College of Engineering

Contact Information:
Campus Location: 123 Science and Engineering Offices (SEO)
(312) 996-3463
engineering.uic.edu

Administration:
Dean, Peter Nelson
Associate Dean—Undergraduate Affairs, Ludwig C. Nitsche, lcn@uic.edu
Director of Engineering Admissions and Records, James Muench, jmuench@uic.edu
Student Services: 123 SEO
Academic Advising: 123 SEO (for appointments)
Departments: Bioengineering (BIOE), Chemical Engineering (CHE), Civil and Materials Engineering (CME), Computer Science (CS), Electrical and Computer Engineering (ECE), and Mechanical and Industrial Engineering (MIE)

- Introduction (p. 1)
  - Mission of the College (p. 1)
  - Undergraduate Study in Engineering (p. 1)
  - Educational Objectives (p. 2)
- Accreditation (p. 2)
- Degree Requirements (p. 2)
  - Semester Hour Requirement (p. 2)
  - Course Requirements (p. 2)
  - Other Requirements (p. 3)
- College Policies (p. 4)
  - Academic Load (p. 4)
  - Academic Probation and Dismissal Rules (p. 4)
  - Change of Course Schedule—Dropping Courses (p. 4)
  - Changes within a Major (p. 4)
  - Class Attendance (p. 4)
  - Course Prerequisites (p. 5)
  - Credit/No Credit Option (p. 5)
  - Declaring a Major (p. 5)
  - Double Major, Double Degree, and Second Bachelor’s Degree (p. 5)
  - Graduate-Level Courses for Undergraduate Credit (p. 5)
  - Proficiency Examinations (p. 5)
  - Registration Approval (p. 5)
  - Repeat Policy for Standard Graded Courses (p. 5)
  - Transferring (p. 6)
  - Undergraduate Research in Engineering (p. 6)
- Minors (p. 6)
  - Requirements for the Minor (p. 6)
  - Admission to an Engineering Minor (p. 7)
  - Engineering Minors for Non-Engineering Students (p. 7)
- Minor Areas Outside of Engineering for Engineering Students (p. 7)
  - Area of Concentration (p. 7)
- Academic Advising (p. 7)
  - Advising Policy (p. 7)
  - Academic Honors (p. 7)

Introduction
The College of Engineering offers degree programs in engineering and computer science. These degree programs prepare men and women for one or more of the many career opportunities in the engineering or computer science professions, such as those in design, production, research, development, management, or sales. An engineering or computer science education also prepares a student for further study in medicine, law, business administration, and other areas.

Instruction in the college is complemented by intensive research activity by most of the faculty. Research is directed toward supporting the educational programs of the college, solving contemporary technological problems, and extending the frontiers of scientific knowledge. This continuing research activity helps to ensure the integrity and progressive evolution of instructional programs at all levels. In conjunction with their teaching and research, many of the faculty also engage in public service activities in the community and in government on the local, state, and federal levels.

Mission of the College
The mission of the College of Engineering at the University of Illinois at Chicago is to provide the opportunity for each student to become all that he or she is capable of becoming through excellence in education in the three areas of teaching, research, and service. In the area of teaching, the college provides academic excellence to its students through ten Bachelor of Science programs in six departments: Bioengineering; Chemical Engineering; Civil and Materials Engineering; Computer Science; Electrical and Computer Engineering; and Mechanical and Industrial Engineering. With the changing dynamics of society, the college continues to strive for excellence and innovation in both its instructional and research programs. In the area of community service and as part of the university’s Great Cities Program related to economic development and environmental concerns, the college is continuously strengthening ties with the industrial community, especially the dynamic region of Illinois.

Undergraduate Study in Engineering
A primary goal of the UIC College of Engineering is to ensure that its students are well prepared for:

1. Practice in the engineering profession;
2. Continued formal education at the graduate level; and
3. Continued education to adapt to evolving technologies and changing markets.

