-UN2046*, a one-year intensive course in organic chemistry. All students in Track 3 take *CHEM UN1507*, a one-term laboratory course.

Note: If you are considering the premedical curriculum, you should take chemistry and the appropriate lab in your first year.

PHYSICS

If you have a strong background in physics, you may wish to take *PHYS UN2801: Accelerated Physics I*. In order to place into this advanced course, you must either take a placement test during the New Student Orientation Program or have scored a 4 or 5 on both the AP Physics and AP Calculus BC tests. **If you are interested in taking this course, you must attend the information session offered during NSOP.**

THEATRE

Auditions are required for each semester's acting classes and productions. Sign-up sheets for audition sessions are posted in the lobby of the Minor Latham Playhouse on the first floor of Milbank Hall at Barnard College. First-year auditions will take place during the first week of the term. If you are auditioning for a production requiring singing, please prepare a two-minute monologue as well as a standard chorus, or approximately 16 bars, to be sung a cappella. Otherwise, students should prepare a two-minute monologue only. Please see theatre.barnard.edu for additional information.

MUSIC PERFORMANCE

For information about music lessons, university orchestra, chamber ensembles, jazz ensembles, Collegium Musicum, Bach Society, Marching Band, Wind Ensemble, Klezmer Band, and more, please visit the Music Performance Program website at music.columbia.edu/mpp or visit the program office in 618 Dodge Hall during NSOP. Auditions are required for music lessons as well as music performance groups, and will be held during the first week of classes.

ADVANCED STANDING

TEST SCORES

The College grants up to 16 credits earned from Advanced Placement (AP), General Certificate of Education Advanced Level Examinations (A levels), the International Baccalaureate Examination (IB), and some other national systems. A description of policies, credits, and/or exemptions can be found in the *Columbia College Bulletin*: college.columbia.edu/bulletin. Please note that students are governed by the academic standing policies that are in place at the start of their first year of enrollment at Columbia.

The table on pages 13–14 generally sets forth ways in which Columbia College students can obtain credit based on AP scores. This chart is designed to be a guide only. You should consult your CSA adviser during NSOP to discuss what credit you may be eligible to receive, and how this will affect your fall registration. You may accrue a maximum of 16 points toward graduation through AP scores. The point equivalents are entirely the prerogative of the faculty and are determined by the relevant academic department. You should not rely exclusively on this chart without further consultation with your CSA adviser. This chart is subject to change at any time based on the academic discretion of the faculty of Columbia University.

If you wish to receive advanced placement credit, you may not register for or take courses at Columbia that cover similar or more basic material than that covered by your AP exam; nor may you receive credit for two exams that cover the same material (for example, AP Calculus and Mathematics A Level). In some cases, you must complete a particular course or achieve a particular grade (and have that letter grade revealed on the transcript, not covered with a grade of Pass) before credit is awarded. In general, advanced standing credit is awarded prior to the sophomore year. An official score report is required for credit to be evaluated. Advanced standing may not be used for exemption from any of the Core Curriculum courses, with the exception of AP scores that may satisfy the foreign language requirement.

Appropriate placement should not depend simply upon test scores and the credit you hope to receive upon evaluation of those scores. For some students, appropriate placement may mean forfeiting advanced credit to achieve stronger preparation in a subject area.

COURSES TAKEN AT OTHER COLLEGES

You will not be granted credit for courses taken at other colleges prior to your graduation from secondary school. Entering students may receive up to 6 points of credit toward the Columbia degree for college courses taken after graduation from secondary school and prior to enrollment at Columbia College. You will be eligible for credit only in subjects that are taught at Columbia; you should not take courses that duplicate those in the Core Curriculum. You must earn a minimum grade of C– in order to receive credit. If you would like to exercise this option, please contact the James H. and Christine Turk Berick Center for Student Advising (CSA) at 212-854-6378 or csa@columbia.edu before enrolling.

Official transcripts for this work, along with catalog descriptions and a copy of the syllabus for each course, should be submitted to the CSA for review. There is no guarantee of credit, which will be awarded only upon approval by the CSA.

If you plan to take summer classes through Columbia's Summer Session, you must obtain approval from the CSA prior to enrollment. Grades for summer school classes taken prior to matriculation will not be calculated into the Columbia GPA and the classes might not count toward your eventual major, even if the summer classes are taken at Columbia.

ADVANCED PLACEMENT CREDIT CHART

In order to receive AP credit, you must send official score reports to Columbia. The CEEB code is 2116.

SUBJECT	SCORE	CREDIT	
Biology	5	3	The department grants 3 credits for a score of 5 on the AP Biology exam, but you are not entitled to any exemptions.
Chemistry	4 or 5	3 or 6	The department grants AP credit for a score of 4 or 5. The amount of credit you receive is based on the results of the department placement exam and completion of the requisite course. Students who are placed into <i>CHEM 1604</i> are granted 3 points of credit; students who are placed into <i>CHEM 2045-2046</i> are granted 6 points of credit. In either case, credit is granted only upon completion of the course with a grade of C or better. You must complete a department placement exam prior to registering for either of these courses.
Computer Science (Principles and/or A)	4 or 5	3	The department grants 3 credits for a score of 4 or 5 on the AP Computer Science Principles exam, along with exemption from <i>COMS 1001</i> . The department grants 3 credits for a score of 4 or 5 on the AP Computer Science A exam, along with exemption from <i>COMS 1004</i> .
Economics (Micro and Macro)	5 on one and 4 or 5 on the other	4	You must take both the AP Microeconomics and the AP Macroeconomics exams, and earn a score of 5 on one exam and at least a 4 on the other. Provided that this is achieved, the department grants 4 credits along with exemption from <i>ECON 1105</i> .
English (Language and Composition and/or Literature and Composition)	5	3	The department grants 3 credits for a score of 5 on the AP Language and Composition exam, but you are not entitled to any exemptions, and these credits will not count toward an English major or concentration. The department grants 3 credits for a score of 5 on the AP Literature and Composition exam, but you are not entitled to any exemptions, and these credits will not count toward an English major or concentration.
French (Language and/or Literature)	5	3	A score of 5 on the AP French Language exam satisfies the foreign language requirement. The department grants 3 credits if you earn a 5 on the AP exam and subsequently complete a 3000-level (or higher) course that is taught in French with a grade of B or higher. Courses taught in English may not be used to earn language AP credit.
	4	0	A score of 4 on the AP French exam satisfies the foreign language requirement but 0 credits will be granted.
German	5	3	A score of 5 on the AP German exam satisfies the foreign language requirement. The department grants 3 credits if you earn a score of 5 on the AP German exam and subsequently complete a 3000-level (or higher) course that is taught in German with a grade of B or higher. Courses taught in English may not be used to earn AP credit.
	4	0	A score of 4 on the AP German exam satisfies the foreign language requirement but 0 credits will be granted.
Government and Politics (U.S. and/or Comparative)	5	4	The department grants 4 credits and exemption from <i>POLS 1201</i> for a score of 5 on the U.S. Government and Politics AP exam. The department grants 4 credits and exemption from <i>POLS 1501</i> for a score of 5 on the Comparative Government and Politics AP exam.

SUBJECT	SCORE	CREDIT	
History (European and/ or U.S.)	5	3	The department grants 3 credits for a score of 5 on the AP European History exam, but you are not entitled to any exemptions, and these credits will not count toward a history major or concentration. The department grants 3 credits for a score of 5 on the AP United States History exam, but you are not entitled to any exemptions, and these credits will not count toward a history major or concentration.
Italian	5	3	A score of 5 on the AP Italian exam satisfies the foreign language requirement. The department grants 3 credits if you earn a score of 5 on the AP Italian exam and subsequently complete a 3000-level (or higher) course that is taught in Italian with a grade of B or higher. Courses taught in English may not be used to earn language AP credit.
	4	0	A score of 4 on the AP Italian exam satisfies the foreign language requirement, but 0 credits will be granted.
Latin	5	3	A score of 5 on the AP Latin exam satisfies the foreign language requirement. The department grants 3 credits if you earn a score of 5 on the AP exam and subsequently complete a 3000-level (or higher) course with a grade of B or higher.
Mathematics AB	4 or 5	3	The department grants 3 credits for a score of 4 or 5 on the AP Calculus AB exam, provided you complete <i>MATH 1102</i> or <i>MATH 1201</i> with a grade of C or better. The amount of credit is reduced to 0 if you take <i>MATH 1101</i> .
Mathematics BC	5	6	The department grants 6 credits for a score of 5 on the AP Calculus BC exam, provided you complete <i>MATH 1201</i> or <i>MATH 1207</i> with a grade of C or better. The amount of credit is reduced to 0 if you take <i>MATH 1101</i> or to 3 if you take <i>MATH 1102</i> .
	4	3	The department grants 3 credits for a score of 4 on the AP Calculus BC exam, provided you complete <i>MATH 1102</i> or <i>MATH 1201</i> with a grade of C or better. The amount of credit is reduced to 0 if you take <i>MATH 1101</i> .
Physics	4 or 5	Up to 6	You may earn a maximum of 6 credits in physics. The department grants 6 credits for a score of 4 or 5 on both of the AP Physics 1 <i>and</i> 2 exams, but you are not entitled to any exemptions. The amount of credit is reduced to 3 if you take a 1000-level physics course. The department grants 3 credits for a score of 4 or 5 on the AP Physics C/MECH exam, but you are not entitled to any exemptions. The amount of credit is reduced to 0 if you take <i>PHYS 1001</i> , <i>1201</i> , <i>1401</i> , or <i>1601</i> . The department grants 3 credits for a score of 4 or 5 on the AP Physics C/E&M exam, but you are not entitled to any exemptions. The amount of credit is reduced to 0 if you take <i>PHYS 1001</i> , <i>1202</i> , <i>1402</i> , or <i>1602</i> .
Spanish (Language and/ or Literature)	5	3	A score of 5 on the AP Spanish Language or Literature exam satisfies the foreign language requirement. The department grants 3 credits if you earn a score of 5 on either exam, and subsequently complete a 3300-level (or higher) course with a grade of B or higher. This course must be for at least 3 points of credit and taught in Spanish. Courses taught in English may not be used to earn language AP credit.
	4	0	A score of 4 on the AP Spanish Language or Literature exam satisfies the foreign language requirement, but 0 credits will be granted.
Statistics	5	3	The department grants 3 credits for a score of 5 on the AP Statistics exam. Students who are required to take introductory statistics for their major should consult with the Director of Undergraduate Studies of the relevant department to determine if this credit provides exemption from their requirement. The Economics Department does not permit a 5 on AP Statistics to substitute for <i>STAT 1201</i> (Calculus-Based Introduction to Statistics).

COLUMBIA ENGINEERING

Dear Students,

Welcome to Columbia Engineering, The Fu Foundation School of Engineering and Applied Science. You are embarking on this course of study when engineering has become a foundational degree that can prepare you to be a leader in almost any field you choose to enter, whether that be industry, government, media, academia, or the nonprofit world. At Columbia Engineering you will experience a rich learning environment among curious and bright students coming from many different backgrounds from across the country and around the world.

Students will encounter a wide range of topics in engineering spanning nine highly interdisciplinary departments. First-year students are exposed to all facets of the discipline through the introductory class, *The Art of Engineering*. Taught by David Vallencourt, this eye-opening course will introduce you to the breadth and depth of engineering and has inspired many students to decide on a major or minor, even in fields they may not have previously considered. If you are joining as a transfer or combined plan student, we provide guidance to ensure your academic and personal goals are met as you continue your education.

