UC campus and are certified has having successfully completed the lower division breadth or General Education requirements of that UC campus (UC reciprocity).

Approved General Education Courses
A list of the courses that provide General Education credit for 2000-2001 appears in the back of this catalog. These courses may be used to fulfill the GE Requirement for students entering UC Davis in 1996-97 and thereafter. Please note that you cannot claim GE credit for a course you completed before it was an approved GE course. This list is subject to change. You should check the Class Schedule and Registration Guide each quarter for the most current information.

General Education Theme Options
General Education theme options are sets of GE courses sharing a common intellectual theme. Faculty from the College of Agricultural and Environmental Sciences have worked collaboratively to develop sets of complementary courses in several areas of interest. These GE theme options are not a separate element of the GE requirement, but a way of selecting your GE courses so that you may benefit from a coherent focus of study while completing the GE requirement.

Completion of a theme satisfies the GE requirement for students with majors assigned to the GE topical breadth area of Arts and Humanities. Students with majors assigned to the topical breadth area of either Science and Engineering or Social Science will need to complete additional GE courses in Arts and Humanities to satisfy the campus GE requirement.

Beginning a theme option does not prevent you from later choosing to take other approved GE courses to fulfill the GE requirement. If you choose to mix courses from a theme option and the broader GE course lists, you will need to make sure that the combination of courses you select will complete the campus GE requirement.

COLLEGE REQUIREMENTS FOR THE BACHELOR’S DEGREE

College of Agricultural and Environmental Sciences

Unit Requirements
Of the required 180 units counted toward a degree, 54 units must be upper division work.

Unit Credit Limitations
In addition, the following unit limitations apply to all majors:

• Not more than 6 units can be Physical Education 1 and 6
• Not more than 20 units can be courses numbered 90X, 92, 97T, 97TC, 99, 190C, 190X, 192, 197T, 197TC, or 199
• Not more than 12 units can be courses numbered 92 and/or 192 (credit will not be given for 192s or 199s taken before the completion of 84 units)
• Not more than 5 units per quarter of Special Study courses (99, 194H, 199)
• Not more than 9 units of professional courses (numbers 300–499) may be used toward the 54 upper division units

Limitation on Credit for Units Graded P
The Academic Senate limits the total number of courses graded P, including units earned in courses graded “P/NP only,” to one third of the units completed on the Davis campus. The P/NP option is to be used only for elective courses and should not be used for major requirements.

Credit in University Extension Courses
Students in residence may apply a maximum of 9 units of credit earned in some Open Campus courses taken through University Extension toward the 180-unit requirement provided written approval has been obtained from the dean before registering. Units of credit allowed by the dean may be less than the number of units listed for a course. No grade points are assigned for courses completed through Open Campus or University Extension.

Registration Beyond the 225-Unit Limit
Students may not exceed 225 units; registration for enrollment when the limit has been reached may only be approved by the Dean. A petition to complete excess units may be picked up in the Dean’s office or in your major department.

Residence Requirement
Thirty-five of the final 45 quarter units completed by each candidate must be earned while in residence on the Davis campus. Not more than 18 of these 35 quarter units may be completed in summer session courses at UC Davis.

Scholarship Requirement
Students in the College are required to attain a minimum grade point average of 2.0 for all courses specified as depth subject matter in their major. Only grades earned in courses taken at UC Davis are included in the grade point calculation. Each candidate must complete...
English Composition Requirement

The English Composition requirement can be met in one of two ways:

1. by completing, before you have completed 120 units, either two courses emphasizing written expression or one course emphasizing written expression and one course emphasizing oral expression, with a grade of C- (or P) or better. The following UC Davis courses satisfy this requirement:
   - (a) one course must be selected from English 1, 3, 18, 19, 101, 102A, 102B, 102C, 102D, 102E, 102F, 102G, 104A, 104B, 104C, 104D, 104E, or 104F (courses with primary emphasis in writing skills);
   - (b) one course selected from the courses not selected above, or from Communication 1, Comparative Literature 1, 2, 3, 4, or Native American Studies 5 (courses emphasizing either writing or speaking skills);

OR

2. by passing the English Composition Examination administered by the College of Letters and Science upon completion of 70 units of degree credit (the examination does not yield credit).

