

# COLLEGE OF ENGINEERING

Engineers design products and develop solutions to society's national and global challenges. The variety of engineering projects requires engineers to have an understanding of people and their values. Engineers blend their knowledge and practical experience with their communication and teamwork skills to work as members of diverse, multidisciplinary teams. Engineers frequently make decisions affecting the development of society and the direction it will take.

The University of Wisconsin–Madison College of Engineering is one of the best places in the world for an engineering education. The outstanding curriculum and the world-class faculty focus on providing students with the technological tools, resources, and knowledge to develop solutions to problems in fields ranging from medicine to energy to manufacturing—and many more.

In the classroom and in the lab, students study and grow their skills, yet they also enrich their academic experience outside of the classroom through opportunities such as international study, field research, internships, laboratory experience, and entrepreneurial opportunities.

Learning isn't confined to the classroom. It can happen anywhere—in the Engineering Hall study lounge, in the state-of-the-art makerspace, or in casual conversation on Engineering Mall. As Badger engineers, students are surrounded by some of the smartest, most innovative people in the world. The faculty do more than teach. They immerse students in interdisciplinary activities and offer real design challenges—and students can actually design and build products that solve those challenges.

In a college internationally renowned for its research, there also are many opportunities for undergraduate students to work directly with faculty members to propose and conduct research, and to publish and patent their results.

The Wisconsin Experience is not limited to academics. Across the university, there are many ways to get involved in the campus community. From the UW Marching Band to student government, students can find a home at UW.

A College of Engineering education will not only offer students the time of their lives, it will also prepare them to change life as we know it.

## DEGREES/MAJORS/CERTIFICATES

- Architecture, Certificate (<http://guide.wisc.edu/undergraduate/engineering/civil-environmental-engineering/architecture-certificate/>)
- Biology in Engineering for Engineering Majors, Certificate (<http://guide.wisc.edu/undergraduate/engineering/biomedical-engineering/biology-engineering-engineering-majors-certificate/>)
- Biomedical Engineering, B.S. (<http://guide.wisc.edu/undergraduate/engineering/biomedical-engineering/biomedical-engineering-bs/>)
- Chemical Engineering, B.S. (<http://guide.wisc.edu/undergraduate/engineering/chemical-biological-engineering/chemical-engineering-bs/>)
- Civil Engineering, B.S. (<http://guide.wisc.edu/undergraduate/engineering/civil-environmental-engineering/civil-engineering-bs/>)
- Computer Engineering, B.S. (<http://guide.wisc.edu/undergraduate/engineering/electrical-computer-engineering/computer-engineering-bs/>)
- Electrical Engineering, B.S. (<http://guide.wisc.edu/undergraduate/engineering/electrical-computer-engineering/electrical-engineering-bs/>)
- Engineering Data Analytics, Certificate (<http://guide.wisc.edu/undergraduate/engineering/industrial-systems-engineering/engineering-data-analytics-certificate/>)
- Engineering for Energy Sustainability, Certificate (<http://guide.wisc.edu/undergraduate/engineering/nuclear-engineering-engineering-physics/engineering-energy-sustainability-certificate/>)
- Engineering Mechanics, B.S. (<http://guide.wisc.edu/undergraduate/engineering/mechanical-engineering/engineering-mechanics-bs/>)
- Engineering Physics, B.S. (<http://guide.wisc.edu/undergraduate/engineering/nuclear-engineering-engineering-physics/engineering-physics-bs/>)
- Engineering Thermal Energy Systems, Certificate (<http://guide.wisc.edu/undergraduate/engineering/mechanical-engineering/engineering-thermal-energy-systems-certificate/>)
- Environmental Engineering, B.S. (<http://guide.wisc.edu/undergraduate/engineering/civil-environmental-engineering/environmental-engineering-bs/>)
- Geological Engineering, B.S. (<http://guide.wisc.edu/undergraduate/engineering/civil-environmental-engineering/geological-engineering-bs/>)
- Industrial Engineering, B.S. (<http://guide.wisc.edu/undergraduate/engineering/industrial-systems-engineering/industrial-engineering-bs/>)
- International Engineering, Certificate (<http://guide.wisc.edu/undergraduate/engineering/college-wide/international-engineering-certificate/>)
- Manufacturing Engineering, Certificate (<http://guide.wisc.edu/undergraduate/engineering/mechanical-engineering/manufacturing-engineering-certificate/>)
- Materials Science and Engineering, B.S. (<http://guide.wisc.edu/undergraduate/engineering/materials-science-engineering/materials-science-engineering-bs/>)
- Mechanical Engineering, B.S. (<http://guide.wisc.edu/undergraduate/engineering/mechanical-engineering/mechanical-engineering-bs/>)
- Naval Science, BNS (<http://guide.wisc.edu/undergraduate/engineering/college-wide/naval-science-bns/>)
- Nuclear Engineering Materials, Certificate (<http://guide.wisc.edu/undergraduate/engineering/nuclear-engineering-engineering-physics/nuclear-engineering-materials-certificate/>)
- Nuclear Engineering, B.S. (<http://guide.wisc.edu/undergraduate/engineering/nuclear-engineering-engineering-physics/nuclear-engineering-bs/>)
- Technical Communication, Certificate (<http://guide.wisc.edu/undergraduate/engineering/college-wide/technical-communication-certificate/>)

## PEOPLE

"If you think of the challenges that we face—energy, transportation, clean air and water, building the next generation of computing and communications technologies as we use up our raw materials—those are problems engineers must address. I'd like our students and faculty to

take the leadership role in solving those problems in their classrooms and research.”

—Dean Ian Robertson

## COLLEGE OF ENGINEERING LEADERSHIP ([HTTPS://ENGINEERING.WISC.EDU/ABOUT/LEADERSHIP/](https://engineering.wisc.edu/about/leadership/))

Dean: Ian M. Robertson

Executive Associate Dean: David A. Noyce

Associate Dean and Chief Financial Officer: Adam Whitehorse

Associate Dean for Inclusion, Equity and Diversity: Chris Castro

Associate Dean for Academic Affairs: Kathy Prem

Associate Dean for Research and Graduate Affairs: Oliver Schmitz

Associate Dean for Interdisciplinary Professional Programs: Edward G. Borbely

Associate Dean for Advancement: Cathleen Walters

## ENTERING THE COLLEGE

### ADMISSION TO THE COLLEGE AS A FRESHMAN

Students applying to UW–Madison (<https://www.admissions.wisc.edu/apply/>) need to indicate an engineering major (<https://engineering.wisc.edu/degrees-programs/undergraduate/>) as their first choice in order to be considered for direct admission to the College of Engineering. Direct admission to a major means students will start in the program of their choice in the College of Engineering and will need to meet progression requirements (<https://engineering.wisc.edu/student-services/undergraduate-student-advising/progression/>) at the end of the first year to guarantee advancement in that program.