Research can be a hallmark of your time in engineering and can also acquaint you with the real-world experience of working in a lab alongside a foremost expert in your subject of inquiry. We have many opportunities for students to engage in research both during the school year and in the summer and provide platforms for them to share their findings with the school community.

Over the years, we have steadily increased entrepreneurship and design thinking into our curriculum and co-curricular programming to reflect the desire of our faculty and students to translate their ideas into marketplace solutions. For many students, the annual Senior Design Expo serves as a capstone to their time at Columbia and a chance to showcase projects on which they have labored throughout the year. Students have designed and built everything from robots that can draw portraits to new medical devices that reduce infection in hospitals.

In 2017, we launched a new vision for the school—Columbia Engineering for Humanity. This vision outlines our dedication to research and education that furthers progress in the areas of sustainability, health, security, connectivity, and creativity. Our students are an integral part of this vision, and I encourage all of you to think about how you will make your mark and contribute to this endeavor.

I am pleased that you have chosen to become part of this important initiative and to join us as we strive toward breakthrough advances in engineering and applied science that make a positive impact on the world.



Mary C. Boyce
Dean of Engineering
Morris A. and Alma Schapiro Professor
The Fu Foundation of Engineering and Applied Science

PLANNING YOUR FIRST YEAR AT COLUMBIA ENGINEERING

THE BASICS

To earn the Bachelor of Science degree from Columbia Engineering, you must earn at least 128 credits. You must take a minimum of five classes each term, and you are expected to complete all requirements within eight semesters of study (not including summer terms). You must register for a minimum of 12 and no more than 21 credits per semester.

YOUR FIRST SEMESTER AT COLUMBIA

As an incoming first-year student, you will be preregistered in the fall for *University Writing* or *The Art of Engineering* (each one semester). You must also enroll in a physics class at the 1400-level or higher, in the appropriate level of calculus, and in *General Chemistry* or higher. Placement tests will be given in chemistry and physics during the New Student Orientation Program, and the results will be posted before the start of registration. Your AP scores and background in math will help determine correct placement. This leaves space in your schedule for a fifth elective of your choosing.

Please review the pages that follow in this section of the guide for further information about the first- and second-year curriculum at Columbia Engineering, and about placement and advanced standing in math, science and other disciplines.

The following online resources will also help you as you plan your first term at Columbia:

- *Columbia Engineering Bulletin* (bulletin.engineering.columbia.edu): Information about the first- and second-year program and all Engineering majors
- Directory of Classes (columbia.edu/cu/bulletin/uwb): A list of all courses offered at Columbia University. (Note that not all are available to Engineering students. Check the “Open To” field of the relevant class, and ask your CSA adviser if you have any questions.)
- Vergil (vergil.registrar.columbia.edu): An online scheduling tool that allows you to search for courses by instructor, date and time, department, subject area, keywords, and more

Please use the worksheet **on page 18** to write down a few potential class schedules for Fall 2018. Bring the completed worksheet, along with any questions you may have, to your meeting with your CSA adviser during the New Student Orientation Program (NSOP). Keep in mind the following:

- You should take an average of 16 credits (five or six classes) per semester in order to fulfill the 128 points needed to graduate in eight semesters. First-year students usually take five classes in their first semester.
- Your options for your fifth class (after calculus, physics, chemistry, and either *The Art of Engineering* or *University Writing*) may include: *Principles of Economics*, Computer Science, or a nontechnical required class or elective.

REGISTRATION ADVICE

During NSOP, you will meet with your CSA adviser and ask any questions you may have about courses of study, life at Columbia, potential majors and anything else. After you have met, you will register for classes on August 31, the Friday of NSOP. By then you will have received an assigned UNI (Columbia login and email address) and password, which you will use to create an email account and to log into Student Services Online (SSOL) at ssol.columbia.edu. To see when and where your preregistered classes meet, click on “Schedule.” Your registration appointments are listed under “Reg Appts.”

Do not worry if your schedule is not complete at the end of the first registration times. You will have the opportunity to finalize your schedule during the first two weeks of classes, when there is a lot of movement in enrollment. Please continue to direct any questions and concerns to your CSA adviser, who is there for you as you find your footing at Columbia Engineering.

COLUMBIA ENGINEERING WORKSHEET

This worksheet is designed to help you start thinking about your first semester and potential courses of study at Columbia, as well as to prepare for your first meeting with your CSA adviser.

Name: _____

Using the online resources listed below, please create possible schedules for the fall term. Keep in mind that in your first term you must take calculus, physics, chemistry, and either *University Writing* or *The Art of Engineering*. Your level of physics, chemistry, and calculus will depend on AP/IB scores as well as placement exams given during the New Student Orientation Program. Indicate several choices for your fifth course.

- Columbia Engineering Bulletin (bulletin.engineering.columbia.edu): Information about the first- and second-year program and Columbia Engineering majors.
- Directory of Classes (columbia.edu/cu/bulletin/uwb): A list of all courses offered at Columbia University*
- Vergil (vergil.registrar.columbia.edu): An online scheduling tool that allows you to search for courses by instructor, date and time, department, subject area, keywords, and more

1. Calculus (please indicate anticipated level): _____
2. Physics (please indicate anticipated level): _____
3. Chemistry (please indicate anticipated level): _____
4. *The Art of Engineering/University Writing* _____
5. _____

QUESTIONS?

Use the space below to write down any questions or concerns you would like to discuss with your CSA adviser. These may be academic or nonacademic, and they may pertain to the transition to college, the role of your CSA adviser, registration details, personal long- and short-term goals, extracurricular interests, etc.

**Not all classes are open to Columbia Engineering students. Check the "Open To" field for the relevant class in the online Directory, and ask your CSA adviser if you have any questions.*

FIRST- AND SECOND-YEAR CURRICULUM

The Bachelor of Science degree includes:

1. The first-year/sophomore technical requirements:
 - Calculus (some departments have additional math requirements)
 - Physics
 - Chemistry
 - *The Art of Engineering (ENGI E1102)*
 - Computer science
 - Lab requirement for selected major
2. At least 27 points of nontechnical requirements:
 - *University Writing (ENGL CC1010)*
 - Core Humanities sequence
 - Art or Music Humanities
 - *Principles of Economics (ECON UN1105)*
 - 3–4 courses of the student's own choosing
3. Requirements for a major
4. Physical education (two one-semester courses)

The first- and second-year curriculum at Columbia Engineering is designed to provide you with a firm background in pure science as well as a comprehensive grounding in the humanities. In this section, you will find detailed information on what to expect academically in your first two years.

FIRST-YEAR/SOPHOMORE TECHNICAL REQUIREMENTS

CALCULUS

- What is required?** Completion of *Calculus I through Multivariable Calculus for Engineers and Applied Scientists*
- When?** All students must take calculus at the appropriate level in the first year.
- Can I test out?** No. However, previous background will determine placement level.

LEVELS OF CALCULUS

Calculus I (MATH UN1101): Covers primarily differential calculus of functions of one variable with geometric applications and the Fundamental Theorem of Calculus. Take *Calculus I* if you:

- have not taken calculus in high school, or
- have less than a full year of high school calculus, or
- have a full year of calculus but have a score of less than 4 on an AP exam.

Calculus II (MATH UN1102): Covers special functions, integration techniques, more geometric applications of integration, and infinite series, including Taylor series. Take *Calculus II* if you:

- received a 4 or 5 on the AB exam, or
- received a 4 on the BC exam, or
- received a 6 or 7 on the IB HL calculus exam, or
- received an A or B on the A-level GCE Further Maths exam
- didn't take an AP exam but received a grade of A in a full-year high school calculus course.

Multivariable Calculus for Engineers and Applied Scientists (APMA E2000): Topics include partial differentiation; optimization of functions of several variables; line, area, volume, and surface integrals; vector functions and vector calculus; theorems of Green, Gauss, and Stokes; and applications to selected problems in engineering and applied science. Take *Multivariable Calculus* if you received a 5 on the BC exam.

Note: Columbia Engineering students with a 4 or 5 on Calc AB, or a 4 on Calc BC, must begin with *Calculus II*. If you have these scores and self-place into *Multivariable Calculus*, you will be required to go back and take *Calculus II*. If you have taken an equivalent math course (beyond *Calculus I* and *Calculus II*) that covers material beyond the Advanced Placement BC curriculum (e.g., *Multivariable Calculus*) at a four-year accredited college and received a B+ or better, you must provide an official transcript and syllabus for evaluation to Professor Drew Youngren: dcy2@columbia.edu.

Placement into the appropriate level math course will be determined by Columbia Engineering. If you place out of *Multivariable Calculus*, you will be required to replace those credits with alternative, upper-level math courses from a list of Columbia Engineering-approved courses. Those alternative choices cannot be used to satisfy any major requirements.

It is imperative that you heed the above guidelines for two reasons:

1. You must master the material covered in both *Calculus II* and *Multivariable Calculus* in order to lay the groundwork for success in the Columbia Engineering curriculum.
2. Accreditation guidelines outlined by Accreditation Board for Engineering and Technology (ABET) require that you either fulfill the requisite amount of calculus as indicated for the major or prove equivalent knowledge.

PHYSICS

What is required? At least a one-year sequence of introductory physics at the 1400-level or higher; some majors may require one or more additional courses

When? First year, fall and spring

Can I test out? No. However, your previous background in physics and/or the physics placement test given during the New Student Orientation Program will help to determine placement level.

You are required to take physics in your first year. You may choose from three sequences, or tracks:

Track 1

PHYS UN1401: Introduction to Mechanics and Thermodynamics
PHYS UN1402: Introduction to Electricity, Magnetism, and Optics

The 1400-level track is less mathematical and more oriented toward problem solving. This sequence is intended for you if you are going into a department that does not make essential use of physics.

Note: If you begin with *Calculus I* you must take this sequence.

Track 2

PHYS UN1601: Mechanics and Relativity
PHYS UN1602: Thermodynamics, Electricity, and Magnetism

This is a more mathematical sequence than the 1400 series. It is intended for students if you are going into a department that makes active use of physics.

Note: If you place into *Multivariable Calculus*, it is recommended that you enroll in this 1600-level track.

Track 3

PHYS UN2801: Accelerated Physics I
PHYS UN2802: Accelerated Physics II

This sequence is extremely challenging and is designed primarily for those applied physics majors with an intense interest in

physics. It is possible to place into the *Accelerated Physics* course in one of two ways:

- a placement test during the New Student Orientation Program, or
- a 4 or 5 on the AP Physics Exam and a 5 on the Calculus BC AP Exam.

If you are interested in taking *Accelerated Physics*, you should attend the information session offered during the New Student Orientation Program.

CHEMISTRY

What is required? At least one semester of chemistry (possibly two, depending on your major)

When? Recommended fall of the first year

Can I test out? No. However, your previous background in chemistry and/or your score on the chemistry placement exam taken during the New Student Orientation Program will help to determine placement level.

If you wish to place into a higher level of chemistry than *UN1403-UN1404*, you must attend a chemistry information session and take a placement exam during the New Student Orientation Program. The chemistry class you take will be determined by the results of that placement exam.