College faculty and administration are continually reevaluating and revising curricula so that engineering and computer science degree programs consistently incorporate the changes that are occurring in technology and society.

The college attracts students and faculty who represent a broad spectrum of nationalities, cultures, races, ages, and genders. Diversity is also
reflected in the number and types of employment opportunities available to students. Area corporate partnerships support co-op and internship experiences that are tailored to individual student needs.

Educational Objectives
The UIC College of Engineering offers undergraduate and graduate students opportunities to join faculty in cutting-edge research. In the classroom, students become familiar with the fundamental mathematical and scientific principles that are common to engineering and computer science disciplines, and they learn to apply these principles to current engineering and computer science problems of analysis, design, and experimentation. Through individual and group projects, students make use of current techniques, instruments, equipment, and computers, and gain proficiency in communicating the results of their work. Study in other disciplines provides students with an understanding of the professional ethical responsibilities of practicing engineers. Students also have the opportunity to participate in a number of the many on-campus student chapters of national engineering professional organizations as a way to supplement their classroom experiences.

In the first two years, each student will be required to complete courses in mathematics, chemistry and physics (or other science requirements, for computer science majors), and University Writing. Beginning in the second year, the student will start course work in a particular major that represents the technical phase of the student’s academic career and constitutes a cohesive program of advanced work in a chosen field. Although the course work in the major becomes progressively specialized in the junior and senior years, each student is also required to take engineering or computer science courses outside of his or her chosen field.

A student must also complete course work in the general fields of humanities and social sciences. Because engineers and computer scientists are no longer narrow specialists, they must recognize the effects of their work on the general welfare of society. The humanities/social sciences phase of their education helps them to become serious contributors to the quality of life. Requirements for the degrees often include free electives that introduce flexibility into the curricula.

Accreditation
Eight undergraduate degree programs of the College of Engineering are accredited by the Accreditation Board for Engineering and Technology (ABET)

415 North Charles Street
Baltimore, Maryland 21201
(410) 347-7700
http://www.abet.org

Those programs receiving approval by the Engineering Accreditation Commission (EAC) of ABET include bioengineering, chemical engineering, civil engineering, computer engineering, electrical engineering, industrial engineering, and mechanical engineering. The Computing Accreditation Commission (CAC) of ABET has accredited the program in computer science. Accreditation has not been sought for two interdisciplinary programs—engineering management and engineering physics.

Degree Requirements
To earn a BS degree from the College of Engineering at UIC, students need to complete university, college, and department degree requirements. University and college degree requirements for all College of Engineering students are outlined below. Students should consult their department section for additional degree requirements.

Semester Hour Requirement

<table>
<thead>
<tr>
<th>Degree Program</th>
<th>School/Department</th>
<th>Degree Conferred</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioengineering</td>
<td>Bioengineering</td>
<td>BS in Bioengineering</td>
<td>128</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>Chemical Engineering</td>
<td>BS in Chemical Engineering</td>
<td>128</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Civil and Materials Engineering</td>
<td>BS in Civil Engineering</td>
<td>128</td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>Electrical and Computer Engineering</td>
<td>BS in Computer Engineering</td>
<td>128</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Computer Science</td>
<td>BS in Computer Science</td>
<td>128</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>Electrical and Computer Engineering</td>
<td>BS in Electrical Engineering</td>
<td>128</td>
</tr>
<tr>
<td>Engineering Management</td>
<td>Mechanical and Industrial Engineering</td>
<td>BS in Engineering Management</td>
<td>128</td>
</tr>
<tr>
<td>Engineering Physics</td>
<td>Electrical and Computer Engineering</td>
<td>BS in Engineering Physics</td>
<td>128</td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>Mechanical and Industrial Engineering</td>
<td>BS in Industrial Engineering</td>
<td>128</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>Mechanical and Industrial Engineering</td>
<td>BS in Mechanical Engineering</td>
<td>128</td>
</tr>
</tbody>
</table>

a *Offered jointly with the College of Business Administration.*

b *Offered jointly with the Department of Physics in the College of Liberal Arts and Sciences.*