English Composition Examination. The English Composition Examination will be offered on the following dates for the 2000-2001 academic year:

- October 21, 2000
- January 27, 2001
- April 28, 2001

There are no examinations given during the summer. Sign-up rosters will be posted on the bulletin board near the main English Department office (176 Voorhies), Monday until Friday at noon (or until they are filled) just preceding each Saturday examination date. Sign-ups must be done, in person, by noon Friday. The English Composition Examination form, available at the UCD Bookstore, is required. This is a no-fee examination.

General Education

You should consult your Dean’s Office or department adviser in advance to determine exactly how your General Education courses will apply toward your major.

You can choose one of four General Education theme options to help plan your GE courses. The themes, Global Population and Environmental Issues; Biodiversity and Cultural Diversity; Food and Fiber; and Changing Agriculture are described in more detail in the section “General Education Theme Options” in the General Education section at the back of this catalog.

Study Plan Approval

A Study Plan provides for attainment of specific long-term goals and should allow for the acquisition of prerequisite knowledge for courses to be taken in subsequent quarters; the fulfillment of College and major requirements; a proper balance between the demands of the courses and your ability to master the subject matter; and meeting the minimum progress requirements (see the “Academic Information” chapter).

In conjunction with a faculty adviser and/or staff adviser, you must plan and prepare a program that specifies your goals and shows how the graduation requirements will be met. It is a regulation that a written “study plan” be filed with your faculty adviser or staff adviser by the end of the second quarter of the junior year (having completed not more than 120 units either in residence and/or by transfer).

You may be denied registration for future quarters if you do not comply with this regulation. However, filing this study plan does not preclude a change of major or program modifications.

Major Degree Certification

A Major Certification is completed during the quarter you plan to graduate. At that time, you and your faculty adviser and/or staff adviser check to see that all major requirements have been completed. The Dean’s Office completes the degree certification by verifying that all college and university requirements have been satisfied and will notify you with a copy of the Major Certification form.

Degree Requirement Changes

On occasion, the faculty make changes in the requirements that students must satisfy to obtain the baccalaureate degree. So that you will not be penalized by changes that may work to your disadvantage and so that you will benefit by changes that assist you in completing your degree requirements, it is college policy that you may choose to fulfill the university, college and major requirements in effect at the time you were registered at UC Davis. If you have transferred to UC Davis from a community college, state college, or another university, you may follow the requirements as stated in any UC Davis catalog in effect either during the three years immediately preceding your transfer to Davis or at the time you first registered at that institution, whichever is most recent. Once you have chosen the year of the General Catalog under which you wish to be governed, you must satisfy all of the university, college and major requirements specified in that catalog.

College of Engineering

Unit Requirements

Each candidate for the degree of Bachelor of Science in Engineering must satisfactorily complete an approved curriculum in engineering. Each curriculum consists of a specified Lower Division Program (or an approved equivalent program for students who transfer into the
College with 90 or more quarter units) and a specified Upper Division Program. **No unit of coursework you complete may be used to satisfy two different degree requirements (except where the catalog specifically indicates otherwise).** Detailed requirements for the approved curricula are given in the “Programs and Courses” section of this catalog; to see the courses required in your major, consult this section. The minimum number of required units in the combined Lower and Upper Division Programs varies, with the curriculum, from 180 to 195. **You are responsible for planning your program and satisfactorily completing all degree requirements.**

You may, for good cause, request a modification of particular degree requirements by submitting a student petition. These petitions, which are available in the Undergraduate Office, can be a valuable aid in resolving individual program conflicts or other special problems. Such petitions are subject to approval by the Student Petitions Committee, a body of seven professors and six (non-voting) students. A negative decision by the committee may be appealed to the College faculty for action at a regular meeting.

**Transfer students.** To be eligible for transfer, you must have at least 90 transferable quarter units. You will be classified as having upper division status, but you will be required to complete the lower division requirements for your major before your lower division is considered complete. You may, however, start your upper division program while completing your lower division requirements provided you meet all prerequisites for the upper-division courses.

All engineering majors are impacted. For your application for transfer to be considered, you need to have completed a substantial proportion of your lower-division requirements.