### CROSS-CAMPUS TRANSFER TO ENGINEERING

UW–Madison students in other schools and colleges on campus must meet minimum admission requirements (<https://engineering.wisc.edu/admissions/undergraduate/cross-campus-students/>) for admission consideration to engineering degree granting classifications. Cross-campus admission is competitive and selective, and the grade point average expectations may increase as demand trends change. The student’s overall academic record at UW–Madison is also considered. Students apply to their intended engineering program by submitting the online application by stated deadlines for spring and fall. The College of Engineering offers an online information tutorial and drop-in advising (<https://engineering.wisc.edu/admissions/undergraduate/cross-campus-students/>) for students to learn about the cross-campus transfer process.

### OFF-CAMPUS TRANSFER TO ENGINEERING

With careful planning, students at other accredited institutions can transfer coursework that will apply toward engineering degree requirements at UW–Madison. Off-campus transfer applicants are considered for direct admission to the College of Engineering by applying to the Office of Admissions with an engineering major listed as their first choice. Those who are admitted to their intended engineering program must meet progression requirements (<https://engineering.wisc.edu/admissions/undergraduate/transfer-from-off-campus/>) at the point of transfer or within their first two semesters at UW–Madison to guarantee advancement in that program. A minimum of 30 credits in residence in the College of Engineering is required after transferring, and all students must meet all requirements for their major in the college. Transfer admission to

the College of Engineering is competitive and selective, and students who have exceeded the 80 credit limit at the time of application are not eligible to apply.

The College of Engineering has dual degree programs with select four-year UW System campuses. Eligible dual degree applicants are not subject to the 80 credit limit.

Off-campus transfer students are encouraged to discuss their interests, academic background, and admission options with the Transfer Coordinator in the College of Engineering: [ugtransfer@engr.wisc.edu](mailto:ugtransfer@engr.wisc.edu) or 608-262-2473.

## SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree student (<https://engineering.wisc.edu/admissions/undergraduate/adult-students-second-degree-students/>)s (<https://engineering.wisc.edu/student-services/undergraduate-student-advising/>) might explore the Biological Systems Engineering program at UW–Madison, an undergraduate engineering degree elsewhere, or a graduate program in the College of Engineering.

## POLICIES AND REGULATIONS

### REGULATIONS

Official regulations regarding enrollment, scholarship, and graduation for undergraduates in the College of Engineering.

A printer-friendly PDF can be found on the College of Engineering Regulations page (<https://engineering.wisc.edu/student-services/undergraduate-regulations/>).

### ADMISSIONS

#### 1. Direct Admission

New students are admitted directly to the degree program (major) of their choice or to the College of Engineering as Engineering Undecided. Progression requirements must then be satisfied as described in Regulations 3–7.

#### 2. Degree Programs (Majors)

Biomedical Engineering (BME)  
Chemical Engineering (CHE)  
Civil Engineering (CEE)  
Computer Engineering (CMPE)  
Electrical Engineering (EE)  
Engineering Mechanics (EM)  
Engineering Physics (EP)  
Environmental Engineering (EnvE)  
Geological Engineering (GLE)  
Industrial Engineering (IE)  
Materials Science and Engineering (MSE)  
Mechanical Engineering (ME)  
Nuclear Engineering (NE)

### PROGRESSION

#### 3. First Year Progression Requirements

To automatically progress in a College of Engineering (CoE) degree program (major) after direct admission or to switch between engineering degree programs, students must complete the following

requirements after their first two semesters of residency at UW–Madison:

- A. 24 credits completed at UW–Madison. Special topics, independent study, seminar, pass/fail, and credit/no credit courses will not be included in the 24 credits except for required English as a Second Language courses.
- B. General Education Communications Part A (Comm A) requirement. If Comm A is not completed as a graded course at UW–Madison (i.e., completed through placement test, AP/IB, or transfer credit), then a liberal studies course of at least 3 credits with a breadth designation of Humanities, Literature, or Social Sciences must be taken on a graded basis at UW–Madison.
- C. Introduction to Engineering: course specified by degree program or INTEREGR 170 Design Practicum for Engineering Undecided students.
- D. Math course sequence through MATH 222 Calculus and Analytic Geometry 2 or MATH 276
- E. Four core courses, required for engineering degree programs (majors), completed at UW–Madison, as defined below:

1. **Math:** A minimum of two math courses numbered MATH 217 Calculus with Algebra and Trigonometry II or above; or one math course 300 level or above. If the math requirement for the degree program (major) is complete or the student has completed the calculus sequence through MATH 234 Calculus--Functions of Several Variables, then additional math courses numbered MATH 217 Calculus with Algebra and Trigonometry II or above or additional courses from the science requirement in Regulation 3.E.2. can be taken to complete the four core course requirement. Excludes MATH 228 WES Calculus Supplement, MATH/HIST SCI 473 History of Mathematics, special topics, independent study, seminar, pass/fail, and credit/no credit courses.

2. **Science:** A minimum of two science courses required for engineering degree programs (majors) as defined below. If the math and science requirements for the degree program are complete, then departmental engineering courses 200 level and above can be taken to complete the four core course requirement. Excludes EPD, InterEGR, special topics, independent study, seminar, pass/fail, and credit/no credit courses.