Course Requirements

General Education Core
General Education at UIC is designed to serve as a foundation for lifelong learning. Students are required to complete a minimum of 24 semester hours in the General Education Core with at least one course from each of the following categories:

1. Analyzing the Natural World
2. Understanding the Individual and Society
3. Understanding the Past
4. Understanding the Creative Arts
5. Exploring World Cultures
6. Understanding U.S. Society

For a description and a list of courses for each General Education Core category, students should consult the General Education section of the catalog. Information on meeting the General Education requirements for each degree program is provided in the College of Engineering department sections.
General Education Proficiencies—University Writing Requirement

College of Engineering students meet the requirement by achieving a passing grade in ENGL 160 and ENGL 161. Credit for ENGL 160 may be earned on the basis of a score of 3–5 on the AP English Language and Composition exam, an ACT English subscore of 27 or more, an SAT Evidence-Based Reading and Writing score of 600 or higher (2016 or after), or an SAT Critical Reading score of 610 or higher (prior to 2016). Students should consult the Registering and Enrolling in Courses at UIC and Academic Standing sections for more information on required scores.

Orientation Course Requirement

All incoming freshmen and transfer students must take an engineering orientation course ENGR 100 during the first or second term at UIC. Satisfactory completion of the engineering orientation course is a graduation requirement.

Recommended First-Year Program

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 100</td>
<td><strong>Engineering Orientation a</strong></td>
<td>1</td>
</tr>
<tr>
<td>ENGL 160</td>
<td>Academic Writing I: Writing in Academic and Public Contexts</td>
<td>6</td>
</tr>
<tr>
<td>&amp; ENGL 161</td>
<td>Academic Writing II: Writing for Inquiry and Research</td>
<td></td>
</tr>
<tr>
<td>Chemistry (Computer Science majors may take Biological Sciences or Earth and Environmental Sciences) b</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Mathematics c</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Physics (Computer Science majors may take Biological Sciences or Earth and Environmental Sciences)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Engineering/computer course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Education Core courses</td>
<td></td>
<td>0-6</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>28-34</td>
</tr>
</tbody>
</table>

a ENGR 100 is a one-semester-hour course, but the hour does not count toward the total hours required for graduation. However, the hour does count in the calculation of tuition and toward full- or part-time enrollment status and financial aid eligibility. The course must be taken in the first or second term at UIC.

b The normal chemistry requirement is CHEM 122/123 for students who pass the placement examination in chemistry. Students who do not pass the examination may be required to take CHEM 101.

c The beginning mathematics course in the College of Engineering is MATH 180 for students who pass the mathematics placement examination. Students who do not pass the examination will be placed in specific preparatory mathematics courses by the mathematics department.

Other Requirements

Course Work Limitations

For the degree of Bachelor of Science, a minimum of 128 semester hours acceptable to the College of Engineering is required for graduation. (See individual majors for the specific hours required for graduation.)

Course work that duplicates previous credit does not count toward graduation; no credit is given for a course in which a failing grade is received.

Credit earned in ENGL 060, ENGL 070 or ENGL 071 does not count toward graduation in the college, except in the following way: students may earn 3 semester hours of credit in ENGL 070 or ENGL 071 and a waiver of ENGL 160 for the term in which they receive written authorization from the Department of English.

Credit for graduation is not given by the College of Engineering for courses numbered below CHEM 116, PHYS 141, and MATH 180; such preparatory courses cannot be used as nonmajor electives or free electives.

All courses will be used when determining a student’s full-time or part-time status; for computing grade point averages (except for 000-level courses); and in determining probation, dismissal, and Dean’s List statuses.

