

New GEC Requirements for the Bachelor of Arts

(These requirements apply to freshman entering the university Summer Quarter 2007 or later.)*

1. SKILLS AREAS (40 HOURS)

A. Writing and Related Skills (10 hours)

- First Course (English 110)
- Second Course (367)
- Third Course in major as required by individual programs

B. Quantitative and Logical Skills (9-10 hours)

- Basic Computational Skills: Mathematics Placement R or higher, or Mathematics 075, 076, or 104. (Credit hours earned for Mathematics 075 or 076 do not count toward the minimum hours required for the degree.)
- Mathematical and Logical Analysis: Math Placement L or select one course from the list.
- Data Analysis: Select 1 course from the list. Courses approved to do so may overlap with the major.

C. Foreign Language (20 hours)

Proficiency through 104

2. BREADTH AREAS (45 HOURS)

A. Natural Sciences (15 hours)

Select one two-course sequence in either the biological or the physical sciences, and one other course. At least one course must be from the biological sciences and at least one from the physical sciences. At least one course must have a laboratory component.

B. Social Sciences (10 hours)

Select two courses and include at least two categories. A maximum of five hours is permitted from the area of the major, but these hours may not be counted on the major.

- Individuals and Groups
- Organizations and Politics
- Human, Natural, and Economic Resources

C. Arts and Humanities (10 hours)

Select ten hours with at least five hours from the Literature category and five hours from the Visual/Performing Arts category. A maximum of five hours is permitted from the area of the major, but these hours may not be counted on the major.

- Literature
- Visual/Performing Arts
- Cultures and Ideas

D. Additional Breadth Selections (10 hours)

In consultation with their advisors, students should select two courses from any of the breadth areas. These courses may not be selected from the area of the major.

3. HISTORICAL STUDY (10 HOURS)

Select two courses. The first course must come from the approved list. The second can be from the list or any History course at the 500-level (except 598).

4. DIVERSITY EXPERIENCES (three courses/0-15 HOURS)

- Social Diversity in the US: one course, may overlap with another category or with the major
- International Issues: one non-western/global course; may overlap with another GEC category or with the major
- Another course that may be non-western/global or western (non-US); may overlap with another GEC category or with the major.

5. ISSUES OF THE CONTEMPORARY WORLD (5 HOURS)

Select 1 course from the approved list.

*The current GEC requirements apply to all undergraduate students in the Arts and Sciences admitted to the university and enrolled for any quarter prior to Summer Quarter, 2007; and to transfer students admitted to the university for Summer Quarter or Autumn Quarter, 2007, who have earned 45 or more hours of transfer credit. The new GEC requirements apply to students beginning their careers as regularly enrolled college students in Summer Quarter or Autumn Quarter, 2007

Current and New B.A. GEC Requirements

Current GEC Requirements for the Bachelor of Arts

(These requirements apply to students admitted prior to Summer Quarter 2007.^{*)}

1. **Writing & Related Skills (10 Hours)**
 - A. First Course (English 110)
 - B. Second Course (367)
 - C. Third Course in major as required by individual programs
2. **Quantitative and Logical Skills (10 hours)**
 - A. Basic Computational Skills: Mathematics Placement R or higher, or Mathematics 075, 076, or 104 (Credit hours earned for Mathematics 075 or 076 do not count toward the minimum hours required for the degree.)
 - B. Mathematical and Logical Analysis: Mathematics Placement L or select one course from the list
 - C. Data Analysis: Select one course from the list.
3. **Natural Sciences (20 hours)**

Select one two-course sequence in either the biological or the physical sciences, and two other courses. At least one of the four courses must be from the biological sciences and at least one from the physical sciences. At least one of the four courses chosen must have a laboratory component.
4. **Social Sciences (15 hours)**

Select three courses from the lists, with at least one course from two of the three categories.

 - A. Individuals and Groups
 - B. Organizations and Politics
 - C. Human, Natural, and Economic Resources
5. **Arts and Humanities (25 hours)**
 - A. Historical Survey (10 hours): Complete one two-course sequence.
 - B. Analysis of Texts and Works of Art (15 hours): Select 15 hours from the lists, with at least five hours from the Literature category and five hours from the Visual/Performing arts category.
 1. Literature
 2. Visual/Performing Arts
 3. Cultures and Ideas
6. **Diversity Experiences (three courses/0-15 hours)**
 - A. Social Diversity in the US: one course, may overlap with another category
 - B. International Issues: one non-western/global course and another course that may be non-western/global or western (non-US); courses may overlap with another category
7. **Foreign Language**

Proficiency through 104
8. **Issues of the Contemporary World 5 hours**

Select one course selected from approved list.