- For Chemical Engineering majors, the following science requirements apply:
  - i. One course must be CHEM 104 General Chemistry II or higher
  - ii. One course must be PHYSICS 201 General Physics/E M A 201 Statics or higher

*If above two requirements are completed, select from additional science courses below.*

- For majors in Biomedical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Mechanics, Engineering Physics, Environmental Engineering, Geological Engineering, Industrial Engineering, Materials Science and Engineering, Mechanical Engineering,

and Nuclear Engineering, the following science requirements apply:

- i. One course must be either CHEM 104 General Chemistry II or higher OR PHYSICS 201 General Physics/E M A 201 Statics or higher
- ii. One other science course, from the following:
  - Chemistry, all classes
  - E M A 201 Statics, E M A 202 Dynamics, M E 240 Dynamics
  - PHYSICS 201 General Physics and above
  - Statistics, calculus-based
  - E P 271 Engineering Problem Solving I
  - COMP SCI 200 Programming I, COMP SCI 220 Data Science Programming I, or COMP SCI 300 Programming II or above, excluding COMP SCI 304 WES-CS Group Meeting
  - Excludes special topics, independent study, seminar, pass/fail, and credit/no credit courses

F. Core and Overall GPA requirements must be satisfied as defined by CoE departments for each engineering degree program (major) (Progression - College of Engineering - University of Wisconsin-Madison (<https://engineering.wisc.edu/student-services/undergraduate-student-advising/progression/>)). All graded UW–Madison courses referenced in E.1. and E.2. above and any departmental engineering courses level 200 or above will be counted in the Core GPA (excludes EPD, InterEGR, special topics, independent study, and seminar courses). All graded UW–Madison courses are counted in the Overall GPA. For one and only one of these core courses that a student has repeated, the more recent of the two grades will be used in the calculation of Core and Overall GPAs. Students may not be on academic probation for GPA reasons for automatic completion of first year progression requirements.

Students who do not meet the first year progression requirements to automatically progress in a degree program (major) can be considered for non-automatic progression (Regulation 4) or extension (Regulation 5).

#### 4. Consideration for Non-Automatic Progression

Students who do not meet progression GPAs but meet all other progression requirements will be considered for progression in degree program (major). The consideration process includes review of written statement, rigor of completed courses, and grade trends.

#### 5. Extension for First Year Progression Requirements

- A. Students who will not meet progression requirements due to University of Wisconsin placement and/or assessment tests (math and ESL) will be granted a one semester extension up to their fourth semester if they are making satisfactory progress in a degree program (major).
- B. Students who do not meet the requirements in Regulation 3 may apply for a one semester extension but not beyond their fourth semester. Students granted extensions will be considered for non-automatic progression in degree program (major). The consideration process includes review of written statement, rigor of completed courses, and grade trends. Extensions will

be evaluated only in cases where it is mathematically possible during the one semester extension to meet progression GPAs for intended program.

## 6. Diversity of Student Body

When the number of non-automatic considerations and/or applications for admission to a degree program (major) exceed the capacity of that program, progression and admission will be limited to capacity. In order to implement the University's goals of achieving a heterogeneous and diverse student body, selection of students under consideration or admission to a program operating at capacity will be based on demographic background, written statement, rigor of completed courses, and grade trends.

## 7. Progression Requirement Completion and Extension Application

Students are required to submit to the dean's office an application for progression for a degree program (major) or an application for an extension by the deadline. Deadlines will be posted on the College of Engineering website at Progression Requirements (<https://engineering.wisc.edu/student-services/undergraduate-student-advising/progression/>) and emailed to students in the College of Engineering.

## REGISTRATION

### 8. Definitions

- A. Full-time student: One carrying a minimum credit load of 12 credits. All students are expected to be full-time unless they have the permission of the dean to be part-time. A student carrying less than the minimum credit load without the dean's permission will be placed on part-time warning at the end of the semester.
- B. Part-time student: One who has the dean's permission to carry less than the minimum credit load (Regulation 9.F.).
- C. Semester: A term of 15 weeks minimum duration.
- D. Session: A term of less than 15 weeks duration (e.g., summer session or intersession).
- E. Modular Course: A course that is offered during a semester, but which lasts fewer than 15 weeks.

### 9. Credit Load Constraints

- A. Maximum credit load: 20 enrolled credits per semester.
- B. Minimum credit load: 12 enrolled credits per semester or enrolled for one cooperative education program credit as an engineering co-op student during a co-op work period.
- C. For sessions there is no minimum credit load; the maximum credit load equals the number of weeks in the session.
- D. A student not on academic probation may freely choose to carry any number of credits between a minimum credit load and a maximum credit load.
- E. A student may carry more than a maximum credit load only with the recommendation of an advisor and with written approval of the dean.
- F. Part-time student: A student who wishes to carry less than a minimum credit load in a specific semester for definitive reasons—e.g., a verifiable disability, or a necessity of employment or other outside obligations exceeding 15 hours per week—must request permission from the dean to become a part-time student. Part-time permissions must be renewed during the first two weeks of each semester part-time permission is requested.

Part-time students must satisfy all regulations other than the minimum credit load.

- G. A student on academic probation is advised to carry not more than 14 credits per semester unless repeating a course. For every three credits being repeated, the student is advised to carry not more than one additional credit beyond 14, up to a maximum of 16 credits.

### 10. Student Responsibility for Scheduling

Each student is responsible for arranging a course list that will permit satisfactory progress towards degree requirements and a class schedule that (a) avoids class and final exam scheduling conflicts, (b) avoids an excessively demanding final exam schedule, and (c) verifies registration in chosen classes.

### 11. Access to Courses

Departments may specify courses as not open to students who need to complete progression requirements, or as open only to students in a specific degree program (major).

### 12. Transfer of Degree Applicable Credits

A course taken anywhere other than UW–Madison, or by independent study or resident extension, is transferable to the College of Engineering, in credits only, if it is transferable to the UW–Madison. The course counts toward graduation only if it satisfies a graduation requirement of the curriculum to which it is to be applied and only if it was passed with a grade of C (2.0 on a 4.0 scale) or better.

### 13. Transfer of Grades

Grades for courses taken anywhere other than UW–Madison are not transferable, even if the credits for those courses are transferable.

### 14. Adding Courses

Students may add full-semester courses only during the first two weeks of classes (Regulation 19). The deadline to add a course is specified on the Office of the Registrar's website.

### 15. Dropping Courses

Students may drop full-semester courses during the first twelve weeks of classes. Courses dropped after the initial drop deadline are noted on the transcript as DR (Regulations 14, 19 and 22.G.). The deadlines to drop a course are specified on the Office of the Registrar's website.

### 16. Course Substitutions

A student may substitute courses that deviate from the requirements of a published curriculum of the College of Engineering upon the recommendation of the student's degree-granting department and with the approval of the college governance committee.

### 17. Pass/Fail and Credit/No Credit Courses

Pass/fail is a student-option alternative way of being graded in a regularly graded course. Credit/no credit describes courses approved for two-level grading and is not a student option.

A student may change the grading option of a full-semester course to or from pass/fail only during the first four weeks of classes. (Regulation 19). These courses must be free electives. Only students in good standing may elect the pass/fail privilege.

The pass/fail agreement is between the student and the Registrar, and is not revealed to the person teaching the course. The person teaching the course submits the appropriate letter grade to the

Registrar, who converts C or higher grades to S (Satisfactory), D and F grades to U (Unsatisfactory).