Free Elective Credit

Students in some majors must complete 1–6 credit hours in free elective courses to reach 128 hours required for engineering degrees. These hours are in addition to specific types of elective groups (humanities, social science, nonmajor-rubric, additional math, technical, or area electives). These free elective courses may be technical or nontechnical, but remedial or duplicative courses are not allowed. A maximum of 2 semester hours of free elective credit in kinesiology is allowed. Programs that have such free electives are chemical engineering, computer science, and engineering management.

Grade Point Average (GPA) Requirement

In order to receive a degree from the College of Engineering, a student must present a minimum grade point average of 2.00/4.00 in all work in the major. In addition, the student must satisfy the UIC requirement of a 2.00/4.00 grade point average in two categories:

1. all work taken at UIC;
2. all work taken at UIC and all other two- and four-year institutions combined.

Graduation Declaration/Filing to Graduate

Students declare their intent to graduate online using my.UIC. The deadline for submission to the Pending Degree List is the end of the third week (fall and spring) or second week (Summer Session 2) of the term in which graduation is sought. Failure to submit the request at this time may delay the awarding of the degree. A final review will be made following the close of the term. If a student has satisfactorily completed all the degree requirements, the student’s name will be placed on the official degree list.

Enrollment Residence Requirement

Either the first 90 or the last 30 semester hours of degree work must be completed in continuous, uninterrupted enrollment residence at UIC. In addition, at least one-half of the credit hours required in the student’s major area of study must be completed at UIC. Concurrent attendance at the University of Illinois at Chicago and another collegiate institution or enrollment during the summer at another institution, when approved by the student’s college, does not interrupt the UIC enrollment residence requirement for graduation. Work taken at the Urbana-Champaign or Springfield campuses of the University of Illinois cannot be used to satisfy this requirement. Credit earned through proficiency examinations, including credit earned through the College Level Examination Program (CLEP), UIC extension courses, and Urbana-Champaign correspondence courses; and Academic Writing II: Writing for Inquiry and Research.
Transfer Credit Limitations

The College of Engineering requires that of the 128 semester hours needed for the degree, at least 60 semester hours after attaining junior standing must be taken at UIC or another accredited four-year institution; the university enrollment residence requirement (see above) must also be satisfied. For most transfer students, these requirements mean that additional transfer credits from junior (or community) colleges are severely restricted or not permitted.

Upper-division (300- and 400-level) courses in ABET-accredited engineering or computer science majors can be transferred only from other ABET-accredited engineering or computer science programs. This limits transfer of credits from junior colleges, U.S. vocational or technology programs, and overseas programs to lower-division (100- and 200-level) courses.

All transferrable courses must have a grade of C or better in order to be considered for credit toward a degree in the College of Engineering.

Military Science Credits Toward the Degree

The College of Engineering applies earned credits in Military Science courses (https://catalog.uic.edu/ucat/degree-programs/univ-degree-requirements-graduation/#application-military-science-credits) as elective credit in accordance with UIC policy.

College Policies

Academic Load

During the fall and spring semesters, a full-time program is 12 to 18 semester hours. More than 18 semester hours is considered an overload and students must seek approval by filing a petition in 123 SEO. For Summer Session 1 (Four-Week) and Summer Session 2 (Eight-Week), UIC considers a total aggregate of 6 semester hours as the minimum number necessary to constitute full-time enrollment. Students seeking to take more than 9 semester hours during the summer should file a petition in 123 SEO.

Academic Probation and Dismissal Rules

Probation Rules

1. Any student whose UIC cumulative grade point average falls below 2.00/4.00 is placed on 2.25 academic probation. A student on 2.25 probation is required to earn at least one B and no grade less than a C in each ensuing term until both the UIC cumulative grade point average and the total cumulative grade point average are above 2.00/4.00.
2. Any student whose grade point average for any term falls below 2.00/4.00 but whose UIC cumulative grade point average is above 2.00 will be placed on 2.00 academic probation for the following term. The student will return to clear status if a grade point average of at least 2.00 is earned without any grade less than C in the following term.

