In order to earn a degree from the College of the University of Chicago, a student must obtain credit for at least forty-two quarter courses (4200 units), distributed among general education requirements, major program requirements, and electives, as described in the section on the curriculum at the front of this publication. For students matriculating in Autumn 2017 or later, of the 4200 units, 3800 units of credit must be earned by course enrollment, i.e., not credit by examination.

All students receive credit toward their degrees by taking courses in the College. In addition, students may receive credit and/or satisfy College requirements in the following ways: by placement test; by Advanced Placement (AP) examinations; by accreditation examination; by International Baccalaureate (IB) Programme; and by credit transferred from another institution. The limits and conditions placed on credit earned in these various ways are explained in the following section and on the Transfer Credit (http://collegecatalog.uchicago.edu/thecollege/transfercredit/) page. A student must be in residence at the University of Chicago for at least six quarters and must successfully complete a minimum of eighteen courses (1800 units) while in residence. More than half of the requirements for a major or minor must be met by registering for courses bearing University of Chicago course numbers.

Students who have examination credit for a specific course will forgo that credit if they complete an equivalent course in the College.

Placement Tests and Accreditation Examinations

Placement tests serve to adapt the needs and backgrounds of individual students to the College curriculum. They place entering students at the proper level of study in a given subject. On the one hand, placement tests minimize the repetition of subjects already mastered and, on the other, they reduce the possibility that students might begin their programs with courses for which they are inadequately prepared. Placement tests measure skill in problem solving as well as general knowledge in a subject field. Students who have some background in the areas being tested are urged to review it, but incoming students without such knowledge are not expected to acquire it over the summer preceding entrance.

Placement tests may be taken only at the time of matriculation and each test may be taken only once. Information that describes these tests is sent to incoming first-year and transfer students.

Credit is available by accreditation examinations, which are optional, to those students who have already studied certain subjects at the college level. See the information below under each subject heading for when these examinations are offered. In the case of a course where both experimental and theoretical skills are involved, students may be required to fulfill the laboratory portion along with the rest of the class.

College credit achieved by accreditation examination is entered as units of credit on the student’s official academic record. Letter grades are not assigned. An accreditation examination may be taken only once.

Chemistry Placement Test

Students who wish to enroll in chemistry must take the online Chemistry Placement Test along with the Mathematics Placement Test (or they must have earned a score of 5 on the AP Chemistry exam).

First-year and transfer students with a strong Chemistry background (i.e., those who score an AP 5 or equivalent) may, after consultation and approval from the Director of Undergraduate Studies, take an Advanced Placement exam to qualify to be directly placed into more advanced courses, such as CHEM 22000 Organic Chemistry I, CHEM 20100 Inorganic Chemistry I, or CHEM 26100 Quantum Mechanics. If a student is approved to pursue this option, the student may substitute quality grades earned in any three of the following courses for the required General Chemistry course credit: CHEM 23300 Introduction to Chemical Biology, CHEM 26100-26200-26300 Quantum Mechanics; Thermodynamics; Chemical Kinetics and Dynamics, CHEM 20100-20200 Inorganic Chemistry I-II, CHEM 26700 Experimental Physical Chemistry, CHEM 22700 Advanced Organic/Inorganic Laboratory, or CHEM 26800 Quantum Molecular and Materials Modeling. This Advanced Placement track may fast-track well-prepared students who wish to advance their studies into the various subfields of Chemistry, those who wish to double major or minor in Chemistry, or non-Chemistry majors who wish to enroll in advanced courses that require General Chemistry as a prerequisite.

Economics Placement Test

Students who wish to begin their economics major with ECON 20000 The Elements of Economic Analysis I in their first year must pass the Economics Placement Test or complete ECON 10000 Principles of Microeconomics. No standardized external exams (IB, AP, A-Levels) will substitute. The placement test will be offered Monday evening of the first week of Autumn Quarter.

Language Placement Tests

Each year the University of Chicago teaches over 50 different languages. Language placement tests are required of students who plan to continue in languages studied prior to entrance in the University. Placement
Examination Credit

tests determine where a student begins language study. The results do not confer credit or satisfy the Language Competency Requirement (http://collegecatalog.uchicago.edu/thecollege/thecurriculum/#languagecompetence).

In most cases you will not be able to register for courses into which you were not placed, with the exception of the first quarter of an introductory level (in most cases, a 10100 course). Many languages offer online placement tests in Canvas. They also offer placement for heritage language speakers.