There are three different tracks in chemistry:

Track 1

CHEM UN1403-UN1404: General Chemistry (fall, spring)
CHEM UN1500: General Chemistry Lab (fall or spring, usually taken in the first year)

Track 2

CHEM UN1604: Intensive General Chemistry (fall of first year)
CHEM UN1500: General Chemistry Lab (fall or spring, usually taken in the first year) or *CHEM UN1507: Intensive General Chemistry Lab* (if you place into it)

Track 3

CHEM UN2045: Intensive Organic Chemistry (fall of first year)
CHEM UN2046: Intensive Organic Chemistry (spring of first year)
CHEM UN1507: Intensive General Chemistry Lab (spring of first year)

Four majors (biomedical engineering, chemical engineering, earth and environmental engineering, and materials science) require two semesters of chemistry. All other majors require only one semester. It is recommended that you fulfill this requirement

in your first year, but in some cases it may be possible to postpone chemistry until your sophomore year after consultation with your CSA adviser.

Note: If you are considering the premedical curriculum, you must take a full year of chemistry and the appropriate lab in your first year, regardless of major.

THE ART OF ENGINEERING

What is required? One semester of *ENGI E1102: The Art of Engineering*

When? Either fall or spring of the first year (taken in the semester opposite *ENGL 1010: University Writing*)

Can I test out? No.

This course is a bridge between the science-oriented, high school way of thinking and the engineering point of view. Fundamental concepts of math and science are reviewed and reframed in an engineering context, with numerous examples of each concept drawn from all disciplines of engineering represented at Columbia. Nontechnical issues of importance in professional engineering practice such as ethics, engineering project management, and societal impact are addressed.

COMPUTER SCIENCE

What is required? One semester of a computer science programming course is required for all majors

When? First or second year

Can I test out? It is unlikely. Consult with your CSA adviser.

Choose from one of the following, depending on your anticipated major:

ENGI E1006: Introduction to Computing for Engineers and Applied Scientists

COMS W1004: Introduction to Computer Science and Programming in Java

COMS W1005: Introduction to Computer Science and Programming in MATLAB

LAB

What is required? One semester of chemistry and/or physics laboratory work; selection will depend upon major

When? First or second year

Can I test out? No.

Special note: In most cases, you may make your own decision as to whether you want to take a chemistry or physics lab. Students who choose chemistry lab should take it in the first year. Students who choose physics lab must wait until their second year. There are a few Columbia Engineering majors that specify either chemistry or physics lab (or require both). Students should consult with their CSA adviser and/or the *Bulletin* before choosing a lab.

NONTECHNICAL REQUIREMENTS

What is required? 27 points of nontechnical coursework; 16–18 of these points are mandated by Columbia Engineering, and 9–11 points are electives

When? Before graduation

Note: *University Writing (ENGL CC1010)* must be taken in the first year.

Can I test out? No, but AP scores may be applied toward portions of the 27-point nontechnical requirement.

Required Nontechnical Courses (16–18 Points)

University Writing (ENGL CC1010) 3 pts. Required in first year.

Core Humanities sequence: *Masterpieces of Western Literature and Philosophy (HUMA CC1001-CC1002)*; *Introduction to Contemporary Civilization in the West (COCI CC1101-CC1102)*; or a Global Core sequence. 6–8 pts. Recommended in second year.

Masterpieces of Western Art (HUMA UN1121) or *Masterpieces of Western Music (HUMA UN1123)* 3 pts. Can be taken at any time.

Principles of Economics (ECON UN1105) 4 pts. Recommended in first or second year.

Elective Nontechnical Courses (Minimum of 9 Points)

Of the 27-point nontechnical requirement, 16–18 points will be fulfilled by taking the required courses listed above. The remaining 9–11 points (three or four classes) are at your discretion. Please consult the *Columbia Engineering Bulletin* for additional information on appropriate courses in each of the approved liberal arts disciplines: bulletin.engineering.columbia.edu/b-elective-nontechnical-courses.

UNIVERSITY WRITING

What is required? One semester of *University Writing (ENGL CC1010)*

When? Either fall or spring of the first year (taken in the semester opposite *ENGI E1102*)

Can I test out? No.

University Writing is designed to help you read and write essays in order to participate in the academic conversations that form Columbia's intellectual community. The course gives special attention to the practices of close reading, rhetorical analysis, research, collaboration, and substantive revision. By writing multiple drafts of essays typically ranging from three to ten pages, you will learn that writing is a process of forming and refining your ideas and your prose. Rather than approaching writing as an innate talent, the course teaches writing as a unique skill that can be practiced and developed.

All first-year students must complete *University Writing* during their first year. Credit from advanced placement exams in English does not exempt students from this requirement.

PHYSICAL EDUCATION

What is required? Two courses

When? Before graduation

Can I test out? No.

Two terms of physical education (*PHED UN1001* or *UN1002*) are a degree requirement for Columbia Engineering students. No more than 4 points of physical education courses may be counted toward the degree. One point of the physical education requirement can be fulfilled with a Barnard physical education course or a Barnard dance technique course. If you intend to participate in an intercollegiate sport, you should register for the appropriate section of *PHED UN1005: Intercollegiate Athletics*.

MAJORS AND MINORS

Columbia Engineering students must complete the requirements for a major. Major requirements can be found on the website of the *Columbia Engineering Bulletin*, bulletin.engineering.columbia.edu, listed under each department. You will declare your major online during the first semester of your sophomore year. If you are undecided, talk to your CSA adviser about ways to assess your options and narrow down the choices. You may opt to declare one or more minors at the same time.

Double Minors/Double Majors: You may declare more than one minor but may not use the same courses to satisfy the requirements of more than one minor. To double major, you are required to have approval from both departments, with a signed plan to complete all requirements within eight semesters. This plan must be approved by the vice dean for undergraduate programs in Columbia Engineering.

ADVANCED STANDING

TEST SCORES

Columbia Engineering grants up to 16 credits earned from Advanced Placement (AP), General Certificate of Education Advanced Level Examinations (A levels), the International Baccalaureate Examination (IB), and other national systems. A complete description of policies, credits, and/or exemptions can be found in the *Columbia Engineering Bulletin*: bulletin.engineering.columbia.edu/advanced-placement. Please note that students are governed by the advanced-standing policies that are in place during their first year at Columbia.

If you wish to receive advanced placement credit, you may not register for courses at Columbia that cover similar or more basic material than the work already completed, nor may you receive credit for two exams that cover the same material (for example, Calculus AP and Mathematics A-Level). In some cases, you must complete a particular course before credit will be awarded. Advanced standing credit is awarded prior to the sophomore year in accordance with the policies stated in that year's *Columbia Engineering Bulletin*. Advanced placement credit in appropriate nontechnical areas may be applied toward the 27-point nontechnical requirement.

Pending review by the appropriate department at Columbia, students whose secondary school work was in other national systems (such as the French baccalauréat) may be granted credit

in certain disciplines for sufficiently high scores. The appropriate transcript should be submitted to the James H. and Christine Turk Berick Center for Student Advising (CSA).

Appropriate placement should not depend simply upon test scores and the credit you hope to receive upon evaluation of those scores. For some students, appropriate placement may mean forfeiting advanced credit to achieve stronger preparation in a subject area.

COURSES TAKEN AT OTHER COLLEGES

Entering students may receive up to six points of credit toward the Columbia degree for college courses taken after graduation from secondary school and prior to enrollment in Columbia Engineering. You must earn a minimum grade of B in order to receive credit. If you would like to exercise this option, you must consult with your CSA adviser before enrolling.

Official transcripts for this work, along with catalog descriptions and a copy of the syllabus for each course, should be submitted to your CSA adviser for review. There is no guarantee of credit, which will be awarded only upon approval by the CSA. If you plan to take summer classes through Columbia's Summer Session, you must obtain approval from your CSA adviser prior to enrollment.

Grades for summer school classes taken prior to matriculation will not be calculated into your Columbia GPA and the classes might not count toward your eventual major, even if the summer classes are taken at Columbia.

Note: You will not be granted credit for courses taken at other colleges prior to your graduation from secondary school.

ADVANCED PLACEMENT CREDIT CHART

In order to receive AP credit, you must send official score reports to Columbia. The CEEB code is 2116.

SUBJECT	SCORE	CREDIT	REQUIREMENTS OR PLACEMENT STATUS CREDIT
Art History	5	3	No exemption from <i>HUMA 1121</i>
Biology	5	3	No exemption
Chemistry	4 or 5 4 or 5	3 6	Requires completion of <i>CHEM 1604</i> with grade of C or better. Requires completion of <i>CHEM 2045-2046</i> with grade of C or better.
Computer Science A	4 or 5	3	Exemption from <i>COMS 1004</i>
Principles	4 or 5	3	Exemption from <i>COMS 1001</i>
Economics Micro & Macro	5 & 4	4	Exemption from <i>ECON 1105</i> . Exam must be taken in both micro and macro with a score of 5 in one and at least 4 in the other.
English Language and Composition	5	3	No exemption
Literature and Composition	5	3	No exemption
French	4 or 5	3	
German	4 or 5	3	
Government and Politics United States	4 or 5	3	Exemption from <i>POLS 1201</i> . Credit is awarded upon completion of a 3000-level (or higher) course in the American Politics subfield with a grade of C or higher
Comparative	4 or 5	3	Exemption from <i>POLS 1501</i> . Credit is awarded upon completion of a 3000-level (or higher) course in the Comparative Politics subfield with a grade of C or higher. Students may be given an exemption based on AP scores, from only one undergraduate introductory political science class, either <i>POLS 1201</i> or <i>POLS 1501</i> .
History European	5	3	
United States	5	3	
Italian	4 or 5	3	
Latin	5	3	
Mathematics Calculus AB	4 or 5	3*	Requires completion of <i>MATH 1102</i> with a grade of C or better. Credit is reduced to 0 if <i>MATH 1101</i> is taken.
Calculus BC	4	3*	Requires completion of <i>MATH 1102</i> with a grade of C or better. Credit is reduced to 0 if <i>MATH 1101</i> is taken.
Calculus BC	5	6	Requires completion of <i>APMA E2000</i> with a grade of C or better. Credit is reduced to 0 if <i>MATH 1101</i> is taken, or to 3 if <i>MATH 1102</i> is taken.
Physics (<i>max. of 6 credits</i>) C-MECH	4 or 5	3	Credit is reduced to 0 if <i>PHYS 1401</i> or <i>1601</i> is taken. Credit is reduced to 0 if <i>PHYS 2801</i> is taken and the final grade is C- or lower.
C-E&M	4 or 5	3	Credit is reduced to 0 if <i>PHYS 1402</i> or <i>1602</i> is taken. Credit is reduced to 0 if <i>PHYS 2801</i> is taken and the final grade is C- or lower.
Physics 1 and 2	4 or 5	3	No exemption. Both AP Physics 1 and 2 must be taken to receive credit.
Spanish Language	4 or 5	3	
Literature	4 or 5	3	

*Columbia Engineering students with a 4 or 5 on Calculus AB or a 4 on Calculus BC must begin with *MATH 1102* (Calculus II). If a Columbia Engineering student with these scores goes directly into *APMA E2000* (Multivariable Calculus), he or she will have to go back and complete *MATH 1102* (Calculus II). Students with A-level or IB calculus credit must start with *MATH 1102* (Calculus II).

TRANSFER AND COMBINED PLAN

THE BASICS

- As a transfer student, you are expected to graduate in eight semesters, including terms completed before entering Columbia.
- You will not be granted extended time to finish a particular major.
- Depending on prerequisite requirements, some majors may not be available to you.
- A normal course load is four to five academic classes a semester.
- You must complete a minimum of 60 credits at Columbia.