Dismissal Rules

1. A student on academic probation who does not meet the probationary requirements will be dismissed from the university.
2. A student who fails to make progress toward a degree may be dismissed. Examples of failure to make progress include excessive term deficit points, failure to complete required courses, accumulation of excessive number of Incomplete (I) grades, failure to earn credit in any semester, and failure to maintain a 2.00 average in the major discipline.
3. A student may be readmitted after the first dismissal with petition and presentation of above-satisfactory performance in college-level courses taken outside of UIC. The non-UIC work evaluated for readmission may or may not apply towards a UIC degree. However, only in rare cases, a student will be readmitted after the second dismissal.

Change of Course Schedule—Dropping Courses

Undergraduate students may drop courses using my.UIC through the end of the second week of classes for fall and spring semesters, the first Wednesday of Summer Session 1, or the first Friday of Summer Session 2. During weeks 3 through 10 of the fall and spring semesters (first Thursday through the second Wednesday of Summer Session 1 or weeks 2 through 5 of Summer Session 2), students may drop courses with the permission of their major college. If the drop occurs between 0 and 2 weeks in fall and spring, there will be no notation on the transcript. If the drop occurs during weeks 3 through 10 in fall and spring (first Thursday through the second Wednesday of Summer Session 1 or weeks 2 through 5 of Summer Session 2), a W is noted on the transcript. Undergraduate students may drop a maximum of four UIC individual courses that result in a W notation on their transcript during their entire undergraduate degree program. College of Engineering students must submit a Late Drop Petition Form to the COE Front Office, 123 SEO.

A student who wishes to drop all courses must withdraw from the university by completing a special form and submitting it to the College Office, 123 SEO, by the end of the last business day before final examinations. The grades of W for all courses in the term withdrawn do not count towards the maximum of four allowed late course drops. Student can register normally in the next term.

Changes within a Major

Changes within degree programs are handled through petitions. A General Engineering Petition or Petition for Modification of Major is required when a student wishes to change contents of a major. Petitions often require long lead-times for processing and the College Office, 123 SEO, should be contacted for specific instructions. If approved, the student is sent a notification by mail or fax.

Class Attendance

In case of excessive absences, the course instructor may recommend to the college that a student be dropped from the course. Adverse consequences of such involuntary course drop must be weighed against high probability of failure in the course. Moreover, such involuntary course drops must be within the framework of four allowable late course
drops by sixth week in fall or spring (between the third Wednesday of Summer Session 1 and fifth Friday of Summer Session 2).

Course Prerequisites
Some departments verify whether students have listed prerequisites and may drop students who cannot provide satisfactory proof of having completed the prerequisites by first or second week of the term. In other instances, it is students’ responsibility to ensure that they have the listed prerequisites. It is difficult to perform satisfactorily in most engineering courses without having the listed prerequisites.

Credit/No Credit Option
Certain types of courses may be taken on the credit/no credit option in the College of Engineering. In this option, a student will be allowed to complete a limited number of courses with a grade of credit (CR) or no credit (NC) instead of a letter grade. Courses below the 200-level, required courses, and essential prerequisite courses cannot be taken as credit/no credit. For detailed information on the college’s policy on credit/no credit, the student should inquire in 123 SEO.

Students must apply at their college office no later than the tenth day of the term (first Wednesday of Summer Session 1 or first Friday of Summer Session 2) to have a course designated for credit/no credit grading option.

Declaring a Major
All students entering the College of Engineering must declare a major in order to be assigned a departmental faculty advisor after the first term. Students must declare their majors at the time of entry to the college or by the end of their first term. Students can petition to change their major by completing a form in the college office, but the petition will not be approved if the intended major is oversubscribed and thus closed.

Double Major, Double Degrees, and Second Bachelor’s Degree
Double Major
This option is not available in the College of Engineering.

Double Degrees
Double degrees are possible for some College of Engineering students who want to pursue two bachelor’s degrees in Engineering concurrently. Students must complete a minimum of 30 additional hours of 300- and 400-level course work for the second engineering degree. Combination of degrees that have substantial overlap is not allowed. Interested students should speak with an advisor and submit a petition to College of Engineering Office, 123 SEO. Double degrees with another college are not permitted.