Courses designated as credit/no credit will not be counted in determining the number of pass/fail courses the student may elect.

### 18. Audited Courses

A student may audit a course only if the instructor consents. Auditors are expected to attend with a reasonable regularity and to participate in the class, as determined by the instructor. Audited courses carry no degree credit, do not count in determining the minimum number of credits permitted in each term, and are not included in the calculation of the GPA. The only valid grade for audited courses is a grade of S (Satisfactory) or NR (No Report). A student may change to or from credit to audit only during the first four weeks of classes (Regulation 19).

### 19. Courses Scheduled for Fewer Than 15 Weeks

Deadlines for sessions and modular courses are listed on the Office of the Registrar's website.

## PERFORMANCE AND EVALUATION

### 20. Attendance

Each student is expected to attend all assigned classes during the regular meeting times, and take all of the examinations for those courses at the regularly scheduled times. In the case of course or examination absences excused for a reason acceptable to the course instructor, the student is expected to make up the work within a reasonable time, and may do so without a grade penalty.

### 21. Grading System

Course grades are reported by letter only; plus and minus grades are not authorized. The following grades are included in computing grade point average (GPA) and point-credit ratio (PCR).

Grade: A (Excellent)

Grade Points Per Credit: 4.0

Grade: AB (Intermediate)

Grade Points Per Credit: 3.5

Grade: B (Good)

Grade Points Per Credit: 3.0

Grade: BC (Intermediate)

Grade Points Per Credit: 2.5

Grade: C (Fair)

Grade Points Per Credit: 2.0

Grade: D (Poor)

Grade Points Per Credit: 1.0

Grade: F (Failure)

Grade Points Per Credit: 0.0

### 22. Special-Purpose Grades

The following ways of reporting course grades are also used and, except for NR, do not affect GPA or PCR

- A. S (Satisfactory) or U (Unsatisfactory) – used to report pass/fail courses (Regulation 17). S is also used in audited courses (Regulation 18).
- B. CR (Credit) or N (No Credit) – used to report credit/no credit courses (Regulation 17).
- C. NR (No Report) – signifying that no grade has been reported to the Registrar's Office – a temporary grade that must be replaced by an A-F grade; also used for a permanent grade in audited courses (Regulation 18).
- D. NW (No Work) – student enrolls in a course and then never attends. This means that instructor has no evidence that student ever attended.
- E. I (Incomplete) – a temporary grade (Regulation 27); EI is used for an extended incomplete (requires a dean's action); IN is used to indicate an incomplete in a credit/no credit course; PI is used for a permanent incomplete (Regulation 28).
- F. P (Progress) – a temporary grade used for courses extending beyond one term. The final grade determines the grade for each term and replaces P grades for the course.
- G. DR (Dropped) – indicates the course was dropped after the initial drop deadline noted on the Office of the Registrar's website.

### 23. Course Grade Changes

The final course grade may be changed only by the professor in charge of the course section, and then only to correct a clerical error in the computation or reporting of the original grade.

### 24. Grade Point Average (GPA) and Point-Credit Ratio (PCR)

Grade point average (GPA) is computed by dividing the total number of grade points earned at UW–Madison by the total number of credits attempted (excluding pass/fail or credit/no credit courses) at UW–Madison. The point-credit ratio (PCR) differs from the grade point average in that it involves only those credits that count toward graduation and the related grade points. When a course is repeated, the credits and grade points earned only for the final attempt are included in the point-credit ratio.

### 25. Dean's Honor List

At the end of each semester the names of all full-time students in good standing with a 3.5 or higher semester GPA and cumulative GPA of at least 3.0 and no incomplete or unreported grades will be included on the Dean's Honor List. Credit/no credit and pass/fail courses are not considered in meeting the full-time standing requirement for the Dean's Honor List. Transcript will show a notation of "Dean's Honor List."

### 26. Repeating Courses

Any course may be repeated at the student's option. In the case of a required course in which the student earned a grade of D and which is a prerequisite to another required course, the student is encouraged (or may be required by departmental regulation) to repeat the course. For courses taken more than once, all grades count in the grade point computations, but only the last grade for the course is applied to the student's point-credit ratio.

### 27. Incomplete

An incomplete may be reported for a student who has carried a subject with a passing grade, but because of illness or other unusual



and substantiated cause beyond the student's control has been unable to complete the final examination or some limited amount of term work. A student who stays away from a final examination without proof of being prevented from attending as indicated above will receive a grade of F, N, or U (whichever is appropriate). Even with such proof, if the term work has convinced the instructor that the student cannot pass, the grade shall be F, N, or U (whichever is appropriate).

### 28. Resolution of an Incomplete

At the instructor's option, a course marked incomplete may be completed at any time no later than last day of class of the student's next semester of attendance at UW–Madison, or it will lapse into a fail. An incomplete may not be removed after five years of absence from UW–Madison without special permission of the dean. Such an incomplete remains on the record with a grade of PI and does not lapse into an F, N, or U.

### 29. Final Exam Rescheduling

A student may be permitted to take an examination at other than the regularly scheduled time only with permission of the instructor. Permission will be granted only for illness or other unusual and substantiated cause beyond the student's control. (Regulation 10).

### 30. Withdrawal

Students may withdraw from the University after consulting with their advisor and with the approval of the Dean. The withdrawal date and a DR notation will be recorded for courses in progress if the student withdraws after the initial deadline to drop a course and before the withdrawal deadline (Regulations 14, 19 and 22.H.). The deadline to withdraw is specified on the Office of the Registrar's website.

A Medical Withdrawal may be granted to students who experience a serious or unexpected physical or behavioral health condition; who may need to provide care to an immediate family member who is experiencing a serious or unexpected physical or behavioral health condition; or who have experienced the death of an immediate family member. Approval will be granted on a case-by-case basis.

Withdrawals (other than Medical Withdrawals) are not granted in the last three weeks of scheduled classes. Grades of Incomplete, if justified (Regulation 27), or F, N, or U will be recorded for students who leave the University during this time.