For more specific advice on your requirements, see the transfer counselor at your institution, consult Project Assist (available at community college transfer centers) or consult with the advisers in the Engineering dean's office.

### Minimum Subject Areas

<table>
<thead>
<tr>
<th>Subject Areas</th>
<th>Quarter Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mathematics</strong> (calculus, differential equations, linear algebra, vector analysis)</td>
<td>22</td>
</tr>
<tr>
<td><strong>Physical and biological sciences</strong> (typically, at least 10 units must be in general chemistry and at least 12 units in physics courses designed for engineering and physical science students)</td>
<td>22-26</td>
</tr>
<tr>
<td><strong>Engineering</strong> (lower division subjects such as graphics, properties of materials, surveying, computer programming, statics and circuit theory. These courses must include statics, circuits and the programming language required by your major. Students majoring in Mechanical, Aeronautical, Materials Science, Civil, Electrical or Computer Engineering, or Computer Science may have additional course requirements specific to their respective majors. Because of additional lower division chemistry requirements, Chemical Engineering majors may elect to take only 10 units—programming language, circuit theory and statics—of engineering in their lower division programs)</td>
<td>15-26</td>
</tr>
<tr>
<td><strong>Written expression</strong> (two courses in university level composition)</td>
<td>8</td>
</tr>
<tr>
<td><strong>General Education</strong> (courses that are similar to courses acceptable for General Education credit for engineering students)</td>
<td>5-12</td>
</tr>
<tr>
<td><strong>Additional subjects</strong> (Chemical Engineering majors should cover quantitative analysis and one course in organic chemistry with a laboratory component during their sophomore year)</td>
<td>7-8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

Once you have completed the Lower Division Program and fulfilled these specified subject area requirements, you need not take additional lower division courses, except those that are prerequisite to upper division courses in your curriculum. For additional information on core prerequisite courses, please contact your department or college adviser.

**Credit in University Extension Courses.** Appropriate courses taken through University Extension may be used for degree credit; however, you may use a maximum of 16 units of courses taken through University Extension for degree credit. Simultaneous registration in resident courses and Extension courses requires prior approval by the College's Associate Dean for Undergraduate Studies. Such approval will be given only for a limited number of credits. No grade points are assigned for courses completed in University Extension.

**Residence Requirement**

In addition to fulfilling the university residence requirement, you must complete at least 35 of the final 45 units characteristic of your curriculum in engineering while registered in the College.

**Scholarship Requirement**

In addition to meeting the university scholarship requirement, you are required to maintain a 2.0 grade point average for all course work within Engineering.
After completing 70 quarter units, you may elect to satisfy the upper division English Composition requirement by passing the English Composition Examination administered by the College of Letters and Science. (You should take it early in your junior year and must take it before your last quarter. Units of credit are not given for passing this examination.)

Or, upon completion of 90 quarter units, you may satisfy this requirement by completing English 101, 102A, 102B, 102C, 102D, 102E, 102F, 102G, 104A, or 104E with a grade of C– or higher.

This requirement is in addition to the expository writing course requirement (English 1 or 3; Comparative Literature 1, 2, 3 or 4; or Native American Studies 5) specified in the Lower Division Programs.

During the 2000-2001 academic year, the English Composition Examination will be offered on the following three Saturdays: October 21, 2000; January 27, 2001; and April 28, 2001. Sign-up rosters will be posted on the bulletin board near the main English Department office (176 Voorhies), Monday until Friday at noon (or until they are filled) just preceding each Saturday examination date. You must sign up, in person, by noon on Friday. You must obtain the English Composition Examination form, available at the UCD Bookstore, to take the exam.

**Engineering Design Requirement**

Engineering design is the process of devising a system, component, or process to meet certain needs. Design involves a decision-making process (often iterative), in which the basic sciences, mathematics and engineering sciences are applied to convert resources optimally to meet a stated objective. Among the fundamental elements of the design process are the establishment of objectives and criteria, synthesis, analysis, construction, testing and evaluation. You must take an appropriate amount of such design course work through a combination of required and restricted elective courses. Specific comments about design are included in individual curricula descriptions. You should also review the design content of your individual program with your adviser in the course of completing the upper division advising worksheet.