For more information about language placement tests, visit Language Placement FAQs (https://languages.uchicago.edu/placement-faqs/).

**MATHEMATICS PLACEMENT TEST**

See also the Placement section on the Mathematics program page (http://collegecatalog.uchicago.edu/thecollege/mathematics/#placement).

Every entering student must take the Mathematics Placement Test. This online test must be taken during the summer before arrival on campus. Solely on the basis of the Online Mathematics Placement Test, the following mathematics courses are the possible Calculus placements for each student:

- MATH 10500 Fundamental Mathematics I
- MATH 11200 Studies In Mathematics I
- MATH 13100 Elem Functions and Calculus I
- MATH 15100 Calculus I
- MATH 15200 Calculus II
- MATH 15300 Calculus III or MATH 15250 Mathematical Methods for Economic Analysis or MATH 18300 Mathematical Methods in the Physical Sciences I

Students with an Advanced Placement Calculus BC score of 5 or an International Baccalaureate Mathematics HL score of 7 will also be invited to begin in MATH 18300, but these scores do not supersede the Online placement, and a MATH 18300 invitation is not the equivalent of a MATH 15300/15250/18300 placement.

Students who receive a sufficiently high score on the Mathematics Placement Test may also receive an invitation to enroll in MATH 16100 Honors Calculus I/MATH 16110 Honors Calculus I (IBL). On the basis of placement test results, students may also be invited to sit the Higher-Level Mathematics Exam prior to the start of Autumn Quarter, which would allow placement into courses at a higher level than MATH 15300 (see below).

Scores on the Mathematics Placement Test are used to determine placement into PHYS 13100 Mechanics or PHYS 14100 Honors Mechanics.

**HIGHER-LEVEL MATHEMATICS EXAM**

Students who have scored at a high level on the online Mathematics Placement Test (described above) will receive an invitation to take the Higher-Level Mathematics Exam, which will only be offered in the summer prior to matriculation. Students planning to continue with higher-level mathematics or other disciplines requiring advanced mathematics are urged to take this exam. On the basis of this exam, a student may receive placement into:

- MATH 15910 Introduction to Proofs in Analysis
- MATH 19520
- MATH 19620 Linear Algebra
- MATH 20250 Abstract Linear Algebra
- MATH 20300 Analysis in Rn I

Students may also be invited to begin in MATH 16100 Honors Calculus I/MATH 16110 Honors Calculus I (IBL) or MATH 20700 Honors Analysis in Rn I.

**CALCULUS ACCREDITATION EXAM AND MATHEMATICS CREDIT**

Students who place into MATH 15200 Calculus II will earn credit for MATH 15100 Calculus I upon completion of MATH 15200. Students who place into MATH 15300 Calculus III or higher will receive credit for MATH 15100 and MATH 15200 by completing MATH 15300 or the higher-level course.

Students who have placed into MATH 15300 Calculus III but do not intend to take any further mathematics courses (e.g., humanities majors, pre-health students) may earn examination credit for MATH 15100 Calculus I and MATH 15200 Calculus II by receiving a sufficiently high score on the Calculus Accreditation Exam. Students who have placed into MATH 15300 Calculus III will be invited to take the Calculus Accreditation Exam. This exam is only offered in the summer prior to matriculation.

Students who opt to take MATH 18300-18400-18500-18600 Mathematical Methods in the Physical Sciences I-II-III-IV instead of MATH 15300 Calculus III will receive credit for MATH 15100 Calculus I and MATH 15200 Calculus II by completing MATH 18300 Mathematical Methods in the Physical Sciences I.
PHYSICS ACCREDITATION EXAMINATIONS

Accreditation examinations are administered for the content of PHYS 12100-12200-12300 General Physics I-II-III and PHYS 14100-14200-14300 Honors Mechanics; Honors Electricity and Magnetism; Honors Waves, Optics, and Heat. The first examination may be taken by incoming students only at the time of matriculation in the College. Students who pass the first examination (for PHYS 12100 General Physics I or PHYS 14100 Honors Mechanics) will receive credit for the lecture part of the course only and will then be invited to try the next examination of the series. Entering students who have taken AP physics in high school but who do not receive AP credit from the College (and who do not plan to major in physics) may take the PHYS 12100 General Physics I accreditation examination. Students who receive AP credit for PHYS 12100-12200 General Physics I-II but whose planned major requires PHYS 13100-13200 Mechanics; Electricity and Magnetism or PHYS 14100-14200-14300 Honors Mechanics; Honors Electricity and Magnetism; Honors Waves, Optics, and Heat are eligible to take the PHYS 14100 Honors Mechanics examination. Entering transfer students who choose a major requiring physics but who are not granted transfer credit for a completed calculus-based introductory physics sequence may take one of the accreditation examinations.