### 31. Year Classification

The year classification of a student is determined by the number of credits passed and the number of grade points earned, applicable to the student's degree, as indicated by the following tabulation:

#### Freshman

Numerical Classification of Year: 1  
Minimum Credits Passed: 0  
Minimum Grade Points Earned: 0

#### Sophomore

Numerical Classification of Year: 2  
Minimum Credits Passed: 24  
Minimum Grade Points Earned: 48

#### Junior

Numerical Classification of Year: 3  
Minimum Credits Passed: 54  
Minimum Grade Points Earned: 108

#### Senior

Numerical Classification of Year: 4  
Minimum Credits Passed: 86  
Minimum Grade Points Earned: 172

For the purpose of year classification only, pass/fail and credit/no credit courses and courses transferred from another campus are assumed to have earned 2.0 grade points per credit.

### 32. Good Standing

A student is in good academic standing unless on academic probation or dropped.

### 33. Part-time Warning

A student is placed on part-time warning when that student has, in the semester just completed, passed fewer than 12 credits without permission from the Dean.

### 34. Probation

A student is placed on academic probation when that student has, in the semester just completed, attained less than a 2.0 GPA. Once on probation, the student is continued on probation until either removed from probation or dropped (Regulations 35, 36).

### 35. Removal From Probation

The following requirements must be satisfied for the removal of a student from academic probation (Regulation 34):

- A. A cumulative GPA of at least 2.0;
- B. A GPA of at least 2.0 for the semester just completed.

### 36. Drop

- A. A student on academic probation will be dropped at the end of any semester for which that student has attained a GPA of less than 2.0 or passed fewer than half of the credits attempted (Regulation 34).
- B. A student not on academic probation will be dropped at the end of any semester for which that student has passed fewer than half of the credits attempted.

### 37. Readmission

A student who has been dropped for academic reasons may be readmitted by the dean only after the student has been out of the College of Engineering for at least one semester.

### 38. Session Actions

No academic actions (part-time warning, probation, drop, removed from probation) will be taken at the end of sessions (Regulation 8.D.).

### 39. Graduation

It is the student's responsibility to ensure that graduation requirements have been met. All students should regularly consult their DARS (Degree Audit Reporting System) document in conjunction with their advisor to ensure that all the following graduation requirements have been met:

- A. Have fulfilled the published graduation requirements of that curriculum, with all substitutions formally approved, and have achieved a minimum 2.0 GPA overall.
- B. Have a PCR (Regulation 24) of at least 2.0 for those semesters and sessions containing the last 60 credits taken at UW–Madison or for all credits taken at UW–Madison if fewer than 60.

- C. Have a departmental PCR of at least 2.0 for all courses taken in the degree-granting department that count toward graduation.
- D. Have completed at least 30 credits in residence in the College of Engineering, including 15 credits of work in the degree-granting department.
- E. Have completed the last two semesters in residence in the College of Engineering. Cannot be on co-op or study abroad in the last semester. Students may seek permission from the Dean to be on co-op or study abroad in their second to last-semester.
- F. Have completed the last semester in the College of Engineering enrolled in courses required for their engineering degree.
- G. Have a GPA of at least 2.0, both for the last semester and also for the combined last two semesters.

#### 40. Graduation with Distinction and Highest Distinction

Students who have earned at least 60 credits on the University of Wisconsin–Madison campus and whose total cumulative GPA is in the top 5 percent of the College graduating class will receive the designation “Graduated With Highest Distinction,” or if in the next 15 percent, “Graduated with Distinction.” The appropriate designation is entered as a permanent record on the student’s transcript.

## APPEAL

### 41. Appeal

The Dean of the College of Engineering has the authority to suspend or modify the operation of these regulations if their enforcement is judged to work an injustice to the student.

## POLICIES

### ACCREDITATION

The following engineering undergraduate degree programs described in this catalog are accredited by the Engineering Accreditation Commission of ABET, [www.abet.org](http://www.abet.org) (<http://www.abet.org/>):

- Biological Systems Engineering (with College of Agricultural and Life Sciences)
- Biomedical Engineering
- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Electrical Engineering
- Engineering Mechanics
- Geological Engineering
- Industrial Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Nuclear Engineering

### SECOND BACHELOR'S DEGREE

The College of Engineering does not accept second undergraduate degree applications. Second degree students (<https://engineering.wisc.edu/admissions/undergraduate/adult-students-second-degree-students/>) might explore the Biological Systems Engineering program at UW–Madison, an undergraduate engineering

degree elsewhere, or a graduate program in the College of Engineering.

## ADDITIONAL MAJOR

Engineering students may earn an additional major and have the additional major noted on their transcript at the time of graduation. This includes most majors in the College of Letters & Science as well as Health Promotion and Health Equity (HPHE), Education Studies, and Theatre & Drama in the School of Education; and Global Health in the College of Agricultural and Life Sciences. To qualify, the student must have approval in advance from both the department offering the major and the academic dean of the College of Engineering. Students must satisfy all requirements for their declared additional major prior to or concurrently with the engineering degree. For further details, contact the College of Engineering Dean’s Office, 2640 Engineering Hall.

Adding additional majors from colleges other than the College of Letters & Science and majors not approved in the College of Agricultural & Life Sciences and the School of Education is not accepted. For example, majors such as art (School of Education) and forestry (College of Agricultural and Life Sciences) cannot be completed in conjunction with an engineering degree. Likewise, students cannot pursue more than one undergraduate engineering degree concurrently.

## STUDENT GRIEVANCES

In compliance with Title IX regulations, the College of Engineering has a grievance procedure to handle student complaints. Students should follow these steps until a resolution is achieved:

1. Attempt to resolve the grievance directly with the individual involved.
2. If that approach seems unsatisfactory, and the grievance involves a teaching assistant (TA), consult the professor in charge of the course.
3. If necessary, discuss the grievance with the appropriate department chair.
4. The next level involves the academic dean. Students should contact the Associate Dean for Academic Affairs, 608-262-5511.
5. All students have the right to appeal to the dean of the college, Ian Robertson, 608-262-3482, if they feel their case has not been justly handled by another dean.
6. Only a few grievances are really serious and difficult to resolve. In these instances, the dean seeks a solution that, as best as can be determined, is appropriate, just, legal and in the best interests of all concerned.

### AUTHORITY LIMITS ON GRADES

There are areas in which the dean does not have authority to override an instructor, such as determination of a student’s grade. However, it has happened that the department chair has intervened, for example, by having a grade determined by committee rather than by the course instructor.

It has also occurred, by agreement between deans, department chairs and faculty, that a misgraded course was dropped from the

student's record and credit given for the controversial course by having the student pass the next higher course.