**Electives**

In general, there are three kinds of elective courses in the engineering curricula: General Education, technical, and unrestricted. Transfer students have an additional set of electives: Physical and Biological Sciences electives.

**General Education Electives.** Because, as an engineer, you will be a significant participant in the human setting, you will need to have a breadth of education that will allow you to deal with contemporary social issues and to understand the impact of engineering solutions on the global and societal context. To these ends, you will need to take a minimum of 24 units (33 units for Computer Science and Engineering majors) of General Education electives.

Since all engineering majors are in the Science and Engineering GE topical breadth area, you will fulfill the campus GE requirement by taking courses in the Arts and Humanities and the Social Sciences areas.

In satisfying the GE requirement, note that (a) you must take GE courses for a letter grade, and (b) you must satisfy the Subject A requirement before you can receive GE writing experience credit for any course. In consultation with your academic adviser, you should attempt to design a coherent approach to contemporary issues by using your GE electives.

The list of Arts and Humanities and Social Sciences electives appears at the end of this catalog. Note that you may not take the following courses for GE credit if you are a College of Engineering student:

- Agricultural Education 100, 160, 172
- Animal Science 141, 148
- Applied Science 137
- Civil and Environmental Engineering 165
- Engineering 160
- Entomology 158
- Environmental and Resource Sciences 10
- Fiber and Polymer Science 110
- Food Science and Technology 2
- Geology 115N
- Physics 137, 160
- Plant Biology 141
- Political Science 192A, 192B
- Statistics 10
- Viticulture and Enology 3

**Technical electives** permit you to tailor a program to your own academic and career objectives. For some, the technical electives offer the opportunity to prepare for a specific occupation. For others, they offer an opportunity to broaden a background in the sciences and engineering.

You may receive technical elective credit to a maximum of 6 units for any combination of engineering courses numbered 190C, 192, 197, 198 and 199, unless further restrictions are imposed on your major. Academic credit for 199 courses is limited to a maximum of 5 units per quarter for each substantially different project. Academic credit for engineering internship courses (192s) is also limited to a maximum of 5 units per quarter.

With the exception of the following courses, all upper division courses in engineering, physics, chemistry, mathematics and statistics may be taken as technical electives. The courses which may not be used are:

- Applied Science Engineering 137 (restricted to one unit of technical elective)
- Physics 137 and 160 (restricted to one unit of technical elective), 194HA, 194HB, 195, 197T, 198, 199
- Chemistry 194HA, 194HB, 194HC, 197, 198, 199
- Engineering 160 (restricted to one unit of technical elective)
- Mathematics 192, 194, 197TC, 198, 199
- Statistics 102

In addition to upper division engineering, physics, chemistry, mathematics and statistics courses, the following courses may be taken as technical electives:

- Agricultural Systems and Environment, any upper division course except 101 and 188 through 199
Anatomy, Physiology, and Cell Biology 100
Animal Biology 102, 103
Animal Genetics 101, 107, 108, 109, 111
Animal Science 104, 105
Applied Biological Systems Technology 110L, 134, 161, 163, 170, 175, 180, 181, 182
Atmospheric Science 110, 111, 115, 116, 120, 121A, 121B, 124, 128, 133, 149, 150, 158, 160
Biological Sciences 1A, 1B, 1C, 101, 102, 103, 104, 120, 120P, 122, 122P
Chemistry 2B, 2BH (if not used for your major requirement), 2C, 2CH, 8A, 8B
Economics 140
Environmental Horticulture 100, 102, 105, 120, 125, 130, 133, 144, 145, 149, 150
Environmental Toxicology 101, 112A, 112B, 114A, 114B, 128, 131, 135, 146
Fiber and Polymer Science 100, 150, 161, 161L
Management 11A, 11B
Microbiology 102, 102L, 105, 110, 120, 120L, 140, 150, 155L, 160, 162
Molecular and Cellular Biology 120L, 121, 122, 123, 126, 140L, 141, 142, 150, 150L, 160L, 161, 162, 163, 164, 166
Neurobiology, Physiology, and Behavior, any upper division course
Plant Pathology 120, 123, 130
Soil Science 100, 102, 105, 107, 109, 111, 112, 118, 120
Wildlife, Fish and Conservation Biology 100, 102, 102L, 110, 110L, 111, 111L, 120, 120L, 121, 122, 123, 130, 131, 136, 140, 141, 151, 152, 153, 154, 156, 157

You are urged to discuss the selection of technical elective courses with your academic adviser.