TRANSFER CREDIT EVALUATIONS

The courses you have taken at outside institutions (or at Columbia while not matriculated as a Columbia College or Columbia Engineering student) have been reviewed. For courses that are substantively similar to those taught at Columbia College or Columbia Engineering, credit has been tentatively awarded. The Transfer Credit Evaluation (TCE) or the Combined Plan Transfer Evaluation that you received this spring identifies which credits from your prior or home institution have been accepted for transfer to your Columbia degree.

Some TCEs may note that specific course syllabi are needed for further credit review. Please forward any additional paperwork directly to the Berick Center for Student Advising.

Credit and course approvals are two separate issues. Credit gets you closer to the 124 Columbia College or 128 Columbia Engineering points you need to complete your Columbia degree. Course approval means that you have satisfied a particular requirement. The credit shown on your TCE is general degree credit, unrelated to any course approvals. Sometimes (but rarely) a course approval for a requirement is given without any corresponding credit.

To receive the B.A. degree from Columbia College or the B.S. degree from Columbia Engineering, you must complete a minimum of 60 points of credit at Columbia. For Columbia College students, no more than 64 points from outside sources will be counted toward the degree, and no more than 68 points for students at Columbia Engineering. Outside sources of credit include transfer credit from another college and advanced standing earned on the basis of Advanced

Placement, International Baccalaureate, and other standardized examinations. Please review the advanced placement credit chart for your respective school on pages 13–14 (Columbia College) or page 24 (Columbia Engineering). Credit is not granted for college-level courses taken while in high school.

You have been assigned a class standing and an expected graduation date based on previously completed academic work. Your class standing may be changed upon receipt of an updated transcript. All students at Columbia College and Columbia Engineering are expected to graduate within eight semesters, including semesters completed before entry. The expected graduation date cannot be extended without petitioning the Committee on Academic Standing. These petitions are granted only for exceptional reasons, which do not include requests for extra time to complete a specific major. You are expected to work with your CSA adviser to create a plan to graduate by the assigned graduation date.

A final credit evaluation is completed when you matriculate and a final official transcript and course descriptions have been received.

COURSE APPROVAL FOR THE MAJOR/CONCENTRATION AND CORE

Course approval for your major/concentration needs to be carried out by a departmental representative in your intended major department. Such exemptions cannot be granted by the Berick Center for Student Advising. You will have an opportunity to speak with departmental representatives during the New Student Orientation Program (NSOP), at the Academic Resources Fair, and during the first few weeks of the semester. It is recommended that transfers entering as fifth-semester juniors with an expected graduation of May 2020 make appointments with their faculty adviser as soon as possible. Make sure that you bring appropriate course descriptions and transcripts so you can discuss major/concentration requirements.

You must petition to request course approval for any of the Core Curriculum requirements. During the summer, your CSA adviser will discuss the petition procedure with you.

COLUMBIA COLLEGE: THE CORE CURRICULUM

Please review the Columbia College section of this guide for information about your Columbia College journey and a detailed outline of the Core Curriculum.

Core Curriculum requirements:

- *Masterpieces of Western Literature and Philosophy* (HUMA CC1001-CC1002) (two semesters)
- *University Writing* (ENGL CC1010) (one semester)
- Science (three semesters from the approved course list)
- Foreign language (four semesters or the equivalent)
- *Introduction to Contemporary Civilization in the West* (COCI CC1101-CC1102) (two semesters)
- *Masterpieces of Western Art* (HUMA UN1121) (one semester)
- *Masterpieces of Western Music* (HUMA UN1123) (one semester)
- Global Core (two one-semester courses from the approved course list)
- Physical education (PHED UN1001, UN1002) (two semesters, plus swim test)

UNIVERSITY WRITING

What is required? ENGL CC1010: *University Writing*

When? This course must be taken in your first year, provided you have not been granted exemption from the requirement.

May I test or place out? You may petition to receive exemption from the *University Writing* requirement by submitting a portfolio consisting of three essays written for a course taken at your prior institution. The petition form and essays may be sent to the Berick Center for Student Advising.

LITERATURE HUMANITIES

What is required? HUMA CC1001-CC1002: *Masterpieces of Western Literature and Philosophy*

When? Fall and spring semester of the first year

May I test or place out? It is very unlikely that courses taken at other institutions will be considered adequate substitutions for Literature Humanities. If you feel strongly that you do have a case for exemption, please contact your CSA adviser.

Special note: You should be prepared to discuss the first six books of *The Iliad* at the introductory lecture, which meets during the New Student Orientation Program.

You will be presented with a copy of *The Iliad*, a gift from the Columbia College Alumni Association, when you arrive on campus in August. We suggest you prepare for the first day of class by reading either an electronic version of *The Iliad*, which will be sent via email over the summer, or a copy borrowed from the local library.

The edition used in Literature Humanities classes is the Lattimore (2011) translation.

CONTEMPORARY CIVILIZATION

What is required? COCI CC1101-CC1102: *Introduction to Contemporary Civilization in the West, I and II*

When? Fall and spring semester of second year

May I test or place out? It is very unlikely that courses taken at other institutions will be considered adequate substitutions for Contemporary Civilization. If you feel strongly that you do have a case for exemption, please contact your CSA adviser.

ART HUMANITIES

- What is required?** *HUMA UN1121: Masterpieces of Western Art*
- When?** Before graduation
- May I test or place out?** You may not test out of this requirement. Exemption from Art Humanities may be obtained by filing a course substitution request. You must request an exemption during your first semester at Columbia. If you feel strongly that you do have a case for exemption, please contact your CSA adviser.

MUSIC HUMANITIES

- What is required?** *HUMA UN1123: Masterpieces of Western Music*
- When?** Before graduation
- May I test or place out?** While it is very difficult to obtain exemption from this course, you may be exempted by passing an exemption exam or by filing a course substitution request. Exemption must be requested during your first semester at Columbia. The exemption exam is usually offered on the first Friday of the fall semester and may be taken only once. If you feel strongly that you do have a case for exemption and wish to file a course substitution request, please contact your CSA adviser

GLOBAL CORE

- What is required?** Two courses
- When?** Before graduation
- May I test or place out?** You may petition for exemption from one or both of the requirements based on coursework completed at your previous institution. Your CSA adviser will provide information on the process. You may also “double count” a Global Core course toward major/concentration requirements.
- Special note:** The Global Core course approval process is not the same as the College credit approval process.

SCIENCE

- What is required?** Three courses
- When?** Before graduation
- May I test or place out?** You may not test out of the requirement. It is possible to be granted partial Core course approval for courses in the natural sciences, mathematics, computer science, and statistics taken at your prior institution. You must complete at least one of the courses for the requirement at Columbia. Please note that social science courses are not approved for the science requirement, although anthropology courses that cover biological foundations of the discipline may be considered. Likewise, psychology courses that cover biological foundations of the discipline may be considered, but not those that focus on social or abnormal psychology. Petitions are reviewed by the faculty Committee on Science Instruction.
- Special notes:** The science requirement may not be fulfilled using only quantitative (computer science, mathematics, and statistics) courses. After matriculating at Columbia, you may not use Barnard College courses to fulfill the science requirement unless otherwise noted.

FOREIGN LANGUAGE

What is required? Satisfactory completion of the fourth semester of a foreign language (typically Intermediate Level II) or demonstrated equivalent knowledge. The requirement may also be fulfilled by the successful completion of an advanced-level foreign language or literature course that requires Intermediate Level II or the equivalent as a prerequisite.

When? We recommend you either begin or continue a language during your first year.

May I test or place out? Yes. Exemption or placement level can be determined by AP scores, SAT II scores, or departmental placement tests. Consult your CSA adviser and see Appendix A for more information.

Special notes: If you are continuing your studies in a language, you must take a departmental placement exam to determine your appropriate course level. Placement exams for many languages will be given during the New Student Orientation Program. If your native language is not English and the language of instruction in your secondary school was in your native language, you are not required to take an additional foreign language or a placement test.

PHYSICAL EDUCATION

What is required? Two courses and a swim test

When? Before graduation

May I test or place out? You may not test out of the requirement; however, you may receive exemption from one of the two physical education requirements with departmental approval if transfer credit for approved physical education courses is awarded on your TCE. In addition, you may receive physical education credit for participating in varsity intercollegiate athletics. Please speak with your CSA adviser for more details.

HONORS

You are eligible for honors at Columbia College. You do not apply for College honors (*cum laude*, *magna cum laude*, *summa cum laude*) or Phi Beta Kappa. The faculty Committee on Honors, Awards, and Prizes reviews students' files during their final semester and analyzes their performance, taking into account the breadth, depth, and rigor of students' academic programs in addition to the grades they received. Departmental honors are awarded by each department. Some departments in the College require a thesis or research project as well as a specific GPA in order to be eligible for departmental honors. Consult with your departmental advisers for more information.

COLUMBIA ENGINEERING: SELECTING YOUR CLASSES

Consult your CSA adviser in the James H. and Christine Turk Berick Center for Student Advising (CSA) for information on course approvals for first-year/sophomore and nontechnical requirements. We recommend that you take any outstanding required courses as soon as possible. Course approval for major requirements can be given only by departmental faculty and will be reviewed after your arrival on campus. All Columbia Engineering students must complete the following requirements:

- Calculus (proficiency through *Multivariable Calculus*) and additional math courses as determined by your major selection
- General chemistry (minimum one semester) and additional courses as determined by your major selection
- Physics (minimum two semesters) as determined by your major selection
- Laboratory requirement (minimum one semester) as determined by your major selection
- Computer science (*ENGI E1006*, *COMS W1004*, or *COMS W1005*; minimum one semester) as determined by your major selection
- *The Art of Engineering* (*ENGI E1102*)
- *University Writing* (*ENGL CC1010*) (one semester unless granted course approval, as determined by petition and portfolio review)
- *Principles of Economics* (*ECON UN1105*)
- Other nontechnical coursework (total nontechnical requirement is 27 points, which must include *University Writing*, *Principles of Economics*, Art or Music Humanities,

and one of the humanities sequences: Contemporary Civilization, Literature Humanities, or two courses from the approved Global Core list)

- Physical education (two semesters)

TECHNICAL REQUIREMENTS

Please review the Columbia Engineering section in this guide for more information on the following first-year/sophomore requirements, available courses/tracks, and appropriate placement.

CALCULUS

What is required? All Columbia Engineering students are required to take calculus. Proficiency through *Multivariable Calculus* is required for many Columbia Engineering majors.

When? Fall of your incoming year if course approval is not granted

May I test or place out? You should discuss with your CSA adviser partial or full math course approval based on equivalent courses from your prior institution.

CHEMISTRY

What is required? At least one semester of chemistry (possibly two, depending on your declared major)

When? Fall of your incoming year if course approval is not granted

May I test or place out? You should discuss with your CSA adviser partial or full chemistry course approval based on equivalent courses from your prior institution.

PHYSICS

What is required? At least two semesters of introductory physics; some majors may require one or more additional courses.

When? Fall of your incoming year if course approval is not granted

May I test or place out? You should discuss with your CSA adviser partial or full physics course approval based on equivalent courses from your prior institution.