Second Bachelor’s Degree
Students who have already earned a bachelor’s degree must apply and be admitted as an undergraduate to the College of Engineering in order to pursue a second bachelor’s degree. Students must complete all requirements for the second degree as specified by the college and the major department, including a minimum of 30 additional hours of 300- and 400-level course work beyond those required for the first degree. The UIC enrollment residence requirement must also be met, i.e., the last 30 semester hours for second degree must be taken at UIC. Combination of degrees that have substantial overlap is not allowed.

Graduate-Level Courses for Undergraduate Credit
Many 400-level courses are part of required or elective courses. Students need special permission from the college to take 500-level courses.

Proficiency Examinations
Students with nontransferable college-level credits in Academic Writing, mathematics, sciences, and computer programming may earn credits through proficiency examinations, if such examinations are allowed by the departments offering these courses.

Registration Approval
All incoming freshmen and transfer students need approval of a college advisor before registration for courses. Such approval is typically obtained during the orientation visit to the campus. All continuing students need approval from their faculty advisor before registering for courses.

Repeat Policy for Standard Graded Courses
Students may repeat a course to increase their knowledge of the subject matter. There are circumstances under which repeating a course is advisable and to a student’s advantage. There are also circumstances where repeating a course may disadvantage a student and narrow a student’s options. Some colleges require students to discuss any plan to repeat a course with their academic advisor before they register to repeat the course.

Courses with A or B grades may not be repeated. Normally, courses with a C grade may not be repeated. Courses with D or F grades may be repeated once without written permission. In all cases, the original grade for the course and the grade for each repeat will appear on the transcript. The original grade and grade for each repeat will be calculated into the grade point average. Only one registration for the course counts toward the total number of credits required for graduation. A course cannot be repeated after receiving credit in a course for which the repeat course is a prerequisite.

To repeat a course more than once requires written permission from the student’s college dean. Students who have been dismissed may not appeal on the grounds of intention to repeat courses. Certain courses may not be repeated; students should consult their college before repeating a course.

Undergraduate Grade Point Average Recalculation Policy

- Colleges may elect to implement this policy as early as the end of the junior year, or as late as the final semester during degree certification.
- The college will evaluate each student unable to graduate because of an academic grade point average deficit. The deficit may occur in the UIC GPA, the program GPA, or both.
- The academic record is examined so as to determine if courses, deemed appropriate by each college, with grades of F or grades of D, may be excluded from the student’s grade point average.
- A total of four courses may be excluded, with one course excluded at a time until the necessary quality points are obtained to meet the UIC GPA requirement and/or degree program minimum GPA. The credit hours associated with excluded course grades will not count towards graduation requirements.
Transferring

Intercollegiate Transfer Students

Students enrolled in other UIC colleges who wish to transfer to the College of Engineering may apply at any time during the regular semester; see the Transfer Students from Other Colleges and Universities section below for specific requirements.

Transfer Students from Other Colleges and Universities

The College of Engineering admits qualified transfer students from accredited institutions. Depending upon space availability, admission preference will be given to individuals who qualify as Illinois residents as determined by the University (see Regulations Governing the Determination of State Residence Status for Admission and Assessment of Student Tuition). Generally 60 semester hours (90 quarter hours) of transfer work must include English, math, and science courses listed below for admission. Exceptional students who have completed most of these listed English, math, and science courses may be admitted even if they have not completed 60 semester hours by the time of entry to the college. The college will consider residents of the state of Illinois who have a transfer grade point average of at least 2.50/4.00 in math/science/technical courses as well as on a cumulative basis. Out-of-state residents must have a minimum transfer GPA (math/science/technical and cumulative) of 2.50/4.00 and international students that of 2.75/4.00 to be considered for admission. Admission criteria may vary for different programs. Meeting the minimum criteria does not guarantee admission due to limited space availability.