### GRIEVANCE EXAMPLES

The following is a list of student grievances (in no particular order of frequency or importance) that have occurred:

- Discrimination based on sex, religion or political views
- Course or exam grade disputes
- Required class or examination attendance at other than regularly scheduled (timetable) times
- Changes in course content contrary to catalog description or division approval
- Difficulty in obtaining space in a critical course
- Personality conflicts between student and instructor
- Difficulty obtaining an appointment with instructor
- Unwillingness of instructor to estimate a grade before the course drop deadline date
- Teaching above the level of the class, which includes the assumption of an unlisted course prerequisite
- Intelligibility of instructors, especially those for whom English is a second language
- Excessive instructor class absences
- Rescheduled final exams by majority approval or apparent unanimity, to possible disadvantage of the minority
- Sexual harassment (Contact the Division of Student Life, 75 Bascom Hall, 608-263-5700; or the Associate Dean for Academic Affairs, 608-262-5511)

General Education

- Breadth—Humanities/Literature/Arts: 6 credits
- Breadth—Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth—Social Studies: 3 credits
- Communication Part A & Part B \*
- Ethnic Studies \*
- Quantitative Reasoning Part A & Part B \*

\* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

## ENGINEERING CURRICULA

The graduation requirements for each of the engineering degrees are presented in the form of four-year programs of study. These four-year schedules are available, but rarely followed without deviation. Some students can proceed more rapidly; many must proceed more slowly and take nine or more semesters to complete the degree. Flexibility in course selection is also present though elective categories within curricula.

**All engineering curricula are designed to meet all criteria for accreditation by the Engineering Accreditation Commission of ABET, [www.abet.org](http://www.abet.org) (<http://www.abet.org/>). Among other criteria, ABET requires that students complete:**

- A minimum of 30 semester credit hours (or equivalent) of a combination of college-level mathematics and basic sciences with experimental experience appropriate to the program.
- A minimum of 45 semester credit hours (or equivalent) of engineering topics appropriate to the program, consisting of engineering and computer sciences and engineering design, and utilizing modern engineering tools.
- A broad education component that complements the technical content of the curriculum and is consistent with the program educational objectives.
- A culminating major engineering design experience that 1) incorporates appropriate engineering standards and multiple constraints, and 2) is based on the knowledge and skills acquired in earlier course work.

Engineering curricula continuously evolve. The requirements that apply to a particular student are determined by the date (catalog year) that a student enters a degree-granting program. At that point, the curriculum becomes fixed throughout the period it takes for a student to complete the degree, although new changes that benefit a student can be adopted by a particular student if he or she so chooses.

The curricular descriptions below do not address how these requirements are satisfied; students seldom need to be concerned with these details. However, if deviations from a curriculum are requested, they must not violate any of the accreditation requirements.

### DEVIATION FROM PRESCRIBED CURRICULA

Circumstances deemed acceptable for deviating from the outlined engineering curricula are included in each departmental description. The choice of courses to fulfill elective credit requirements provides students with considerable flexibility in their programs. In addition, some departments permit the substitution of elective courses for required ones

## REQUIREMENTS

### UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin–Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (<http://guide.wisc.edu/undergraduate/#requirementsforundergraduatestudytext>) section of the *Guide*.



and also offer outstanding undergraduate students the opportunity to enroll in graduate courses. These options aid the student in tailoring a course of study to meet personal goals more closely.

## DEFINITION OF ELECTIVES

There are general types of elective courses including technical electives, liberal studies and free electives.

**Technical electives** are limited to courses in engineering and closely related fields.

**Liberal studies electives** are those courses that are classified as either humanities, literature, social studies or as foreign language.

**Free electives** are courses completely free of any restrictions or requirements other than the course prerequisites.

Other specific elective requirements are established and described in department curricula.

To assist the student in gaining a better understanding of individuals and societies, and to reduce problems of transferring from one curriculum to another, engineering curricula require adherence to the Liberal Studies Guidelines (see below). Some require slight variations from those guidelines.

## INDEPENDENT STUDY

Students who have high grade point averages may satisfy some elective credits by independent study of subjects or problems suitable for analytical investigative work. The student must identify a professor who is willing to supervise study of interest to the student. Together they must agree upon the work to be done, the credits earned (usually 1-3), and the course number (199, 299, 399, 499, 599, or 699) for which the student is to enroll before the beginning of a semester. Weekly meetings with the professor to discuss questions and report progress are customary.

## LIBERAL STUDIES GUIDELINES

The College of Engineering requires one semester's worth of liberal elective courses in humanities, literature and social science for graduation. The college specifies that students should obtain both **breadth** (i.e., both social science *and* literature or humanities), and **depth** (i.e., more than one course in the same department).

The college has established general liberal elective guidelines that have been adopted by all departments, some of which have additional stipulations (see below).

## FOR ALL ENGINEERING STUDENTS

As a graduation requirement, and to fulfill campus general education guidelines, all engineering undergraduate students must take 15 or 16 credits of liberal electives. These credits must fulfill the following subrequirements.

1. A minimum of two courses from the same subject area (<https://registrar.wisc.edu/subjectarea/>) (the description before the course number). At least one of these two courses must be above the elementary level (i.e., must have I, A, or D level designator), as indicated in Guide (<https://guide.wisc.edu/courses/>).
2. A minimum of 6 credits designated as humanities or literature, and an additional minimum of 3 credits designated as social science. Foreign language courses count as humanities credits.<sup>1</sup>

3. At least one course of at least 3 credits designated as ethnic studies (lower case "e" in the Course Guide). These credits may help satisfy subrequirements 1 or 2 as well, but they count only once toward the total required credits.

1

**Exception:** "Retrocredits," which are credits awarded by foreign language departments for successful completion of a higher level course, do not count toward this subrequirement, nor toward the total credits required (15 or 16). They are still helpful: If a student completes one foreign language course at the intermediate level and is awarded retrocredits, then subrequirement 1 above is satisfied because the student is judged to have achieved "depth" in liberal studies.

## ADDITIONAL RESTRICTIONS/ SUBREQUIREMENTS FOR SPECIFIC DEPARTMENTS

**Civil and Environmental Engineering:** An economics course (from an approved list) and an environmental studies course (with approved characteristics) are required.

**Industrial Engineering:** ECON 101 Principles of Microeconomics or ECON 111 Principles of Economics–Accelerated Treatment is required.

## RESOURCES

The solutions to challenges great and small lie not in the hands of one person, but emerge from the diverse ideas, perspectives, and backgrounds of many people working together. Whether a prospective or current faculty member, staff member, or student, members of the College of Engineering create a welcoming community where they can be themselves and strive to become whatever they want to be. Here are some of the services and organizations that students can utilize along the way.