New GEC Requirements for the Bachelor of Arts

(These requirements apply to freshman entering the university Summer Quarter 2007 or later.^{*)}

1. SKILLS AREAS (40 HOURS)

- A. **Writing and Related Skills (10 hours)**
 - First Course (English 110)
 - Second Course (367)
 - Third Course in major as required by individual programs
- B. **Quantitative and Logical Skills (9-10 hours)**
 - Basic Computational Skills: Mathematics Placement R or higher, or Mathematics 075, 076, or 104. (Credit hours earned for Mathematics 075 or 076 do not count toward the minimum hours required for the degree.)
 - Mathematical and Logical Analysis: Mathematics Placement L or select one course from the list
 - Data Analysis: Select 1 course from the list.
- C. **Foreign Language (20 hours)**

Proficiency through 104

2. BREADTH AREAS (45 HOURS)

IN ADDITION TO THE INDIVIDUAL AREA REQUIREMENTS BELOW, STUDENTS SELECT TWO COURSES FROM ANY OF THE BREADTH AREAS TO COMPLETE 45 BREADTH HOURS.

- A. **Natural Sciences (15 hours)**

Select one two-course sequence in either the biological or the physical sciences, and one other course. At least one course must be from the biological sciences and at least one from the physical sciences. At least one course must have a laboratory component.
- B. **Social Sciences (10 hours)**

Select two courses and include at least two categories.

 - Individuals and Groups
 - Organizations and Politics
 - Human, Natural, and Economic Resources
- C. **Arts and Humanities (10 hours)**

Select ten hours, with at least five hours from the Literature category and five hours from the Visual/Performing Arts category.

 - Literature
 - Visual/Performing Arts
 - Cultures and Ideas

3. HISTORICAL STUDY (10 HOURS)

Select two courses. The first course must come from the approved list. The second can be selected from the list or can be any History course at the 500-level (except 598).

4. DIVERSITY EXPERIENCES (three courses/0-15 HOURS)

- Social Diversity in the US: one course, may overlap with another category or with the major
- International Issues: one non-western/global course and another course that may be non-western/global or western (non-US); courses may overlap with another category or with the major

5. ISSUES OF THE CONTEMPORARY WORLD (5 HOURS)

Select 1 course from the approved list.

^{*}The current GEC requirements apply to all undergraduate students in the Arts and Sciences admitted to the university and enrolled for any quarter prior to Summer Quarter, 2007; and to transfer students admitted to the university for Summer Quarter or Autumn Quarter, 2007, who have earned 45 or more hours of transfer credit. The new GEC requirements apply to students beginning their careers as regularly enrolled college students in Summer Quarter or Autumn Quarter, 2007 (some of these students may have earned more than 45 hours of transfer credit completed while they were enrolled in high school); and to transfer students admitted to the university for Summer Quarter or Autumn Quarter, 2007, who have earned fewer than 45 hours of transfer credit.

New GEC Requirements for the Bachelor of Science

(These requirements apply to freshman entering the university Summer Quarter 2007 or later. *)

1. SKILLS AREAS (40 HOURS)

A. Writing and Related Skills (10 hours)

- First Course (English 110)
- Second Course (367)
- Third Course in major as required by individual programs

B. Quantitative and Logical Skills (9-10 hours)

- Basic Computational Skills: Mathematics Placement R or higher, or Mathematics 104
- Mathematical and Logical Analysis: Mathematics 151-152
- Data Analysis: Taken as part of major program

C. Foreign Language (20 hours)

Proficiency through 104

2. BREADTH AREAS (50 HOURS)

A. Natural Sciences (20 hours)

Select one two-course sequence in either the biological or the physical sciences, and two other courses. At least one course must be from the biological sciences and at least one from the physical sciences. At least one of the four courses chosen must have a laboratory component.

B. Social Sciences (10 hours)

Select two courses and include at least two categories. A maximum of five hours is permitted from the area of the major, but these hours may not be counted on the major.

- Individuals and Groups
- Organizations and Politics
- Human, Natural, and Economic Resources

C. Arts and Humanities (10 hours)

Select ten hours, with at least five hours from the Literature category and five hours from Visual/Performing Arts category. A maximum of five hours is permitted from the area of the major, but these hours may not be counted on the major.

- Literature
- Visual/Performing Arts
- Cultures and Ideas

D. Additional Breadth Selections (10 hours)

In consultation with their advisors, students should select two courses from any of the breadth areas, from course work in Mathematics beyond the level of 152 or in Statistics at or above the level of 400, or from courses approved to meet the Issues of the Contemporary World requirement on the Bachelor of Arts degree. These courses may not be selected from the area of the major.