All transfer applicants should complete the following course work by the time of entry to the College of Engineering:

1. Academic Writing (two courses).
2. Chemistry, equivalent to CHEM 122/CHEM 123 at UIC. (Computer Science students may substitute Biological Sciences or Earth and Environmental Sciences.)
3. Physics for engineers, emphasizing mechanics, electricity, and magnetism (with calculus as a prerequisite). (Computer Science students may substitute Biological Sciences or Earth and Environmental Sciences.)

All transferable courses must have a grade of C or better in order to be considered for credit toward a degree in the College of Engineering.

See the Admissions section for application deadline dates and other procedures for transfer students. See the Office of Admission Transfer Guide (https://admissions.uic.edu/undergraduate/undergraduate-requirements-deadlines/transfer-requirements/transfer) for more information about transfer admission requirements.

Transferring Out of the College

Since procedures for changing colleges differ among the undergraduate colleges, a student should inquire in 123 SEO for proper instructions.

Undergraduate Research in Engineering

Several engineering majors allow undergraduate research within respective engineering departments as technical electives if certain eligibility criteria are met. Prior approval of research topic and scope by a faculty advisor and the director of undergraduate studies is required; special forms are available online and at the college office. Submission of copies of a final report to the department and college offices is also required before undergraduate research credits can be applied for the degree.

Minors

Although a minor is not required, a student may elect to complete one or more minors. The College of Engineering will acknowledge, on a student’s transcript, the successful completion of a minor offered by any engineering program in the college for which the student is eligible to enroll and for which the student meets the requirements for the minor listed below. The number of semester hours required for the minor varies by the field of specialization. Minors offered by the College of Engineering include:

<table>
<thead>
<tr>
<th>Minor</th>
<th>School/Department</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioengineering</td>
<td>Bioengineering</td>
<td>12</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>Chemical Engineering</td>
<td>16–18</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Civil and Materials Engineering</td>
<td>18–19</td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>Electrical and Computer Engineering</td>
<td>17</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Computer Science</td>
<td>15–17</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>Electrical and Computer Engineering</td>
<td>19</td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td>Interdepartmental</td>
<td>18–20</td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>Mechanical and Industrial Engineering</td>
<td>12</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Computer Science</td>
<td>12</td>
</tr>
<tr>
<td>International Studies</td>
<td>N/A; contact College of Engineering</td>
<td>18–21</td>
</tr>
<tr>
<td>Materials Engineering</td>
<td>Interdepartmental</td>
<td>14–19</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>Mechanical and Industrial Engineering</td>
<td>16–18</td>
</tr>
</tbody>
</table>

a All engineering minors require prerequisite courses. Please see department sections for information on prerequisite courses associated with each minor.

Requirements for the Minor

See the appropriate engineering program for a detailed description of each minor. At least 9 semester hours in the minor field of specialization must be at the advanced level (200-, 300-, or 400-level courses), and a minimum grade point average of 2.00/4.00 is required. Engineering minors require that at least 9 semester hours be taken from the UIC College of Engineering.
Admission to an Engineering Minor

Admission to a minor in the College of Engineering will not be approved for any student if there is substantial course overlap between the proposed minor and the student’s major. For example, students majoring in Computer Science may not minor in Computer Engineering. Engineering students who are interested in completing an engineering minor must submit a request form in 123 SEO and obtain approval.

Engineering Minors for Nonengineering Students

Nonengineering students will be allowed to complete minor areas of study within engineering if they meet the transfer eligibility criteria at the time of application and so long as space permits. Students must submit a request form in 123 SEO and obtain approval. Nonengineering students must also consult their home colleges about the acceptability and applicability of engineering course credits toward their degrees. Most engineering classes are closed to nonengineering students; those students with approved minors must submit petitions to the college office at the beginning of the term to register for engineering courses needed.