Unrestricted electives. If your curriculum allows for unrestricted electives, you may count any course for which university credit is allowed as an unrestricted elective in the engineering curricula.

Physical and Biological Science electives. Engineering students are required to have 26 units in sciences, typically 10 units of chemistry and 16 units of physics. If you transfer into the College of Engineering with advanced standing, you are required to complete 26 units of physical and biological science by graduation, but you need to have completed only 5-10 units of chemistry (depending on major) and 12 units of physics by the time you transfer. You may make up the remaining 4 units by taking 4 additional units of chemistry, 4 additional units of physics, or 4 units in courses selected from any of the curricula listed below, with the restrictions that follow.

- Atmospheric Science
- Biological Science
- Chemistry
- Evolution and Ecology
- Geology
- Microbiology
- Molecular and Cellular Biology
- Neurobiology and Behavior
- Physics
- Plant Biology

All courses in these departments numbered 10 and 190–199 are excluded for credit, as are the following courses:

- Evolution and Ecology 138
- Geology 1, 3-3G-3L, 4, 116-116G, 135
- Physics 137, 160
- Plant Biology 1, 11, 12

Degree Check

Use the Degree Requirement Check sheets for each of the curricula for monitoring your progress toward a degree. The Undergraduate Office will prepare only one unofficial preliminary degree check for you (preferably at the end of your junior year). You should also request a follow-up degree check during the quarter before you plan to graduate. To have this degree check prepared, submit a signed Degree Check Request. The office will call you to schedule an appointment. You can get further information concerning these services and the forms for requesting a degree check or an exit interview in the Undergraduate Advising Office.

Degree Requirement Changes

Since engineering is a rapidly developing profession, curricular changes are made by the faculty from year to year. To ensure that you benefit from these changes, the College of Engineering has established a policy that you
must fulfill the degree requirements stated in the College of Engineering Bulletin for the year in which you complete degree work or in the Bulletin for the year immediately preceding.

**College of Letters and Science**

**Unit Requirements**

A minimum of 180 units is required for the bachelor's degree. Of these units, 64 must be earned in upper division courses.

**Registration Beyond the 225-unit Limit.** You are normally expected to fulfill all degree requirements within the 180- to 225-unit range. Once 225 units have been completed (excluding units awarded for College Board Advanced Placement Examinations), you may register only with the permission of the dean. Such permission is rarely granted, and then typically only to allow completion of minimum degree requirements. You will be expected to adhere to a program of courses agreed upon and to meet other conditions that may have been set. Approval must be obtained before you will be permitted to register for courses for the quarter following completion of 225 or more units.

If you are in good standing, you will be able to complete 12 quarters or the equivalent (e.g., four years) of college work even if you have earned more than 225 units before you finish your fourth year. You must petition for continuation, however, and file the quarter-by-quarter course program you have planned.

**Unit Credit Limitations**

For certain courses, limits have been established on the number of units that can be counted towards the 180-unit minimum required for the degree. To avoid discovering just before graduation that you are short units, keep track of the number of units you have taken in each of the following categories.

**Limitation on Credit for Graduate and Professional Courses.** Undergraduates may enroll in graduate and professional courses in the 200, 300 and 400 series subject to the restrictions described in the Academic Information section in this catalog. Graduate and professional courses that have been completed will be listed on the student's transcript in the usual manner. However, the units earned may be counted toward degree requirements only under the conditions listed below.

Within the limitations A, B and C given below, undergraduate students in the College may count an unlimited number of units in graduate 200 series courses and up to a combined total of 9 units in 300 and 400 series professional courses toward degree requirements. These units, however, are not counted as upper division units unless this is granted by petition to the dean.