LAB

What is required? One semester of chemistry and/or physics laboratory work; selection will depend upon major

When? As soon as possible

May I test or place out? You should discuss with your CSA adviser lab course approval based on an equivalent course from your prior institution.

COMPUTER SCIENCE

What is required? One semester of a programming course (*ENGI E1006*, *COMS W1004*, or *COMS W1005*)

When? As soon as possible

May I test or place out? You should discuss with your CSA adviser computer science course approval based on an equivalent course from your prior institution.

THE ART OF ENGINEERING

What is required? One semester of *ENGI E1102: The Art of Engineering*

When? Must be taken in your first year at Columbia

May I test or place out? Students entering as juniors are exempt from this requirement. Sophomore transfers should consult with their CSA adviser about approval based on an equivalent course from their prior institution.

NONTECHNICAL REQUIREMENTS

What is required? 27 points of nontechnical coursework; 16–18 of these points are mandated by Columbia Engineering (Required Nontechnical), and 9–11 points are elective (Elective Nontechnical)

When? Before graduation

May I test or place out? You may not test out, but it is possible for AP scores or approved courses taken at your prior institution to be applied toward the 27-point nontechnical requirement. You should discuss course approvals with your CSA adviser.

UNIVERSITY WRITING

What is required? *ENGL CC1010: University Writing*

When? Entering fall or spring, if course approval is not granted

May I test or place out? You may petition to receive exemption from the *University Writing* requirement by submitting a portfolio consisting of three essays written for a course taken at your prior institution. The essays may be sent as graded or ungraded papers to the Berick Center for Student Advising.

PRINCIPLES OF ECONOMICS

What is required? *ECON UN1105: Principles of Economics*

When? As soon as possible, if course approval is not granted

May I test or place out? You should discuss with your CSA adviser an exemption based on the Economics AP/IB or approved course(s) taken at your prior institution.

Special note: Introductory economics courses taken outside of Columbia must cover both microeconomics and macroeconomics.

PHYSICAL EDUCATION

What is required? Two courses

When? Before graduation

May I test or place out? You may not test out of the requirement. However, transfer students may receive exemption from one of the two physical education requirements with departmental approval if transfer credit for approved physical education courses is awarded on a student's TCE. In addition, you may receive physical education credit for participating in intercollegiate athletics. Please speak with your CSA adviser for more details.

HONORS

Transfer students are eligible for honors at Columbia Engineering. Students do not apply for Latin honors (*cum laude*, *magna cum laude*, *summa cum laude*), which are awarded as follows: no more than 5 percent *summa cum laude*, 10 percent *magna cum laude*, and 10 percent *cum laude*.

COMBINED PLAN STUDENTS

This section provides information regarding the Combined Plan transfer credit process. You will have already received a letter outlining your academic status and any first- and second-year requirements you need to complete. Please meet with your departmental faculty adviser during NSOP to plan your course sequence for your major. You should also plan to meet with your CSA adviser at this time.

Listed below are the requirements for the first two years of study in Columbia Engineering, as laid out in the articulation agreements with Combined Plan schools.

Requirements in the first two years are:

- 27 points of nontechnical work, including a writing-intensive course and one course in economics
- Computer science
- Calculus through *Multivariable Calculus*
- Additional math*
- Chemistry
- Physics
- Lab (physics and/or chemistry)
- Other technical electives required by the department

*Check with your department for additional math requirements.

To view your major program requirements for the third and fourth years, please refer to the *Columbia Engineering Bulletin*. The Combined Plan Program must be completed within a two-year period. Additional time is not permitted. It is your responsibility to clear all remaining requirements for your Bachelor of Arts with your home institution. You must meet the residency requirement of 60 credits in four consecutive semesters (not including summer) at Columbia to graduate.

COMBINED PLAN TRANSFER CREDIT EVALUATION

The Combined Plan Transfer Credit Evaluation reviews courses taken at your prior institution(s). Only credit-bearing courses with a B or better are eligible for transfer or exemption credit. In most cases, you will receive 68 advanced-standing credits, regardless of how many were already earned at their home institutions.

It is important to note that the Berick Center for Student Advising reviews only first- and second-year foundation requirements. Your academic department will advise you in major requirements, as well as granting any engineering-specific exemptions.

EXPLANATION OF YOUR CREDIT AND CLEARANCE EVALUATION LETTER

Your academic credential form from the Berick Center for Student Advising outlines four areas: major, required coursework in progress, first-year/sophomore foundational requirements still to complete, and notes.

Major: It is not possible to accommodate a change of program after your arrival at Columbia.

Required coursework in progress: If you are currently taking a course that is required for the Combined Plan Program, it will be noted as “in progress” on the clearance form. When we receive your official transcript with a grade of B or better, “in progress” courses will be counted toward your degree requirements.

First-year/sophomore requirements still to complete: Any missing requirements from the first two years of foundational courses will be noted. In some cases, these requirements can be completed the summer before matriculation at Columbia Engineering, as subsequent classes will build on the material covered in these courses.

Notes: This area provides suggestions and clarification for deficiencies noted or for classes that may count toward the major. In some cases, more information is needed to evaluate a course. We may also include information about course equivalencies for engineering-specific courses, which must be evaluated by the department.

REQUESTING ADDITIONAL EXEMPTIONS

You will work with your adviser in the Berick Center for Student Advising to request exemptions for the first two years' requirements. You will work with your major department adviser to request exemptions for the major requirements. If syllabi are needed for further evaluation, you will be notified in the notes section of your credit and clearance evaluation letter. It is strongly suggested that you bring to Columbia a folder that includes a course description and syllabus for each class, especially those courses for which you may request exemption by the department. It will make the process much smoother when you meet with your major adviser.

DEPARTMENT CONTACTS FOR COMBINED PLAN STUDENTS

Applied Mathematics: Prof. Michael Tippett, michael.tippett@columbia.edu, 212-851-5936

Applied Physics: Prof. Irving Herman, iph1@columbia.edu, 212-854-4950

Biomedical Engineering: Prof. Clark Hung, 212-854-6542, cth6@columbia.edu; Prof. James Ihn, ji2234@columbia.edu, 212-851-0488

Chemical Engineering: Prof. Faye McNeill, vfm2103@columbia.edu, 212-854-2869

Civil Engineering and Engineering Mechanics: Prof. Shiho Kawashima, 212-854-2701, s-kawashima@columbia.edu; Prof. Ioannis Kougioumtzoglou, iak2115@columbia.edu, 212-853-0462

Computer Engineering: Prof. Charles A. Zukowski, caz@columbia.edu, 212-854-2073

Computer Science: Prof. Stephen Edwards, 212-939-7019, sedwards@cs.columbia.edu

Earth and Environmental Engineering: Prof. Xi Chen, 212-854-3787, xichen@columbia.edu

Electrical Engineering: Prof. John Kymissis, johnkym@ee.columbia.edu, 212-854-4023

Industrial Engineering and Operations Research: Kristen Maynor (lead undergraduate adviser), km3244@columbia.edu, 212-854-2936; Carmen Ng, 212-854-4351, carmen@columbia.edu

Materials Science: Prof. William E. Bailey, web54@columbia.edu, 212-854-3090

Mechanical Engineering: Prof. Michael Massimino, mmassimino@columbia.edu, 212-854-4275



ACADEMIC RESOURCES

Registration Tools

These websites will help you prepare your Fall 2018 schedule and consider potential courses of study.

SCHOOL BULLETIN

college.columbia.edu/bulletin
bulletin.engineering.columbia.edu

From course descriptions and major requirements to rules, regulations, and disciplinary procedures, your school's bulletin is the official source for answers to your academic questions.

DIRECTORY OF CLASSES

columbia.edu/cu/bulletin/uwb

The Directory of Classes contains a list of all courses offered in all undergraduate and graduate programs at Columbia University (with the exception of Teachers College). Students should use their respective *Bulletins* for registration purposes, as not all courses in the Directory of Classes are open to all students. See your CSA adviser if you have any questions about which courses are available to you.

STUDENT SERVICES ONLINE

ssol.columbia.edu

Student Services Online (SSOL) provides instant access to student records, including grades, registration appointments, class schedules, financial aid information, and account details. Official transcripts may also be ordered via SSOL. To access this information, you must first activate your Columbia UNI at uni.columbia.edu.

Among the many useful components of SSOL is the Degree Audit Report (DAR). The DAR is a way for students to monitor their progress toward degree completion. Keep in mind that the DAR is a tool and not the authoritative transcript. All degree and major requirements are set forth in your school's *Bulletin*.

VERGIL

vergil.registrar.columbia.edu

Vergil allows you to search for courses by instructor, date and time, department, subject area, key words, and more. Vergil's Course Planner and graphical calendar interface enable you to keep track of courses of interest and export your projected schedule to your other calendar apps. You can also browse courses, syllabi, and textbook information, export your course selections to SSOL, and be ready to register as soon as your appointment time arrives.

Academic Support

DEPARTMENTAL RESOURCES

A number of resources are available through the academic departments. For additional information regarding each of these services, it is best to refer to an individual department's website.

Faculty and teaching assistant office hours are posted on course syllabi, departmental websites, and faculty office doors. Office hours are times set aside by a faculty member to meet with students to clarify concepts, discuss assignments, and mentor potential majors. You should take advantage of these hours to ask questions, address concerns, and connect with faculty.

Help Rooms are available for subjects taught in a number of departments, including physics, statistics, and mathematics. During these open hours, you may ask questions of faculty and graduate assistants. Help Room schedules are available on the relevant departmental websites.

The **Writing Center** is located in 310 Philosophy Hall. It is staffed by graduate students and provides writers of all levels and abilities—from first-year students to seniors working on their theses—with the opportunity to have detailed conversations about their writing with experienced readers. Writing consultants will work with students at any stage in the writing process. You may sign up for appointments at the Writing Center or simply drop by during operating hours. Contact the Writing Center at 212-854-3886 or at uwp@columbia.edu. For more information, see college.columbia.edu/core/uwp/writing-center.

The **Language Resource Center**, located in 353 International Affairs Building, provides collections and facilities for the more than 40 languages taught at Columbia University. These include language labs, several classrooms, and video-viewing facilities for use by individuals and small groups of up to 20. Students should take advantage of these services in order to practice their listening comprehension skills. For more information, visit lrc.columbia.edu.

TUTORING

cc-seas.columbia.edu/csa/tutoring

The James H. and Christine Turk Berick Center for Student Advising (CSA) provides peer tutoring in a broad range of introductory courses. Trained tutors assist students with mastering course content, sharpening testing skills, and maximizing their potential for academic success. Students should meet with their CSA adviser to request a tutor as soon as the need becomes apparent. Additionally, the CSA also offers Academic Success Seminars throughout each semester. The topics of these seminars range from time management and note-taking to stress management. Seminars are open to all students. Speak with your CSA adviser at any point for more information.

Planning Ahead

STUDY ABROAD

COLUMBIA COLLEGE

ogp.columbia.edu

The Office of Global Programs and Fellowships (606 Kent) helps students take part in intellectually rigorous international educational experiences that enhance and complement their Columbia College education as well as their personal, academic, and professional growth. It is never too early to start preparing to study abroad. Columbia College students from every major should explore the possibilities that international education has to offer. Visit the Academic Resources Fair during the New Student Orientation Program, the annual Study Abroad Fair, and the office in 606 Kent for personalized advising.