NOTE: Accreditation examinations in physics confer credit only for the lecture portion of the courses; additional laboratory work may be required.

COMPUTER SCIENCE PLACEMENT EXAM

The Department of Computer Science, in collaboration with the College, will offer two placement exams to help students with prior experience in computer science determine the correct starting point. The first exam, which will be offered online, will test the material covered in CMSC 14100 Introduction to Computer Science I and CMSC 14200 Introduction to Computer Science II. This exam will be offered in multiple programming languages as it is intended to evaluate students’ grasp of concepts, not their fluency with a specific programming language.

Solely based on this exam, students may be placed into:

- CMSC 14100 Introduction to Computer Science I
- CMSC 14200 Introduction to Computer Science II
- CMSC 14300 Systems Programming I

Students who are placed into CMSC 14200 Introduction to Computer Science II will receive credit for CMSC 14100 Introduction to Computer Science I upon successful completion of CMSC 14200 Introduction to Computer Science II.

Students who are placed into CMSC 14300 Systems Programming I will be invited to sit for the Systems Programming Exam, which will be offered in person before the start of the Autumn Quarter. Based on this exam, students may be placed into:

- CMSC 14300 Systems Programming I
- CMSC 14400 Systems Programming II
- Upper-level computer science courses

Students who are placed into CMSC 14300 Systems Programming I will receive credit for CMSC 14100 Introduction to Computer Science I and CMSC 14200 Introduction to Computer Science II upon successful completion of CMSC 14300 Systems Programming I.

Students who are placed into CMSC 14400 Systems Programming II will receive credit for CMSC 14100 Introduction to Computer Science I and CMSC 14200 Introduction to Computer Science II upon successful completion of CMSC 14400 Systems Programming II.

Students who place out of CMSC 14400 Systems Programming II based on the Systems Programming Exam should contact the director of undergraduate studies in Computer Science for information on how to earn credit for CMSC 14100 Introduction to Computer Science I and CMSC 14200 Introduction to Computer Science II.

Students who place out of CMSC 14300 Systems Programming I and/or CMSC 14400 Systems Programming II should consult the Computer Science catalog entry for information about expected replacements for these courses in the Computer Science (http://collegecatalog.uchicago.edu/thecollege/computerscience/) major curriculum.

ADVANCED PLACEMENT CREDIT

Students who request college credit or fulfillment of College requirements for Advanced Placement (AP) examinations taken in high school (i.e., before a student matriculates in the College) are asked to submit an official report of their scores on the AP tests given by the College Entrance Examination Board. The decision to grant credit is reported at the end of the first year in residence and units of credit awarded appear on the student's official academic record.

While AP scores alone are sometimes used to establish placement or to confer credit, satisfactory performance on the College's own placement tests may supplement AP scores and lead to additional credit.
Examination Credit

The following chart shows how AP credit is automatically awarded. For further information on how credit may be used toward individual degree programs, a student should consult his or her College adviser. For more information on how AP credit may be used to meet major requirements, refer to the major requirements listed under “Programs of Study” in this catalog.

Students may earn any amount of credit from AP exams, placement, accreditation, IB, or other examinations. However, for students matriculating in Autumn 2017 or later, at least 3800 units must be earned through course enrollment. Students who enrolled prior to Autumn 2017 should consult the catalog of their year of entry for policies regarding the use of AP and examination credit, or speak to their College adviser.