A. The recommendations of the instructor in the course and the department chairperson—in addition to approval from the dean—must be obtained by petition in order to receive credit toward the degree for the following kinds of courses:

- all graduate courses 200–298, whether offered by a department or program outside of or within the College of Letters and Science
- all professional courses 300–398 for teachers offered outside of the College of Letters and Science
- all postgraduate professional courses 400–498 offered outside of the College of Letters and Science
- all variable unit courses 300–398 and 400–498 offered within the College of Letters and Science

B. The minimum eligibility conditions for an undergraduate student in the College to petition for degree credit for a 200, 300, or 400 series course are a UC grade point average of 3.3 and completion of 18 upper division units basic to the subject matter of the course. These eligibility conditions may be waived, however, upon the recommendation of the course instructor and concurrence of the department chairperson if the student's preparation warrants exception.

C. Undergraduates in the College cannot receive degree credit for special study courses 299, 399, or 499.

**Limitation on Credit for Units Graded P.** Excluding courses that are graded on a Passed/Not Passed (P/NP) basis only, the number of units graded P that may be accepted toward a degree in the College of Letters and Science is limited to not more than one fourth of the units completed on the Davis campus.

The Academic Senate limits the total number of courses graded P, including units earned in courses graded “P/NP only,” to one third of the units completed on the Davis campus. This limitation applies to all Davis undergraduates, including Letters and Science students.

**Limitation on Credit for University Extension Courses.** Students may apply credit earned in University Extension courses toward the 180-unit requirement only when written approval has been obtained from the dean before registration. The degree credit allowed by the dean for Extension courses is usually less than the unit value listed in the course description. A maximum of 9 units may be offered for elective credit only. Such units and courses may not be applied toward fulfillment of the Area, Foreign Language, Upper Division, or Residence requirements of the College. No grade points are assigned for courses completed in University Extension.

**Other Unit Credit Limitations.** The following are additional courses that have limits on the number of units that can be counted toward your degree.

- *Internship courses (numbers 92, 192):* 12 units maximum including internship units taken at other institutions. (See under Nonstandard courses below.)
- *Nonstandard courses (92, 97T, 97TC, 99, 192, 194H, 197T, 197TC, 199 and similar courses):* 30 units maximum or one-sixth of the units taken at UC Davis, whichever is the smaller. (Note the separate unit limits on internship, special study and tutoring courses; and major limitations.)
Physical Education 1 and 6 (combined): 6 units maximum.

Special Study courses (99, 194H, 199): 5 units maximum in any one quarter. (See under Nonstandard courses above.)

Tutoring courses (97T, 97TC, 197T, 197TC): 10 units maximum. (See under Nonstandard courses above.)

Residence Requirement

While registered in the College of Letters and Science, a minimum of 27 upper division units, including 18 upper division units in the major, must be completed on the Davis campus. (Work completed while registered in the Education Abroad Program does not satisfy campus or College Residence requirements.)

Scholarship Requirement

The minimum grade point average to satisfy the scholarship requirement is 2.0 for all courses counted toward the major and for all upper division courses used to satisfy major requirements. Only grades earned in courses taken at UC Davis will be included in the grade point computations. To obtain these minimum averages in the major, you may repeat courses that are graded D or F. If you have to repeat a course more than once, you need the dean's approval.

English Composition Requirement

The English Composition requirement can be met in one of two ways:

1. by passing the English Composition Examination upon completion of 70 units of degree credit (the examination does not yield credit); OR

2. by completing with a grade of C– (or P) or better

   a) one course from English 1, 3, 18, 19, Comparative Literature 1, 2, 3, 4, or Native American Studies 5; and

   b) English 101, 102A, 102B, 102C, 102D, 102E, 102F, 102G, 104A, 104B, 104C, 104D, 104E, or 104F (which must be taken after 84 units have been completed).

Transfer Courses in English Composition. Transfer courses considered by the dean to be equivalent or comparable to English 1, 3, 18, 19, 101, 104A, 104B, 104C, 104D, 104E, Comparative Literature 1, 2, 3, 4, or Native American Studies 5 will be accepted toward satisfaction of the English Composition requirement. Note that English 101 and 104A, 104B, 104C, 104D, 104E, and 104F or the equivalent must be taken after you have completed 84 units of transferable degree credit.

If your transfer work does not include an acceptable English composition course taken after you had completed or accumulated 84 units, you may fulfill the requirement by examination (see below) or take English 101, 102A, 102B, 102C, 102D, 102E, 102F, 102G, 104A, 104B, 104C, 104D, 104E, or 104F at UC Davis.