## ENGINEERING SCHOLARSHIPS

The College of Engineering awards over two million dollars in scholarships each year to its students.

**Incoming Freshman Awards:** Beginning in 2021-2022, there is no longer a separate scholarship application for incoming freshmen. The admissions applications of admitted students will be reviewed and selection will be based on students' academic record, extracurricular activities, application essays, and letters of recommendation. This new process pertains to both scholarships that are based on need and those which are not based on need. Learn more about College of Engineering scholarships for incoming first-year students, which include the STAR, LEED, Engineering Freshman Awards, and Departmental Scholarships, here: <https://engineering.wisc.edu/admissions/scholarships/>. Additional details about LEED scholarships (Leaders in Engineering Excellence and Diversity), can also be found in the Inclusion, Equity, and Diversity Student Center (IEDE Student Center) section below.

Scholarship award considerations are based on a holistic approach that encourages diversity in the programs while considering course rigor and compatibility and potential for success in the program. Financial need can be a factor for some scholarships based on their Free Application for Federal Student Aid (FAFSA®). Students must submit a FAFSA to UW-Madison in order to be considered for need-based scholarships. For more information on the FAFSA, please refer to the Office of Student Financial Aid website: <https://financialaid.wisc.edu/applying/>.

**Continuing Student Awards:** Each spring, continuing undergraduate students in the College of Engineering are eligible to apply for college-wide and departmental scholarships. The application period is mid-February through mid-April and students must have progressed in their department to be considered for awards for the following academic year. Students can apply by visiting the Wisconsin Scholarship Hub (WiSH) (<https://wisc.academicworks.com/>).

**Off-campus Transfer Students:** There is no longer a separate scholarship application for incoming off-campus transfer students. The admissions applications and transcripts of admitted off-campus transfer students will be reviewed for scholarship opportunities. Each semester, several scholarships are awarded to recognize the outstanding achievements of incoming transfer student scholars who join the College of Engineering from other colleges and universities.

## ACADEMIC ADVISING

Each College of Engineering program has academic advisors (<https://engineering.wisc.edu/student-services/undergraduate-student-advising/>) dedicated to serving its students. Program advisors can help current College of Engineering students with questions about accessing courses, navigating degree requirements, resolving academic issues, and more. Students can find their assigned advisor in their student center.

## UNDERGRADUATE LEARNING CENTER

The Undergraduate Learning Center (<https://engineering.wisc.edu/student-services/undergraduate-learning-center/>) (ULC) in the College of Engineering provides tutoring and academic support programs for engineering undergraduates wanting to excel in their courses. The ULC is a place where students study, form study groups, and discuss engineering concepts and problem-solving strategies with their peers and with the tutors and facilitators.

### Drop-In-Tutoring Sessions

Sessions are offered for over 60 courses in mathematics, chemistry, physics, statistics, computer sciences, and engineering. The sessions provide help with homework problems, concept review, and exam preparation. Drop-in tutoring sessions are offered each evening from Sunday to Thursday, resulting in approximately 15,000 student visits in a typical year.

### PrEPS (Practicing Engineering Problem Solving) Labs

Labs were developed to help students succeed in core courses that have traditionally proved challenging for students. The courses targeted are early in the engineering curricula and contain dense material content delivered at a fast pace. The labs reinforce concepts through practicing problem solving skills. Students commit to meeting twice every week for 75 minutes per meeting.

### Tutoring by Request

Based on the Tutorial Services Room model developed at MIT, the College of Engineering offers Tutoring by Request (TBR) for students in critical need. Assistance is offered in a variety of courses, ranging from gateway courses such as chemistry, math, physics courses, to intermediate-level engineering courses.

### Special Courses and Workshops

Special courses are targeted toward helping students learn topics that span multiple courses such as math concepts common to a variety of introductory engineering courses. Self-guided online tutorials are available for several early math courses. Workshops are offered in topics such as MATLAB, R, and vector review to help

students be successful in their engineering courses. Availability varies by semester.

## STUDY ABROAD

In today's global marketplace, there is an increasing need for broadly educated engineering graduates with cross-cultural skills, international understanding, and proficiency in more than one language. International Academic Programs (IAP) and the College of Engineering are committed to providing and expanding international opportunities that will assist engineering students in obtaining these important skills.

International Academic Programs, in collaboration with the College of Engineering, offers semester, year-long, and summer study abroad programs for engineering students (<https://studyabroad.wisc.edu/programsearch/?advisinglocation=103>), and additional opportunities (<https://studyabroad.wisc.edu/programsearch/?AreaOfFocus=77788>) on which engineering students can complete degree requirements through other units at institutions in many countries around the world. These programs offer engineering students the opportunity to continue to make progress toward degree requirements and have a meaningful experience abroad.

The College of Engineering also offers a Certificate in International Engineering. Courses in language and culture taken abroad and in Madison can count toward this certificate, which demonstrates the student's knowledge of a specific country or region. This credential appears on the student's transcript, strengthens their resume, and testifies to their preparation for an international career.

For more information regarding international programs, visit [studyabroad.wisc.edu](https://studyabroad.wisc.edu) (<https://studyabroad.wisc.edu/>).

## ENGINEERING CAREER SERVICES WITH COOPERATIVE EDUCATION

Engineering Career Services (ECS) assists students in identifying pre-professional work-based learning experiences such as co-ops and summer internships, considering and applying to graduate or professional school, and finding full-time professional employment during their graduation year.

ECS offers two major career fairs per year, assists with resume writing and interviewing skills, hosts workshops on the job search, and meets one-on-one with students to discuss offer negotiations.

Students are encouraged to utilize the ECS office early in their academic careers. For comprehensive information on ECS programs and workshops, see the ECS website (<https://ecs.wisc.edu>) or call 608-262-3471.

## INCLUSION, EQUITY, AND DIVERSITY IN ENGINEERING STUDENT CENTER

The Inclusion, Equity, and Diversity in Engineering Student Center (IEDE Student Center) (<https://engineering.wisc.edu/about/inclusion-equity-and-diversity/>) exists to affirm a sense of belonging for all students, striving to create a welcoming and supportive campus community for students from historically underrepresented groups in the field of engineering, including women, students from racially and ethnically diverse backgrounds, LGBTQ+, first generation, and socioeconomically disadvantaged student populations.