<table>
<thead>
<tr>
<th>AP Exam</th>
<th>Score</th>
<th>Credit Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>Biology</td>
<td>4</td>
<td>100 units general education (BIOS 10130)</td>
</tr>
<tr>
<td>Biology</td>
<td>5</td>
<td>100 units general education (BIOS 10130)+</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>5</td>
<td>MATH 15100 placement</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>4</td>
<td>MATH 15200 placement</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>5</td>
<td>MATH 15200 placement †</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5</td>
<td>CHEM 11100*</td>
</tr>
<tr>
<td>Economics: Micro AND Macro</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>English Language and Composition</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>English Literature and Composition</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>Government and Politics:</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>Comparative AND U.S.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History: European</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>History: U.S.</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>History: World</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>Music Theory</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>Physics C: Mechanics AND E&amp;M</td>
<td>5</td>
<td>PHYS 12100-12200 ‡</td>
</tr>
<tr>
<td>Physics C: Mechanics only</td>
<td>5</td>
<td>PHYS 12100 ‡</td>
</tr>
<tr>
<td>Physics C: E&amp;M only</td>
<td>5</td>
<td>PHYS 12200 ‡</td>
</tr>
<tr>
<td>Statistics</td>
<td>5</td>
<td>STAT 22000++</td>
</tr>
<tr>
<td>Studio Art (2-D Design, 3-D Design, or Drawing)</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>Chinese Language and Culture; French Language and Culture; German Language and Culture; Italian Language and Culture; Japanese Language and Culture; Latin (Literature or Vergil); Spanish Language and Culture; Spanish Literature and Culture</td>
<td>5</td>
<td>Satisfies the Language Competency Requirement</td>
</tr>
</tbody>
</table>

† A student who submits a score of 5 on the Calculus BC exam will also receive invitations to register for MATH 16100 Honors Calculus I/MATH 16110 Honors Calculus I (IBL) or MATH 18300 Mathematical Methods in the Physical Sciences I.

‡ Students wishing to apply AP credits for “Physics C: Mechanics only” or “Physics C: E&M only” toward the physical sciences general education requirement should plan to complete the requirement with an appropriate course from PHYS 12100-12200 General Physics I-II.

+ A Biological Sciences major requires a “Fundamentals” sequence in general education or an “Advanced Biology Fundamentals” sequence in the major. Students with an AP 4 or 5 who complete three quarters of an “Advanced Biology Fundamentals” sequence are awarded a second AP credit to meet the general education requirement.

* AP Chemistry: Students with a score of 5 may accept credit for CHEM 11100 Comprehensive General Chemistry I, or they can register for CHEM 12100 Honors General Chemistry I or CHEM 12200 Honors General Chemistry II. Students who complete CHEM 11100 Comprehensive General Chemistry I or CHEM 12100 Honors General Chemistry I on campus will forgo the AP credit.
++ AP Statistics: Will count for general education mathematics credit. May not be used to meet requirements for the statistics major or minor. Students who register and obtain credit for STAT 20000 Elementary Statistics, STAT 22000 Statistical Methods and Applications, or STAT 23400 Statistical Models and Methods forgo AP credit for STAT 22000 Statistical Methods and Applications.

INTERNATIONAL BACCALAUREATE PROGRAMME
Credit earned for courses in the International Baccalaureate (IB) Programme may be applied to certain general education requirements or to electives as described below. Credit will not be granted for other exams. Course credit is only granted for grades of 7 on Higher-Level IB Examinations (HL). The Language Competency Requirement may be satisfied with grades of 5, 6, or 7 on Standard-Level or Higher-Level IB Examinations in languages other than English. Students who receive a 7 on the Higher-Level Calculus exam receive placement into MATH 15200 Calculus II and an invitation to MATH 16100 Honors Calculus I/MATH 16110 Honors Calculus I (IBL) or MATH 18300 Mathematical Methods in the Physical Sciences I.

<table>
<thead>
<tr>
<th>IB Examination</th>
<th>Score</th>
<th>Credit Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>7 Higher Level</td>
<td>100 units general education (BIOS 10130)</td>
</tr>
<tr>
<td>English</td>
<td>7 Higher Level</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>Languages other than English</td>
<td>5, 6, or 7 Standard Level or Higher Level</td>
<td>Satisfies the Language Competency Requirement</td>
</tr>
</tbody>
</table>

BRITISH A-LEVELS AND OTHER EXAMINATIONS
Credit for A-level work in biology may be awarded by petition to the Senior Adviser in the Biological Sciences Collegiate Division. Students with A-level work in calculus, physics, and chemistry are encouraged to take the College's placement and/or accreditation examinations prior to matriculation; no A-level credit will be granted. Credit for A-levels in other fields except language and economics may be awarded by petition to the Dean of Students in the College.

No credit is given for general education requirements in the humanities or the social sciences. Elective credit may be given only for grades of A in the Advanced Test in liberal arts subjects.