English Composition Examination. This academic year, the no-fee examination will be offered on the following Saturday mornings:

   October 21, 2000
   January 27, 2001
   April 28, 2001

There are no examinations given during the summer. Sign-up rosters will be posted on the bulletin board near the main English Department office (176 Voorhies), Monday until Friday at noon (or until they are filled) just preceding each Saturday examination date. You must sign up, in person, by noon Friday. The English Composition Examination form, available at the UCD Bookstore, is required.

Area (Breadth) Requirement

The College Breadth Requirement promotes the intellectual growth of students by asking them to acquire a broader background of knowledge than is provided by the usual major. The Breadth requirement also guides students in exploring the interdependence of knowledge and, in the case of the A.B. degree, provides students the opportunity to become acquainted with performance in the fine arts.

A.B. degree—satisfaction of the campus General Education requirement plus completion of one of the following options:

a. a “Mini Minor” consisting of a minimum of three approved upper division courses in a single Letters and Science department or program other than the major (and which are not offered in satisfaction of major requirements);

OR

b. a minimum of three approved lower or upper division courses in Art, Music, or Dramatic Art from outside the student’s major;

OR

c. a certified minor from any UC Davis college or program.

The Letters and Science faculty believes that the completion of a certified minor is often the best way for a student to obtain structure and coherence in pursuit of intellectual breadth.

For the purposes of options a and b above, all courses are considered as approved except: courses bearing less than 3 units of credit, internship courses, non-standard courses, directed group study courses, and courses used to satisfy the College English Composition Requirement.

B.S. degree—a total of 90 units in natural sciences/mathematics; and satisfaction of the General Education requirement.

Courses numbered 92, 97T, 97TC, 98, 192, 197T, 197TC, 198, and from 200 through 499 cannot be counted toward satisfaction of the natural sciences/mathematics Area requirement. A maximum of 10 units in special study courses (99, 194H, 199) may be counted toward that portion of the Area requirement. Courses used to satisfy the English Composition and Foreign Language requirements may not be counted toward the Area requirement. Subject to the restrictions just listed, courses acceptable for fulfilling the 90-unit natural sciences/mathematics Area requirement are:
Education

Undergraduate

1. Satisfication of language courses as follows: The Foreign Language requirement may be satisfied by examination or completion of language courses as follows:

   - Undergraduate Education

   - Natural Sciences and Mathematics
     - Anatomy, Physiology and Cell Biology 100
     - Anthropology 1, 5, 15, 151, 152, 153, 154A, 154B, 155, 156, 137, 158
   - Astronomy
   - Avian Sciences 13
   - Biological Sciences
   - Cell Biology and Human Anatomy 101, 101L
   - Chemistry
   - Engineering 5, 102
   - Engineering: Electrical and Computer
   - Entomology 10, 100, 153
   - Environmental and Resource Sciences 131
   - Environmental Science and Policy 30, 100, 121, 126
   - Environmental Toxicology 101
   - Evolution and Ecology
   - Exercise Science 101, 102, 103, 110, 111, 112, 113, 115, 116, 117, 126, 133, 135
   - Fiber and Polymer Science 110
   - Food Science and Technology 2, 100A, 100B, 101A, 101B
   - Geography 1
   - Geology
   - Integrated Studies 8A
   - Mathematics
   - Microbiology
   - Molecular and Cellular Biology
   - Neurobiology, Physiology and Behavior
   - Nutrition 10, 101, 111
   - Pathology, Microbiology and Immunology 126
   - Physics
   - Plant Biology
   - Psychology 41, 100, 101, 103, 104, 105, 113, 121, 122, 123, 124, 126, 127, 128, 129, 130, 131, 135, 140, 180B
   - Statistics
   - Wildlife, Fish and Conservation Biology 10

   - Foreign Language Requirement

   Foreign Language Requirement (A.B. and B.A.S. degrees)

   The Foreign Language requirement may be satisfied in any language offered at UC Davis, or for which transfer credit is allowed from another academic institution (including American Sign Language).

   You may also satisfy this requirement by examination in a language not offered on the Davis campus. In this case, the Dean’s Office will assist you in making arrangements to take an examination on another University of California campus, with a faculty member who teaches the language in question.