3. HISTORICAL STUDY (10 HOURS)

Select two courses. The first course must come from the approved list. The second can be selected from the list or can be any History course at the 500-level (except 598).

4. DIVERSITY EXPERIENCES (three courses/0-15 HOURS)

- Social Diversity in the US: one course, may overlap with another category or with the major
- International Issues: one non-western/global course; may overlap with another GEC category or with the major
- Another course that may be non-western/global or western (non-US); may overlap with another GEC category or with the major.

*The current GEC requirements apply to all undergraduate students in the Arts and Sciences admitted to the university and enrolled for any quarter prior to Summer Quarter, 2007; and to transfer students admitted to the university for Summer Quarter or Autumn Quarter, 2007, who have earned 45 or more hours of transfer credit. The new GEC requirements apply to students beginning their careers as regularly enrolled college students in Summer Quarter or Autumn Quarter, 2007 (some of these students may have earned more than 45 hours of transfer credit completed while they were enrolled in high school); and to transfer students admitted to the university for Summer Quarter or Autumn Quarter, 2007, who have earned

Current and New B.S. GEC Requirements

Current GEC Requirements for the Bachelor of Science

(These requirements apply to students admitted prior to Summer Quarter 2007.⁹)

1. **Writing & Related Skills (10 Hours)**
 - A. First Course (English 110)
 - B. Second Course (367) (Courses approved to do so can overlap with either another GEC category or with the major.)
 - C. Third Course in major as required by individual programs
2. **Quantitative and Logical Skills (10 hours)**
 - A. Basic Computational Skills: Mathematics Placement R or higher, or Mathematics 104
 - B. Mathematical and Logical Analysis: Mathematics 151-152
 - C. Data Analysis: Taken as part of major program
3. **Natural Sciences (25 hours)**

Select one two-course sequence in either the biological or the physical sciences, and three other courses. At least one of the five courses must be from the biological sciences and at least one from the physical sciences. At least three of the five courses chosen must have a laboratory component.
4. **Social Sciences (15 hours)**

Select three courses from the lists, with at least one course from two of the three categories.

 - A. Individuals and Groups
 - B. Organizations and Politics
 - C. Human, Natural, and Economic Resources
5. **Arts and Humanities (25 hours)**
 - A. Historical Survey (10 hours): one two-course sequence
 - B. Analysis of Texts and Works of Art (15 hours): Select 15 hours from the lists, with at least 5 hours from the Literature category and 5 hours from the Visual/Performing Arts category.
 1. Literature
 2. Visual/Performing Arts
 3. Cultures and Ideas
6. **Diversity Experiences (three courses/0-15 hours)**
 - A. Social Diversity in the US: one course, may overlap with another category
 - B. International Issues: one non-western/global course and another course that may be non-western/global or western (non-US); courses may overlap with another category
7. **Foreign Language**

Proficiency through 104

New GEC Requirements for the Bachelor of Science

(These requirements apply to freshman entering the university Summer Quarter 2007 or later.⁹)

1. SKILLS AREAS (40 HOURS)

- A. **Writing and Related Skills (10 hours)**
 - First Course (English 110)
 - Second Course (367) (Courses approved to do so can overlap with either another GEC category or with the major.)
 - Third Course in major as required by individual programs
- B. **Quantitative and Logical Skills (9-10 hours)**
 - Basic Computational Skills: Mathematics Placement R or higher, or Mathematics 104
 - Mathematical and Logical Analysis: Mathematics 151-152
 - Data Analysis: Taken as part of major program
- C. **Foreign Language (20 hours)**

Proficiency through 104

2. BREADTH AREAS (50 HOURS)

IN ADDITION TO THE INDIVIDUAL AREA REQUIREMENTS BELOW, STUDENTS MAY SELECT TWO COURSES FROM ANY OF THE BREADTH AREAS, FROM COURSE WORK IN MATHEMATICS BEYOND THE LEVEL OF 152 OR STATISTICS AT OR ABOVE THE LEVEL OF 400, OR FROM COURSES APPROVED TO MEET THE ISSUES OF THE CONTEMPORARY WORLD REQUIREMENT ON THE BACHELOR OF ARTS DEGREE, TO COMPLETE 45 BREADTH HOURS.