COLUMBIA ENGINEERING

ogp.columbia.edu

bulletin.engineering.columbia.edu

Students in Columbia Engineering who are interested in studying abroad must plan their schedules early and with care. The Office of the Associate Dean for Undergraduate Student Affairs and Global Programs works with the Office of Global Programs and Fellowships to help students take part in intellectually rigorous international educational experiences that enhance and complement their Columbia education as well as their personal, academic, and professional growth. Students from every major should explore the possibilities that international education has to offer. Visit the Academic Resources Fair during the New Student Orientation Program, the annual Study Abroad Fair, the Global Initiatives Office (530 Mudd), and the Office of Global Programs and Fellowships (606 Kent) for personalized advising about the variety of study-abroad opportunities available.

FELLOWSHIPS

ogp.columbia.edu

The Office of Global Programs and Fellowships (606 Kent) helps students apply for national and international fellowships. Services range from ascertaining which fellowships are most appropriate given a student's academic background, aspirations, and values, to helping applicants on such requirements as personal statements or research proposals, to preparing candidates through mock interviews. The goal is to give each student the necessary personalized training to submit the most compelling application possible.

Preparation for Future Professional Study

PREPROFESSIONAL ADVISING

cc-seas.columbia.edu/preprofessional

The James H. and Christine Turk Berick Center for Student Advising (403 Lerner) includes preprofessional advising for Columbia College and Columbia Engineering. Preprofessional advisers provide information for students planning a career in law, business, or one of the health professions. They advise and assist students throughout their four years and beyond, working most intensively with students during their application year.

MEDICAL SCHOOL

If you are thinking about attending medical school, you should attend the prehealth advising meeting during the New Student Orientation Program. This program will introduce you to the premedical curriculum and advising system and give you detailed advice about planning your schedule. Details will be provided in the NSOP schedule.

LAW SCHOOL

Law schools do not require a specific course of study; they prefer that applicants have a broad background of knowledge, with extensive work in writing and good analytical skills. Admission to schools of law depends on the quality of academic work rather than on the field of study. Your undergraduate program should include courses with substantial writing and reading components that strengthen analytical and research skills.

BUSINESS SCHOOL

Admission to business school depends on the quality of overall academic work and related experiences. Students planning to attend a graduate school of business may major in whatever field interests them; however, the undergraduate program should include courses that improve analytical and quantitative skills.

NEW YORK STATE INITIAL TEACHING CERTIFICATION

Columbia College students may qualify for New York State Initial Certification in either childhood education or adolescence education through the Barnard College Education Program. An information packet and application can be picked up at 336 Milbank Hall or downloaded from the website at education.barnard.edu.

ENGINEERING 3-2 PROGRAM

This program is for students who wish to earn both the B.A. and B.S. degrees in five years. Students enter Columbia Engineering after their third year in Columbia College. For more information, see the *Columbia Engineering Bulletin*, at bulletin.engineering.columbia.edu/combined-plan-programs.

4-1 PROGRAM

This program allows students at Columbia Engineering to earn a B.A. from Columbia College, as well as a B.S. from Columbia Engineering, in five years of study. Columbia Engineering students who plan to enter the 4–1 Combined Plan Program offered through Columbia College are advised to apply for admission in April of their third year. Final acceptance is contingent upon completion of the B.S. and the entire Columbia College Core Curriculum. Consult your CSA adviser for more information.

Academic Integrity

Academic integrity defines a university and serves as a cornerstone of the community. At Columbia, students participate in an academic enterprise that honors intellectual work and respects its origins. It is important to the learning process to be able to synthesize information and produce original work. A Columbia education emphasizes not only the student's mastery of intellectual material within a discipline but also the development of the individual's moral character and personal ethics. Columbia requires that students take full responsibility for their actions. Compromising academic integrity not only jeopardizes a student's academic, professional, and social development; it violates the standards of our community. As a Columbia student, you are responsible for making informed choices with regard to academic integrity both inside and outside the classroom.

HONOR CODE

The Student Councils of Columbia College and Columbia Engineering, on behalf of their respective student bodies, have resolved that maintaining academic integrity is the preserve of all members of our intellectual community.

As a consequence, all Columbia College and Columbia Engineering students make the following pledge:

We, the undergraduate students of Columbia University, hereby pledge to value the integrity of our ideas and the ideas of others by honestly presenting our work, respecting authorship, and striving not simply for answers but for understanding in the pursuit of our common scholastic goals. In this way, we seek to build an academic community governed by our collective efforts, diligence, and Code of Honor.

In addition, all Columbia College and Columbia Engineering students are committed to the following honor code:

I affirm that I will not plagiarize, use unauthorized materials, or give or receive illegitimate help on assignments, papers, or examinations. I will also uphold equity and honesty in the evaluation of my work and the work of others. I do so to sustain a community built around this Code of Honor.

VIOLATIONS

Violations of academic integrity may be intentional or unintentional and can include, but are not limited to:

- Plagiarism (the use of words, phrases, or ideas belonging to another, without properly citing or acknowledging the source)
- Self-plagiarism (the submission of one piece of work in more than one course without explicit permission of the instructors involved)
- Cheating on examinations, tests, or homework assignments
- Violating the limits of acceptable collaboration in coursework established by a faculty member or department
- Receiving unauthorized assistance on an assignment
- Copying computer programs
- Obtaining advance knowledge of exams or other assignments without permission
- Unauthorized distribution of assignments and exams
- Facilitating academic dishonesty by enabling another to engage in such behavior
- Lying to an instructor or University officer
- Falsification, forgery, or misrepresentation of information in coursework or lab work, and on any application, petition, or documents submitted to Columbia College or a University official
- Fabrication of credentials in materials submitted to the University for administrative or academic review

STRATEGIES FOR MAINTAINING ACADEMIC INTEGRITY

Columbia classes are challenging, and frequently the workload and grading standards greatly exceed students' high school experiences. When students, pressed for time, unprepared for an assignment or exam, or anxious about the need to earn a high grade, choose to cheat, it compromises the integrity of our academic community, shows disrespect to instructors and classmates, and deprives those students of the opportunity to learn.

Students should be prepared and consider the following when approaching their coursework:

- Understand instructors' criteria for academic integrity and their policies on citation and group collaboration.
- Clarify any questions or concerns about assignments with instructors as early as possible.
- Develop a timeline for drafts and final revision of assignments and begin preparation in advance.
- Always acknowledge other people's opinions and theories by citing their words and indicating sources.
- Do not collaborate on assignments unless specifically permitted by the instructor.
- If you are feeling overwhelmed, burdened, or pressured, utilize campus resources such as the Berick Center for Student Advising, and Counseling and Psychological Services.

DEAN'S DISCIPLINE

A student charged with a violation of academic integrity is notified and provided the opportunity to respond through the Dean's Discipline process. If the student is found responsible for a violation, sanctions will be issued upon consideration of the specifics of the case, institutional precedent, disciplinary history, aggravating circumstances, and community impact. A student found responsible for an academic integrity violation can expect to receive a minimum sanction of disciplinary probation and may be suspended or expelled from the University.

Additionally, students found responsible for violations of academic integrity may be required to report such offenses on future applications to graduate and professional schools. Such offenses will also be noted on recommendations for Latin honors and Phi Beta Kappa. The parents or guardians of dependent students may be notified when a student is no longer in good disciplinary standing. The University reserves the right to indicate disciplinary suspension or expulsion on a student's academic transcript.

For a current list of academic policies, please visit the Student Conduct and Community Standards website at studentconduct.columbia.edu.

CAMPUS RESOURCES

Campus Resources

The following is a compilation of programs, resources, and services that will help you achieve your goals both in and outside of the classroom. For more information, please consult the listed web addresses or talk with your CSA adviser.

JAMES H. AND CHRISTINE TURK BERICK CENTER FOR STUDENT ADVISING

cc-seas.columbia.edu/csa

The Berick Center for Student Advising (CSA) provides an integrated advising experience for all students in Columbia College and Columbia Engineering. The CSA brings together, under one roof, general academic advising, Academic Success Programs, the Columbia Undergraduate Scholars Program, and Preprofessional Advising. Students are assigned an adviser who works with them throughout their time at Columbia. CSA advisers help plan academic programs each semester, answer questions about degree and Core requirements (for Columbia College) and first-year/sophomore and nontechnical requirements (for Columbia Engineering), and help address any other questions or concerns. CSA advisers work collaboratively with faculty and other campus offices and resources to help you succeed.

UNDERGRADUATE STUDENT LIFE

cc-seas.columbia.edu/studentlife

Undergraduate Student Life (USL) is comprised of Multicultural Affairs, Residential Life, and Student Engagement. Collectively, these offices foster a vibrant community by promoting inclusivity, encouraging responsibility, and creating and supporting opportunities for you to develop connections within and beyond Columbia's campus. Throughout the year, USL supports community events; provides leadership, cultural, and civic engagement programs and opportunities; offers diversity education and training; supports identity development and exploration; and advises students, student organizations, and residential communities.

MULTICULTURAL AFFAIRS

cc-seas.columbia.edu/oma

Multicultural Affairs promotes an inclusive campus community by acting as an educational resource and providing a supportive environment for personal exploration,

intercultural connections, and intergroup dialogue. Multicultural Affairs facilitates student engagement with many facets of diversity, including race, ethnicity, socioeconomic status, country of origin, sexual orientation, and gender identity/expression. Offering programs in diversity education, social justice, leadership development, advocacy, and mentoring, Multicultural Affairs also advises cultural and identity-based student organizations. In addition to serving as a resource for all students, Multicultural Affairs works with first-generation and low income students, LGBTQ students, students of color, and international students through all phases of the campus experience.

RESIDENTIAL LIFE

cc-seas.columbia.edu/reslife

Residential Life comprises a team of students, faculty, and professional staff who strive to enhance the quality of the residential experience by cultivating an atmosphere conducive to educational pursuits and developing community among the student body. This team includes resident advisers (RAs), undergraduates who live in the dormitories and serve as peer mentors and educators. Residential Life helps facilitate connections among hallmates, provides programming opportunities, and supports shared community standards. Residential Life staff provide guidance through any challenges you may experience adjusting to residential living at Columbia. Fraternity and Sorority Life is also a vibrant part of the residential experience and the Columbia community.

STUDENT ENGAGEMENT

cc-seas.columbia.edu/engagement

Student Engagement is committed to building a strong sense of campus community by providing programming that enhances leadership skills, fosters community engagement, and encourages the exploration of the variety of cocurricular opportunities available to students at Columbia. Student Engagement staff advise the Columbia College and Columbia Engineering student councils, as well as a broad range of student organizations recognized by the student governing boards, and provide support for a host of community traditions and celebrations. You can find opportunities for community building, social interaction, and participation in campus life through programs and events supported by Student Engagement, including the New Student Orientation Program, pre-orientation programs Urban NY, Alternative Break Program, the WKCR radio station, and more.

STUDENT CONDUCT AND COMMUNITY STANDARDS

studentconduct.columbia.edu

Student Conduct and Community Standards strives to effect change and promote integrity, accountability, and respect in the Columbia Community. Working with students, faculty, and other community partners, Student Conduct and Community Standards thoroughly investigates and resolves incidents of academic, behavioral, and gender-based misconduct through a collaborative, educational, and reflective process guided by established values.