Minor Areas Outside of Engineering for Engineering Students

Engineering majors may complete one or more minors offered by other UIC colleges. Successful completion of a minor outside the College of Engineering will be acknowledged on an engineering student’s transcript if certification of completion of the minor is received from the other college by applicable deadlines for the term of graduation. Engineering students must submit a request form in 123 SEO and obtain approval before petitioning to another college. Minors will be approved by the College of Engineering if the requirements for the minor, as defined by the nonengineering department offering the minor, are satisfied. The request for the minor must be approved by both colleges.

Area of Concentration

Some College of Engineering majors offer areas of concentration within the majors by prescribing some or all of technical, nonmajor, and free electives. Completion of an area of concentration is noted on the transcript. On the other hand, engineering minors offer students the opportunity to study an engineering discipline outside of the major; minors generally require additional course work to meet prerequisite and course requirements. Minors are also noted on the transcripts.

Academic Advising

Contact the College Office, 123 SEO, for the names of college advisors and departmental offices for faculty advisors.

Advising Policy

Faculty advisors are available to assist students with the selection of courses after the first term. Students declare a major when they enter the university and are assigned a faculty advisor by the appropriate department. In addition, the College Office for Undergraduate Administration on the first floor of SEO advises newly admitted freshman and transfer students, seniors contemplating graduation, and students facing academic or other difficulties. All continuing students should take advantage of advance advising and advance registration periods to ensure that they can get into the classes of their choice.

Academic Honors

University Honors

At graduation, students are awarded University Honors for academic distinction. Such honors are designated on the diplomas as Cum laude, Magna cum laude, or Summa cum laude. The minimum cumulative grade point average needed to qualify for University Honors is 3.50/4.00 in all UIC course work.

Cum Laude is awarded to a student who earns at least a 3.50 cumulative grade point average; Magna cum laude is awarded to a student who earns at least a 3.75 cumulative grade point average; Summa cum laude is awarded to a student who earns at least a 3.90 cumulative grade point average. The grades for military science courses are excluded unless a student completes the four-year military science program, in which case 5 semester hours of advanced credit are included in the determination of averages for University Honors.

The Bell Honors Award is given in recognition of attaining the highest grade point average in each graduating class. At the Engineering Convocation, award recipients are recognized and given a certificate acknowledging their scholastic attainments.

Dean’s List

Any student who achieves a grade point average of 3.50/4.00 with 12 or more graded hours in any semester is placed on the Dean’s List.

Special Programs and Opportunities

Cooperative Engineering Education Program

The College of Engineering offers a cooperative engineering education program. It is a coordinated alternating work and study program that provides an opportunity for the undergraduate student not only to acquire academic knowledge but also to obtain work experience in the chosen area of study. Interested students are invited to interview representatives of participating companies during the sophomore year. The first work session usually starts during the summer following the sophomore year. Further information on the program is available in 820 SEO.

The Minority Engineering Recruitment and Retention Program (MERRP)

The Minority Engineering Recruitment and Retention Program promotes academic excellence among minority students of engineering at the University of Illinois at Chicago. Specifically, the program offers structured and individual academic support programs for African Americans, Hispanics, and other minorities currently underrepresented in the engineering profession. By combining personal and academic support with opportunities and incentives, the program seeks to increase the number of minority students who receive undergraduate and graduate degrees from the College of Engineering. Further information may be obtained by calling (312) 996-2201.

Student Organizations

During their early years in the college, students receive information about the many professional engineering societies. Each society has an official representative among the college faculty. Students are strongly advised to join at least one professional society closely affiliated with their career interests. Professional society chapters include those of AIAA, AIChe, ASCE, ASME, ACM, BMES, IEEE, IEEE-CS, IIE, SAE, and SME. Honor society chapters include those of Alpha Eta Mu Beta, Eta Kappa Nu, Pi Tau Sigma, and Tau Beta Pi. Other society chapters include those
of NSBE, SHPE, and SWE. Engineering Council (EC) is an umbrella organization in the college that coordinates some of the activities of these society chapters.