- A. **Natural Sciences (20 hours)**

Select one two-course sequence in either the biological or the physical sciences, and two other courses. At least one of the four courses must be from the biological sciences and at least one from the physical sciences. At least one of the four courses chosen must have a laboratory component.
- B. **Social Sciences (10 hours)**

Select two courses and include at least two categories.

 - Individuals and Groups
 - Organizations and Politics
 - Human, Natural, and Economic Resources
- C. **Arts and Humanities (10 hours)**

Select ten hours, with at least five hours from the Literature category and five hours from the Visual/Performing Arts category.

 - Literature
 - Visual/Performing Arts
 - Cultures and Ideas

3. HISTORICAL STUDY (10 HOURS)

Select two courses. The first course must come from the approved list. The second can be selected from the list or can be any History course at the 500-level (except 598).

4. DIVERSITY EXPERIENCES (three courses/0-15 HOURS)

- Social Diversity in the US: one course, may overlap with another category or with the major
- International Issues: one non-western/global course and another course that may be non-western/global or western (non-US); courses may overlap with another category or with the major

Note: The drop-a-GEC course option available for selected majors under the previous curriculum is no longer available under the new requirements.

⁹The current GEC requirements apply to all undergraduate students in the Arts and Sciences admitted to the university and enrolled for any quarter prior to Summer Quarter, 2007; and to transfer students admitted to the university for Summer Quarter or Autumn Quarter, 2007, who have earned 45 or more

The New General Education Curriculum Questions and Answers

Why do we have a new GEC?

Following the report, in autumn 2004, by the Committee for the University-wide Review of Undergraduate Education (the McHale Report), the Arts and Sciences Committee on Curriculum and Instruction (CCI) began to consider how to re-arrange requirements in the General Education Curriculum, which the McHale Report substantially endorsed, to improve the coherence, flexibility, and transparency of the curriculum for students and faculty, all improvements the report recommended. The new curriculum represents the CCI's recommendations, which were subsequently approved by the Arts and Sciences Faculty Senate and the Council on Academic Affairs.

How is the new curriculum more transparent?

Broadly, the GEC requirements have been rearranged under overarching categories—"Skills Areas" ("Writing and Related Skills," "Quantitative and Logical Skills," and "Foreign Language"); "Breadth Areas," ("Natural Science," "Social Science," and "Arts and Humanities"); "Historical Study"; and "Diversity Experiences." The Bachelor of Arts degree requires, additionally, that students complete an integrating course that considers "Issues of the Contemporary World." Transparency will also depend on communicating the goals of these requirements more effectively to students and faculty.

How is the new curriculum more flexible than the old one?

Although rearranged, many of the GEC requirements are essentially unchanged. The most noticeable changes are in the requirements now listed under "Breadth Areas," where the new GEC allows students more room for choice. Under the previous requirements, students pursuing the Bachelor of Arts degree needed to complete a total of ten courses in these areas: four in the natural sciences, three in the social sciences, and three in the arts and humanities. Under the new requirements, students must complete at least nine courses in these areas: a minimum of three in the natural sciences, two in the social sciences, and two in the arts and humanities (while also satisfying the same distribution requirements they needed to complete under the previous curriculum). Additionally, students must complete two courses of their own choice from any of the three breadth areas, options that should allow each student to explore areas of particular interest, appropriate to his or her academic goals.

The breadth requirements for the Bachelor of Science degree follow a similar pattern. The previous curriculum required eleven courses—five in the natural sciences, three in the social sciences, and three in the arts and humanities. Students must now complete ten courses—a minimum of four in the natural sciences, two in the social sciences, and two in the arts and humanities, as well as two courses the student will select. Bachelor of Science students can choose these courses not only from the list of approved GEC courses under the "Breadth Areas," but also from Mathematics courses above the level of 152, from Statistics courses at or above the level of 400, and from the list of courses approved for the "Issues of the Contemporary World" category on the Bachelor of Arts degree (which is not required for the Bachelor of Science).

How have requirements been altered to accommodate the reduction of the minimum hours required for the degree from 191 to 181?

Five hours have been eliminated by dropping one course from the breadth requirements (students will take one course fewer in each of the three breadth areas, replacing two of them with courses the student will select). On the BA and on some BS programs, students will take five fewer hours of electives. In

many BS programs in the natural sciences, the real saving will occur in the two student-selected course choices, because students in many of these programs are already required to over satisfy GEC math and science requirements, in fulfilling the extensive prerequisites to the major.

How do I know what students will be under the old curriculum and what students will be under the new curriculum?