CENTER FOR CAREER EDUCATION

cce.columbia.edu

The Center for Career Education (CCE) works with undergraduate students to help them define career goals and gain meaningful work experiences through a wide variety of programs and services. These include individual career counseling, skill-building workshops, employer and alumni events, and online resources to help with career planning and all phases of securing a job, including applications, interviewing, networking, and negotiations. CCE also counsels students on their choice of major as it pertains to their future professional lives, as well as on the decision to pursue postgraduate education, and works to connect current students with alumni. CCE maintains LionSHARE, a database that lists more than 20,000 internship and full-time employment opportunities each year; runs domestic and international internship programs; and hosts career fairs, industry showcases, and employer site visits regularly throughout the academic year.

INTERNATIONAL STUDENTS AND SCHOLARS OFFICE

isso.columbia.edu

The International Students and Scholars Office (ISSO) is the university office authorized to oversee students' immigration status. The ISSO offers full advisory and documentation services for international students and serves as a source of comprehensive and up-to-date information on government regulations that affect international students throughout their program of study.

The ISSO participates in orientation programs and offers information sessions throughout the academic year on employment authorization. They provide tax workshops in

the spring term as well as free access to online nonresident tax-preparation software. The ISSO Student Advising Team may be contacted in person during their office hours in person on a walk-in basis, by email, or by telephone.

STUDENT SERVICES

University Services
services.columbia.edu

Computing Support
columbia.edu/cu/cuit

Dining
dining.columbia.edu

Financial Aid and Educational Financing
cc-seas.financialaid.columbia.edu

Housing
housing.columbia.edu

Mail Services
mailservices.columbia.edu

Registrar
registrar.columbia.edu

Student Financial Services
sfs.columbia.edu

Student Financial Services is responsible for monitoring your student account. The student account is a record of the charges and credits that occur during your registration at Columbia. Charges may include tuition, room, meals, health services, and other fees. Credits may include financial aid, personal payments, and non-University loans.

COLUMBIA HEALTH

health.columbia.edu

Columbia Health offers a comprehensive range of routine medical care, self-care options, individual and group counseling, health education, nutritional support, and extensive outreach on issues pertinent to your well-being. Most services are offered without an additional charge because you have paid the Columbia Health Fee, which is mandatory for all full-time students and students living in University housing.

HEALTH INSURANCE AND IMMUNIZATIONS

health.columbia.edu/insurance

health.columbia.edu/content/immunization-requirements

All students are required to provide documentation of immunization against measles, mumps, and rubella (MMR) and to make an informed decision online regarding immunization against meningitis. In addition, by University mandate, all full-time students are required to have medical insurance coverage that meets the waiver requirements in addition to coverage for lab tests, x-rays, and prescriptions not available on campus. For this coverage, students may choose either to enroll in the plan offered by Columbia or request a waiver from the Columbia plan using a comparable alternate insurance plan.

All international students, regardless of credit load, are required to enroll in the Columbia Student Health Insurance plan.

MEDICAL SERVICES

health.columbia.edu/content/medical-services

Medical Services offers care for illness or injury, wellness programs, immunizations, allergy shots, and a travel medicine program. Medical Services also provides well-woman care, contraception, pregnancy and sexually transmitted infection (STI) testing, integrative medicine services, and referral services.

COUNSELING AND PSYCHOLOGICAL SERVICES

health.columbia.edu/content/counseling-and-psychological-services

Counseling and Psychological Services (CPS) is here to support your emotional well-being. CPS offers short-term individual counseling, referrals for longer-term therapy, student life support groups and workshops, medication consultations, and emergency consultations. Located on the 5th and 8th floors of Lerner, CPS is open Mondays through Fridays. CPS has evening drop-in offices on Lerner 5 and in six undergraduate residence halls (please see website for schedule) and an emergency call-in service that is available nights and weekends: 212-854-2878.

DISABILITY SERVICES

health.columbia.edu/content/disability-services

Disability Services (DS) facilitates access for students with disabilities by coordinating accommodations and services, thereby cultivating a campus culture that is sensitive and responsive to the needs of students. DS works with students with all types of

disabilities including physical, psychological, sensory, learning disabilities, ADHD, temporary, and chronic medical conditions.

Reasonable disability accommodations are determined on a case-by-case basis and are adjustments to policies, practices, and programs that facilitate access to Columbia's academic programs, campus resources, and activities. Examples include exam accommodations, note-taking, sign language interpreters, assistive technology, and accessible housing coordination. Students seeking reasonable accommodations are required to register with DS. This registration does not occur automatically upon enrollment at Columbia University and services received in high school or at other universities do not automatically transfer to Columbia University.

Detailed information regarding the registration process, including appropriate forms and documentation guidelines, is available on the DS website. For such information, you can also contact the office by calling 212-854-2388, emailing disability@columbia.edu, or by attending drop-in hours which are held daily for an individual 15-minute meeting.

The registration process can take 3–5 weeks to complete and can be initiated at any time. However, it is strongly recommended that you contact DS no later than July 15, so accommodations can be determined prior to your arrival for the fall.

ALICE! HEALTH PROMOTION

health.columbia.edu/content/alice-health-promotion

Alice! Health Promotion seeks to support the health and well-being of the student body and the University community by connecting individuals and groups to information and resources, cultivating healthy attitudes, promoting healthy behaviors, supporting policy, and fostering a culture that values and supports health—all with a focus on prevention. Alice! offers a wide variety of programs and services covering an assortment of health topics, including alcohol and other drugs, sleep, nutrition, physical activity, relationships, sexual and reproductive health, coping with stress, and more. Alice! staff are also available to talk with students about their health questions and how to access resources.

GAY HEALTH ADVOCACY PROJECT

health.columbia.edu/ghap

The Gay Health Advocacy Project (GHAP) offers HIV testing and treatment, peer counseling around sex and sexuality, birth control education, PrEP and PEP consultations, and gender-affirming hormone consultations to students of all gender identities and sexual orientations.

SEXUAL VIOLENCE RESPONSE AND RAPE CRISIS ANTI-VIOLENCE SUPPORT CENTER

health.columbia.edu/sexual-violence-response

Sexual Violence Response (SVR) provides crisis counseling, support, and advocacy for survivors and co-survivors of violence and works to promote the behaviors of healthy, positive, consensual relationships. SVR provides direct services to survivors and cosurvivors who have been impacted by sexual, intimate-partner, or gender-based violence, stalking, or harassment. This includes crisis intervention, reporting options, and information on rights. Survivor advocates accompany students to hospital emergency departments, police precincts, Public Safety, and other on- and off-campus resources. SVR provides a variety of workshops and training sessions to the student body in order to inform them about sexual violence, intimate partner violence, harassment, stalking, trauma, and effective responses to disclosures. Advocates are available year round by contacting the 24/7 SVR help line at 212-854-4357.

SEXUAL RESPECT

sexualrespect.columbia.edu

Columbia University, Barnard College, and Teachers College are committed to fostering an environment that is free from gender-based discrimination and harassment, including sexual assault and all other forms of gender-based misconduct. The University recognizes its responsibility to increase awareness of such misconduct, prevent its occurrence, support students who experience gender-based misconduct, and deal fairly and firmly with students who violate University policy. In addressing issues of gender-based misconduct, all members of the University must respect each other and work together in a manner consistent with our deeply held academic and community values.

UNIVERSITY CHAPLAIN

ouc.columbia.edu

The Office of the University Chaplain ministers to the Columbia community while promoting interreligious understanding and supporting individual spirituality and faith perspectives. The University Chaplain works to promote interfaith and intercultural awareness; fosters learning through spiritual, ethical, religious, political, and cultural exchanges; and hosts programs on matters of justice, faith, and spirituality. The University Chaplain is available for confidential pastoral counseling to individuals, couples, and families in the Columbia

community, and the Office of the University Chaplain may also assist with private ceremonies such as weddings, christenings, and memorial services. The University Chaplain oversees the work of a fellowship of more than 20 religious life advisers representing specific faith traditions.

PUBLIC SAFETY

publicsafety.columbia.edu

The Columbia University Department of Public Safety's Morningside operations center is open 24 hours a day throughout the year to ensure the safety and well-being of the University community. A number of distinctively marked emergency telephones located throughout the campus, and a special on-campus phone system emergency number, extension 4-5555, help ensure rapid response to calls for assistance from any residence hall, classroom building, or other part of the campus. The department also provides walking escorts within the Columbia University vicinity, operates an evening shuttle bus service, issues crime alerts when necessary, engages in crime prevention, and operates the "safe haven" program, which provides storefront locations near campus where people who feel threatened may take refuge.

COLUMBIA UNIVERSITY LIBRARIES

library.columbia.edu

The Columbia University Libraries is made up of 21 distinct libraries. They are centers for pursuing scholarly research, for learning about and using information technology, and for writing and studying. They offer a rich collection of print and electronic resources. The Library Information Office, located in Butler Library, Room 201, answers general questions about any of the Libraries' services and resources. Workshops are provided throughout the year to familiarize students with the available services.

BOOKSTORE

columbia.bncollege.com

The Columbia bookstore is located in the basement of Lerner Hall. It is a full-service bookstore for the purchase of textbooks as well as other books of all categories, stationery, Columbia apparel, and household items for dormitory living.



APPENDICES

Appendix A

Foreign Language Requirement

You may satisfy the requirement in one of the following ways:

1. Complete the second term of an intermediate language sequence
2. Demonstrate an equivalent competence through the appropriate score on an SAT II Subject Test or Advanced Placement exam
3. Demonstrate an equivalent competence through one of the College's placement tests
4. Successfully complete an advanced-level foreign language or literature course that requires Intermediate II or the equivalent as a prerequisite

If your native language is not English, you are not required to take an additional foreign language or a placement exam if you completed your secondary school curriculum in your native language.

Additional information:

- You must take all language instruction courses for a letter grade.
- If you wish to satisfy the requirement in a language not listed below, please consult with your adviser.
- For some languages, equivalent courses offered at Barnard College may be used to satisfy the requirement.
- If you have taken a language course at another institution in fulfillment of the language requirement, you must pass a departmental placement exam.
- If you wish to receive advanced credit or exemption for the language requirement, you may not take courses at Columbia that cover similar or more basic material than the advanced work already completed.

PLACEMENT POLICIES

See below for SAT II and Advanced Placement information for Chinese, French, German, Hebrew, Italian, Japanese, Korean, Latin, and Spanish.

CHINESE

Neither the Chinese AP exam nor the SAT II Subject Test in Chinese satisfy the language requirement. If you wish to continue your study of Chinese at Columbia, you must take the departmental placement exam during the New Student Orientation Program.

FRENCH

The French department recognizes SAT II Subject Tests and AP Exams as outlined below. If you have not taken the latter exams but wish to continue with French at Columbia, you must take the departmental placement exam given during the New Student Orientation Program or at an alternate time arranged through the department.

SAT II: Subject Test in French Score	Course Placement
below 420	Elementary I
420–499	Elementary II
500–639	Intermediate I
640–779	Intermediate II
780+	satisfies language requirement

ADVANCED PLACEMENT EXAM IN FRENCH

A score of 5 on a French language exam satisfies the foreign language requirement. Upon successful completion of a 3-point 3000-level (or higher) course in French at Columbia, the Department of French and Romance Philology will award 3 points of AP credit, provided the grade in the course is a B or better. A score of 4 on the French language exam satisfies the foreign language requirement, but no points will be awarded.

GERMAN

The Department of Germanic Languages recognizes SAT II Subject Tests and AP Exams as outlined below, but very strongly encourages students with high school German to take the Columbia placement exam to ensure proper placement. If you do not submit scores from these exam but wish to continue with German, you must take a departmental placement exam during the New Student Orientation Program.