In partnership with units across campus, the IEDE Student Center develops and implements student-centered programs and services that foster an inclusive campus community; it offers a space and place for intercultural and cross-cultural engagement as well as opportunities for

students to make meaningful connections with others. The center provides students a comfortable place to study with access to computers and printers, and a place to be their genuine and authentic selves.

The IEDE Student Center also works closely with the UW-Madison chapters of the National Society of Black Engineers (NSBE), Queer and Trans Engineers (QTE), Society of Hispanic Professional Engineers (SHPE), and the Society of Women Engineers (SWE).

### Undergraduate Programs

The Leaders in Engineering Excellence and Diversity (LEED) Scholars is a community and scholarship program providing students with monthly student development meetings, adjunct academic advising, peer mentoring and networking, personal and career development, leadership and community outreach opportunities, and engagement in social justice. LEED Scholars events are open to any student interested in engaging in a diverse learning community.

### High School Programs and Outreach

The IEDE Student Center, with the help of undergraduate student leaders, offers engineering outreach visits on campus and at high schools. In the summer, we offer residential and virtual programs for high school students, including the Engineering Summer Program and Engineering Tomorrow's Careers (Society of Women Engineers).

### Other Programs

The IEDE Student Center develops programs designed to promote a welcoming climate that celebrates the diversity of all students in the College of Engineering. The variety of events and projects includes History Month Lunch and Learns, Student Success Summit, and the Diversity in Engineering Welcome events.

## COMPUTER-AIDED ENGINEERING CENTER

The Computer-Aided Engineering Center (CAE) (<http://www.cae.wisc.edu>) provides computing resources, facilities, and services for students, faculty, and staff in the college. The broad range of services and resources include:

- Windows and Linux computer classrooms;
- open labs which have Windows and Linux workstations;
- industry-standard engineering software;
- software and services available on students' personal computers;
- reliable file storage for coursework;
- customer consulting and help-desk services.

The CAE walk-in help desk is located at 1410 Engineering Drive; 608-262-5349; submit contact form: <https://www.cae.wisc.edu/contact/>. For more information, see the CAE website (<http://www.cae.wisc.edu>).

## WELLNESS SERVICES

University Health Service's mental health (<https://www.uhs.wisc.edu/mental-health/>) providers understand the complexities of student life and offer an open, safe, and confidential environment to help students through issues that may interfere with their development, well-being, and academic productivity.

UHS's no-cost mental health services include individual, couple/partner, group counseling, outreach programming, and stress management. They also offer 24/7 crisis services. Psychiatry services are also available for medication management.

University Health Services/Mental Health Services

333 East Campus Mall  
Madison, WI 53715-1384  
608-265-5600

## REGISTERED STUDENT ORGANIZATIONS

The College of Engineering has just as many opportunities outside the classroom as it does inside. CoE students have access to a wide variety of groups, organizations, and services that will help make their time on campus memorable and unique. There are more than 50 engineering affiliated student organizations (<https://engineering.wisc.edu/student-life/student-organizations/>) on campus. Students can get involved in organizations that range from competitive, such as teams that build and race vehicles or concrete canoes, to service-oriented, honors societies, and student government. The College of Engineering also offers many discipline-related student chapters of professional organizations that will connect students with their peers and also help them make professional contacts.

## EMERGING LEADERS IN ENGINEERING

The Emerging Leaders in Engineering (ELE) program is the College of Engineering's undergraduate leadership program.

ELE is a one-year cohort-based program created by engineering students, for engineering students. Students who graduate from the ELE program are awarded a formal leadership certificate by the UW-Madison Center for Leadership and Involvement.

Those who are admitted into the program receive individual leadership coaching, join our young alumni mentorship program, create a personal/professional development plan, work on local technical issues in our community, and receive course credit for their experience. Any student going into their sophomore year is encouraged to apply.

For more information please contact Angela Kita ([amkita@wisc.edu](mailto:amkita@wisc.edu)) or visit our website (<https://engineering.wisc.edu/student-life/student-organizations/student-leadership-program/>).

## HONORS

In general, the concept of academic honors programs in higher education focuses resources on especially able students who are interested in challenging themselves at unusually high levels. This concept does not translate to the College of Engineering programs. All engineering classes are challenging, focused, and require high academic ability in math and science. Further, in engineering, resources must be used to make sure all engineering graduates—not just a few—excel in every respect. Nonetheless, honors opportunities are available on a limited basis in the College of Engineering.

## ENGINEERING HONORS IN RESEARCH

Select students in certain degree-granting departments may pursue the Honors in Research distinction. It requires completion of a certain number of semesters of faculty-guided independent study work and completion of a written thesis. Honors in Research programs have been developed for majors in biomedical engineering, chemical engineering, civil engineering, computer engineering, electrical engineering, engineering mechanics, geological engineering, industrial engineering, materials science and engineering, mechanical engineering, and nuclear engineering. Interested students should contact their department for more information.

## ENGINEERING HONORS IN THE LIBERAL ARTS (EHLA)

EHLA allows for a small group of highly motivated students who have special, broad interests in liberal arts to take challenging background courses in physical science, natural science, humanities, foreign language, and social science to supplement their engineering program. The EHLA program will allow students access to honors sections in these College of Letters & Science courses. Honors courses in physical and natural science are available to invited engineering freshmen whether or not they are selected for EHLA. Conversely, no engineering courses are available as honors courses. Admission to EHLA is based on applications from high school students submitted before May 23 of their last year in high school. Fewer than 30 students are admitted each year. Interested students can find the application on the College of Engineering website (<https://docs.google.com/forms/d/e/IFAlpQLSfgNM66tru6Y69xxCmjN5ea34avL0Ogc73t8crCdQoSoLW3gw/viewform/>) and should contact Dr. Andrew Greenberg at [greenberg2@wisc.edu](mailto:greenberg2@wisc.edu) with questions.

The EHLA designation will be awarded to those admitted to the EHLA program who meet the following requirements when they graduate with an engineering degree:

- A cumulative grade point average of at least 3.3 in all honors courses through the semester in which all criteria for EHLA are met;
- Completion of at least 24 credits in Honors courses with grades of B or better;
- Completion of at least 6 credits in Honors courses in the humanities, 6 credits in social sciences, and 6 credits in natural sciences;
- Completion of at least 15 Honors credits in courses with the designation "H" or "!" (honors sections).

Because the classes for which Honors designation is available are taken mainly in the first year, students do not apply to the EHLA program once they begin in the College of Engineering. Students can, however, transfer from the College of Letters & Science Honors in Liberal Arts program into the EHLA program provided they transfer into an engineering program in their first two years.