   Satisfaction of the Requirement. Plan to complete the Foreign Language Requirement by the end of your first or second year, as program priorities permit. This is particularly important if you plan to apply for the university’s Education Abroad Program. The Foreign Language requirement may be satisfied by examination or completion of language courses as follows:

   1. Foreign Language Placement Test. This test does not yield unit credit—it only determines whether the Foreign Language requirement has been met, or at which point in the language sequence you should enroll.

   You may validate your knowledge of a language learned in high school by taking this test. A test may not be taken, however, in a language for which you have already received degree credit. If you are a transfer student, consult your Graduation Requirement Degree Check, which is issued by the Dean’s Office within a quarter after enrollment.

   2. College Board SAT II: Subject Test. Earning a qualifying score of at least 550 on a College Board Foreign Language Subject Test satisfies the requirement. This test may be taken at any time during your high school career. Once your score is on file at Undergraduate Admissions and Outreach Services, notify the Letters and Science Dean’s Office so that satisfaction of the College requirement can be noted on your record.

   3. College Board Advanced Placement Examination. A score of 5, 4, or 3 on any foreign language College Board Advanced Placement Examination, with the exception of Latin, taken in high school will satisfy the Foreign Language requirement.

   4. Course Completion in College (or the equivalent). A.B. and B.A.S. degrees—15-unit level in one language (e.g., Spanish 3 or Japanese 3). B.S degree—none, but as is required in the major program.

   If you have successfully completed the second or third year of a language in the tenth or higher grade in high school you may receive unit credit for course 1 of that language on a P/NP grading basis only. Although a Passed or Not Passed grade will be charged to your P/NP option, no petition is required. (See “Passed/Not Passed (P/NP) Grading” in the “Academic Information” chapter.)

   5. Proficiency Examination. If you have not completed the required level language course, but assume you have attained equivalent knowledge, you may satisfy the language requirement by passing a proficiency examination. For more information, consult the appropriate foreign language department.

   Major Program Requirements

   Requirements for major programs are described in the Programs and Courses section of this catalog. These requirements are fulfilled by completing a major program offered by a teaching department or program committee in the College of Letters and Science (see the list of majors) or an individual major program approved by the College’s Committee on Individual Majors.

   No more than 6 units in internship courses (numbered 92, 192, or similar internship courses), may be accepted in satisfaction of the requirements of major programs. Courses numbered 97T, 97TC, 197T and 197TC do not satisfy unit or course requirements in the major.

   Degree Check

   Before the beginning of your senior year, take some time to consider your goals and to plan the academic program for your final year as an undergraduate. To plan properly and to ensure that you get the most out of your remaining education and complete all graduation
requirements as well, you should know what requirements remain unsatisfied. To help you in these efforts, the Undergraduate Education and Advising Office provides informational materials and instructions on how to evaluate your progress on college and university requirements. Many departments provide similar information regarding your major requirements.

Once you have completed 135 units of degree credit, you should contact your faculty adviser for a check of your major requirements. At approximately this point, the Undergraduate Education and Advising Office will provide each student with one official degree check summarizing your progress in fulfilling college and university requirements.

**Degree Requirement Changes**

On occasion, the faculty makes changes in the requirements that students must satisfy to obtain the baccalaureate degree. So that you will not be penalized by changes that may work to your disadvantage and so that you will benefit by changes that assist you in completing your degree requirements, it is College policy that you may choose to fulfill the university and College requirements (see General Education requirement for an exception) as stated in any UC Davis *General Catalog* in effect at any time you were registered in a postsecondary institution of higher education (i.e., community college, college, or university). Once you have chosen the year of the *General Catalog* under which you wish to be governed, you must satisfy all of the university and college requirements specified in that catalog.

With respect to the completion of your major requirements, most of the majors in the College of Letters and Science require completion of the major degree requirements in effect at the time you officially declared your major. However, because departments differ in how they handle these matters, check with the department or major program office if you have any questions about which requirements apply to you.

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Each spring the UC Davis Quad comes alive with the sights, sounds and tastes of diversity as the campus celebrates Asian Pacific Culture Week, Native American Culture Days, La Raza Cultural Days and African American Family Week.