SAT II: Subject Test in German Score	Course Placement
below 400	Elementary I
400–569	Elementary II
570–679	Intermediate I
680–779	Intermediate II
780+	satisfies language requirement

ADVANCED PLACEMENT EXAM IN GERMAN

A score of 5 on the German language exam satisfies the foreign language requirement. Upon successful completion of a 3-point 3000-level (or higher) course in German at Columbia, the department will award 3 points of AP credit, provided the grade in the course is a B or better. A score of 4 on the German language exam satisfies the foreign language requirement, but no points will be awarded.

HEBREW

A score of 700+ on the SAT II Subject Test in Hebrew and/or a passing grade on the Jerusalem Examination satisfies the foreign language requirement. Depending on their scores, students who passed the Jerusalem Examination may also receive credit. If you plan to enroll in Hebrew language courses beyond Elementary Hebrew I, you must take a placement exam prior to registration. Exams are available at the Department of Middle Eastern, South Asian, and African Studies in 401 Knox Hall. Beginners should register for Elementary Hebrew I.

ITALIAN

A score of 5 on the AP Italian language exam satisfies the foreign language requirement. Upon successful completion of a 3-point 3000-level (or higher) course in Italian at Columbia, the Department of Italian will award 3 points of AP credit, provided the grade in the course is a B or better. A score of 4 on an Italian language exam satisfies the foreign language requirement, but no points will be awarded. A score of 780 or higher on the SAT II Subject Test also satisfies the foreign language requirement, but no points will be awarded. If you plan to continue your study of Italian at Columbia, you must take a departmental placement exam during the New Student Orientation Program.

JAPANESE

A score of 5 on the AP Japanese Exam satisfies the foreign language requirement, as does a score of 780 or higher on the SAT II Subject Test in Japanese. No credit or placement is offered for the IB exam.

KOREAN

A score of 780 or higher on the SAT II Subject Test in Korean satisfies the foreign language requirement.

LATIN

A score of 5 on the AP Latin exam satisfies the foreign language requirement. Upon successful completion of a 3-point 3000-level (or higher) course at Columbia, the Department of Classics will award 3 points of AP credit, provided the grade in the course is a B or better. No credit or placement is given for the SAT II Subject Test. If you wish to continue with Latin at Columbia, you should take the departmental placement test and/or speak with the program director prior to registration.

SPANISH

The Department of Latin American and Iberian Cultures recognizes SAT II Subject Tests and AP exams as outlined below. All students not submitting those scores but continuing with Spanish must take a departmental placement exam during the New Student Orientation Program.

SAT II: Subject Test in Spanish

Score	Course Placement
below 420	Elementary I
420–569	Elementary II or Comprehensive Beginning*
570–689	Intermediate I
690–779	Intermediate II or Comprehensive Intermediate*
780+	satisfies language requirement

*with instructor approval and if Spanish is not the first foreign language you are learning

ADVANCED PLACEMENT EXAM IN SPANISH

A score of 5 on the Spanish language or literature exam satisfies the foreign language requirement. Upon successful completion of a 3-point 3300-level (or higher) course in Spanish at Columbia, the Department of Latin American and Iberian Cultures will award 3 points of AP credit, provided the grade in the course is a B or better. A score of 4 on the Spanish language or literature exam satisfies the foreign language requirement, but no points will be awarded.

INTERNATIONAL BACCALAUREATE EXAM IN SPANISH

A score of 5 or higher on the Higher Level Exam in Spanish satisfies the foreign language requirement.

For information about other languages taught at Columbia, please see the complete list in the Columbia College Bulletin: bulletin.columbia.edu/columbia-college/core-curriculum/foreign-language-requirement

Appendix B

FACULTY CONTACTS FOR COLUMBIA COLLEGE SCIENCE MAJORS

If you are considering a major in the sciences you should, in your first two years, focus on the required introductory science classes. You should consult the *Columbia College Bulletin* and speak with your CSA adviser to plan your academic program. Students planning to follow a premedical program should also obtain a copy of the *Premedical Handbook* during the New Student Orientation Program.

The following professors are also available to answer the questions of students who:

- are interested in the sciences
- are considering a major or concentration in one of the following departments
- have questions about courses offered in the sciences
- wonder where a degree in science can lead after graduation

Astronomy

Frederik Paerels | frits@astro.columbia.edu

Biology

Deborah Mowshowitz | dbm2@columbia.edu

Chemistry

Vesna Gasperov | vg2231@columbia.edu

Computer Science

Jae Woo Lee | jae@cs.columbia.edu

Earth and Environmental Sciences

Meredith K. Nettles | nettles@ldeo.columbia.edu

Hugh Ducklow | hducklow@ldeo.columbia.edu

Ecology, Evolution, and Environmental Biology

Matthew Palmer (Environmental Biology) | mp2434@columbia.edu

Jill Shapiro (Evolutionary Biology of the Human Species) | jss19@columbia.edu

Mathematics

Ovidiu Savin | savin@math.columbia.edu

Physics

Jeremy Dodd | dodd@phys.columbia.edu

Psychology

Katherine Fox-Glassman | kjt2111@columbia.edu

Larisa Heiphetz | lah2201@columbia.edu

Statistics

Banu Baydil | bb2717@columbia.edu

Ronald Neath | rcn2112@columbia.edu

Planning Guide 2018–2019

Appendix C

COLUMBIA UNIVERSITY 2018–2019 ACADEMIC CALENDAR

FALL TERM 2018

September 3	Labor Day—University Holiday
September 4	First Day of Classes
September 14	End of Change of Program Period, Last Day to Add a Class without Instructor Permission
October 9	Last Day to Drop a Class for Columbia College
October 18	Midterm Date
November 5	Academic Holiday—No Classes
November 6	Election Day—University Holiday
November 15	Last Day to Exercise Pass/D/Fail Option
November 15	Last Day to Drop a Class for Columbia Engineering
November 22	Thanksgiving Day—University Holiday
November 23	University Holiday
December 10	Last Day of Classes
December 14–21	Final Exams

SPRING TERM 2019

January 22	First Day of Classes
February 1	End of Change of Program Period, Last Day to Add a Class without Instructor Permission
February 26	Last Day to Drop a Class for Columbia College
March 11	Midterm Date
March 18–22	Spring Break
March 28	Last Day to Exercise Pass/D/Fail Option
March 28	Last Day to Drop a Class for Columbia Engineering
May 6	Last Day of Classes
May 10–17	Final Exams
May 22	Commencement

IMPORTANT NOTES:

1. Dates are subject to change. See the 2018–2019 *Columbia College* or *Columbia Engineering Bulletin* for current Academic Calendar.
2. Vacation travel—Students should not make travel plans until they know their final exam schedule. **Final exams will not be rescheduled for vacation travel purposes.**
3. The New Student Orientation Program—Because of its paramount importance to the academic and social well-being and success of first-year students, **attendance during the New Student Orientation Program is mandatory.**

ALICE! HEALTH PROMOTION

John Jay Hall, 3rd Floor
212-854-5453
health.columbia.edu/content/alice-health-promotion

ATHLETIC AND RECREATIONAL FACILITIES

Dodge Physical Fitness Center
212-854-3439
dodgefitnesscenter.com

BOOKSTORE

Lerner Hall
212-854-4131
columbia.bncollege.com

CENTER FOR CAREER EDUCATION

East Campus, Lower Level
212-854-5609
cce.columbia.edu

JAMES H. AND CHRISTINE TURK BERICK CENTER FOR STUDENT ADVISING

403 Lerner Hall
212-854-6378
cc-seas.columbia.edu/csa
csa@columbia.edu

Academic Success Programs
cc-seas.columbia.edu/asp

Preprofessional Advising
cc-seas.columbia.edu/preprofessional

Scholars Program
cc-seas.columbia.edu/scholars

COLUMBIA UNIVERSITY INFORMATION TECHNOLOGY (CUIT)

202 Philosophy Hall
212-854-1919
columbia.edu/cuit

COUNSELING AND PSYCHOLOGICAL SERVICES

Lerner Hall, 8th Floor
212-854-2878
health.columbia.edu/content/counseling-and-psychological-services

DEAN OF COLUMBIA COLLEGE

208 Hamilton Hall
212-854-2441
college.columbia.edu

DEAN OF COLUMBIA ENGINEERING

510 Mudd
212-854-2993
engineering.columbia.edu/office-dean

DINING SERVICES

118 Hartley Hall
212-854-4076
columbia.edu/cu/dining

DISABILITY SERVICES

Wien Hall, 1st Floor
212-854-2388
health.columbia.edu/content/disability-services

FINANCIAL AID AND EDUCATIONAL FINANCING

618 Lerner Hall
212-854-3711
cc-seas.financialaid.columbia.edu

FRATERNITY AND SORORITY LIFE

515 Lerner Hall
212-854-6805
columbiagreeks.info

GRADUATION ZONE

cc-seas.columbia.edu/gradzone

HEALTH SERVICES

212-854-2284
health.columbia.edu

HOUSING SERVICES

118 Hartley Hall
212-854-2779
hosingservices.columbia.edu

INSURANCE AND IMMUNIZATION COMPLIANCE

John Jay Hall, 3rd Floor
Insurance Office: 212-854-3286
Immunization Compliance Office:
212-854-7210

INTERCULTURAL RESOURCE CENTER

552 West 114th Street
212-854-0720
cc-seas.columbia.edu/multicultural/aboutus/irc.php

INTERNATIONAL STUDENTS AND SCHOLARS OFFICE

524 Riverside Drive, 1st Floor
212-854-3587
isso.columbia.edu

STUDENT CONDUCT AND COMMUNITY STANDARDS

800 Watson Hall
212-854-6872
studentconduct.columbia.edu

LIBRARY SERVICES

Butler Library
212-854-7309
library.columbia.edu

MEDICAL SERVICES

John Jay Hall, 3rd and 4th Floors
212-854-7426
After hours: 212-854-9797
health.columbia.edu/content/medical-services

MULTICULTURAL AFFAIRS

505 Lerner Hall
212-854-0720
cc-seas.columbia.edu/oma

NEW STUDENT ORIENTATION PROGRAM (NSOP)

505 Lerner Hall
212-854-3611
cc-seas.columbia.edu/orientation

STUDENT AND FAMILY SUPPORT

609 Lerner Hall
212-854-2446
cc-seas.columbia.edu/parents

PUBLIC SAFETY

111 Low Library
212-854-2797
Emergency: 212-854-5555
publicsafety.columbia.edu

REGISTRAR

See Student Service Center.

RESIDENTIAL PROGRAMS

515 Lerner Hall
212-854-6805
cc-seas.columbia.edu/reslife

STUDENT ENGAGEMENT

515 Lerner Hall
212-854-3611
cc-seas.columbia.edu/engagement

STUDENT SERVICE CENTER

205 Kent Hall
212-854-4400
Financial Services: sts.columbia.edu
Registrar: registrar.columbia.edu

STUDY ABROAD AND FELLOWSHIPS

606 Kent Hall
212-854-2559
ogp.columbia.edu

UNDERGRADUATE STUDENT LIFE

510–515 Lerner Hall
212-854-3612
cc-seas.columbia.edu/studentlife

UNIVERSITY CHAPLAIN

Earl Hall Center
212-854-6242
ouc.columbia.edu