The current GEC requirements apply to all undergraduate students in the Arts and Sciences admitted to the university and enrolled for any quarter prior to Summer Quarter, 2007; and to transfer students admitted to the university for Summer Quarter or Autumn Quarter, 2007, who have earned 45 or more hours of transfer credit. The new GEC requirements apply to students beginning their careers as regularly enrolled college students in Summer Quarter or Autumn Quarter, 2007 (some of these students may have earned more than 45 hours of transfer credit completed while they were enrolled in high school); and to transfer students admitted to the university for Summer Quarter or Autumn Quarter, 2007, who have earned fewer than 45 hours of transfer credit.

How will petitions be reviewed for students who are under the provisions of the earlier curricular requirements, but request to be allowed to finish a degree under the newer requirements?

Students will have access to a petition process (as they always do) through which they can ask for exceptions, but students should be aware that they are indeed asking for exceptions and that approvals are not likely to be routine. Petitions will be assessed by two criteria, both of which must be convincingly demonstrated: 1) the student would suffer hardship by having to take the additional required hours (we'd expect, to take one example, documentation of a job offer contingent on receiving the degree, for students making a request based on reasons of that sort); *and* 2) the academic rigor of the student's program. It won't suffice for the student to claim that his remaining course work would consist only of elective hours that could be completed by taking "meaningless" courses, especially if that is essentially what the student has already been doing with elective course work. The university is counting on advising, wherever it occurs, to raise the level of the conversations we have with students about the course work they are taking, and in some ways, conversing with students about these issues will afford occasions to do that.

Students may also seek access to some of the other provisions of the new curriculum (not just the reduction in hours). These petitions will be evaluated on the basis of compensatory curricular strength and good academic reasons for wanting, for example, to take only three science courses for the BA degree. In a petition like that one, we'd look for balancing strength in the science courses (and math courses) the student has taken and the strength of the course the student was asking to select and its value to the coherence of the student's program. We've actually been considering petitions that seemed to be making requests in the spirit of "McHale" since the McHale Report came out (and, in fact, long before that)—and have been considering them on these same criteria—so this amounts to business as usual, though perhaps more of it.

General Education Template for the College of Engineering
Approved by CCAA May 2007; Approved by Council on Academic Affairs May 2007

	# of Crs	Hours
1. Skills		
Quantitative & Logical Analysis: Math 151, 152 Selected Breadth Courses: Math 153, 254	4	20
Writing and Related Skills: English 110, Second Writing Course, and Third Writing Course(s) in the major.	3+ (Varies depending on student's major)	10+
Foreign Language: Waived – advanced study may be used for substitution for other GEC courses. A. The completion of a foreign language sequence through the 104 level (one to four language courses) can be substituted for one (5 hour) GEC course requirement from the Arts and Humanities categories of Cultures and Ideas. A student receiving advanced placement through the 104 level must take a minimum of one foreign language course with a prerequisite of 104 to receive this GEC credit. B. The completion of a minor within a foreign language department (which includes the completion of a language through 104) can be substituted for two (5 hours each) GEC courses. One course would be from the Arts & Humanities categories of Literature or Cultures and Ideas. The second course would be from the Social Sciences categories of Individuals and Groups or Organizations and Politics. This two course substitution is not in addition to the substitution discussed in number 1.	0	0
2. Breadth		
Natural Science: Chemistry 121, Physics 131 & 132, and an additional science from an approved list	4	20
Social Science: 1 to 2 courses, 5 to 10 hours, from a list containing approved Social Science courses, no more than one course from a group. (See Note) A. Individual and Groups B. Organizations and Politics C. Human, Natural & Economic Resources	1-2	5-10
Arts & Humanities: 1 to 2 courses, 5 to 10 hours, from a list containing approved Arts & Humanities courses, no more than one course from a group. (See Note) A. Literature B. Visual/Performing Arts C. Cultures and Ideas	1-2	5-10
3. Historical Study: Students will choose 1 to 2 courses, 5 to 10 hours, from a list containing approved Historical Study courses. (See Note)	1-2	5-10
4. Issues of the Contemporary World: Waived, A Social Science 597 may be substituted for a 5 hrs Social Science course; A 5 hr Arts & Humanities 597 may be substituted for a 5 hr Arts & Humanities course.	0	0
5. Diversity Experiences: Students choose 1 overlap course as prescribed.	1	0
6. Ethics: Students choose 1 course from an approved list. This course will count as a Social Science or an Arts & Humanities Course depending on the course selected.	1	0
Total	16-18+	75+

Note: Programs will have the option of designating or allowing their students to choose which Social Science, Arts & Humanities, and History courses are taken. A minimum of 5 courses, 25 hours, must be taken within these three categories.