

# MechSE Advising Manual

*(last updated 10/26/2018)*

## Introduction

The purposes of faculty advising of students are to provide the students with career advice and to help the students tailor their coursework and experience (internships, research, study abroad, student societies, etc.) to achieve their academic and professional goals. If you make good use of your advising sessions your advisor will be an excellent potential source for letters of recommendations for jobs, graduate school, fellowships, and scholarships.

We have listed below topics that commonly arise, in order to reduce the time you spend with your advisor on curriculum requirements and procedural questions.

If you have additional curriculum requirement and procedural questions that are not addressed by the information below, please refer to the MechSE Undergraduate Programs Office in 154 MEB or by email at [mechse-ug-advise@illinois.edu](mailto:mechse-ug-advise@illinois.edu).

## Add/Drop/Withdraw Courses

### Adding/Dropping

Students may modify their schedules independently on UI-Integrate during the first ten days of the semester. After the first ten days of instruction, undergraduate students must go to the College of Engineering web portal to request any type of schedule change, including adding, dropping, changing sections, or changing credit hours for a course. For information regarding the procedure and timeline, respectively, for dropping a course please visit the following:

<https://wiki.illinois.edu/wiki/display/ugadvise/Course+Registration>  
<https://registrar.illinois.edu/academic-calendars/>

All schedule change requests that are restricted, such as dropping a required course or adding a course late, will require approval—the web portal will prepare a form with instructions for the type of approval needed: <https://wiki.illinois.edu/wiki/display/ugadvise/Course+Registration#CourseRegistration-AddorDropCourses>. Schedule changes that are not restricted will be automatically processed within a few days of the date the requested change was made. Hand written changes to the form are not accepted by the college.

Undergraduate students must have approval from the MechSE Department and a College of Engineering Assistant Dean to do either of the following: (i) drop below 12 credit hours, or (ii) register for more than 18 credit hours.

A student must obtain MechSE approval to drop an ME or TAM course listed by number on the curriculum flow sheet after the first ten days of instruction. Only one such drop is permitted during the student's undergraduate program.

### **Withdrawing**

Students may only withdraw from a course with proof of extenuating circumstances beyond their control that have severely affected their academic performance. For more information on withdrawing from courses visit:

<https://wiki.illinois.edu/wiki/pages/viewpage.action?pageId=680722808#IncompleteGrades,Withdrawals,andReadmission/ResumingStudies-Withdrawal>

### **Auditing a Course**

No credit is given for auditing a course. Auditing courses is typically only done by graduate students. For more information, please visit:

<https://wiki.illinois.edu/wiki/display/ugadvise/Course+Registration#CourseRegistration-AuditaCourse>

### **Campus Foreign Language Requirements**

All students must complete either three years of a single foreign language in high school or a third semester of a language at the college level—for example, SPAN 103 or GER 103. International students whose native language is *not* English may petition to take a proficiency exam in their native language to satisfy this requirement. Students who have not already met the foreign language requirement should be directed to 206 Engineering Hall for assistance.

<https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements#DegreeRequirements-LanguageRequirements>

### **Counseling center**

The Counseling Center is committed to providing a range of services intended to help students develop improved coping skills in order to address emotional, interpersonal, and academic concerns. The Counseling Center provides individual, couples, and group counseling. All of these services are paid for through the health services fee. The Counseling Center offers primarily short-term counseling, but we do provide referrals to the community when students could benefit from longer term services.

<http://www.counselingcenter.illinois.edu/>

A counselor from the Counseling Center is also available for consultations at Engineering Hall 206. Students will have the opportunity to meet with a counselor to talk about issues that may be affecting their academic, social or emotional functioning, such as procrastination, depression, relationships and anxiety. To schedule an appointment, stop by EH 206 or call 217-333-2280.

## **Credit / No Credit (CR/NC) Grading Option**

The *only* courses that engineering students may take CR/NC and apply towards a degree are the Free Electives, the Liberal Education (*not* General Education) electives, and approved study abroad courses. In ME, the required Economics course must be taken for a grade. The CR/NC option, if allowed, also requires:

- that the student be on clear status (*not* probation), and
  - that the student elect the CR/NC option on or before the last day to drop a course.
- Other restrictions also apply:
- A full-time student may take a maximum of two courses each semester CR/NC. A part-time student may take one course each semester CR/NC. During the summer session, a student may take only one course CR/NC.
  - To remain eligible for the Dean's List, students must be registered for at least 14 hours of graded course work.

Students who wish to take a course CR/NC should fill out a form for this purpose, available in 154 MEB, obtain the approval of the MechSE Academic Advisor or Chief Advisor, and take the form to 206 Engineering Hall. Complete regulations governing the CR/NC grading option are found in the Code of Policies and Regulations Applying to All Students:

<http://www.admin.illinois.edu/policy/code/>.

## **Curriculum Modification**

Students may petition that an alternate course fulfill the requirement of a required course in their curriculum by using a Curriculum Modification form found in the MechSE Undergraduate Programs Office, 154 MEB.

## **Emergency Dean (217-333-0050)**

The Emergency Dean provides information and follow-up services to students and families in an emergency situation. Also, the Emergency Dean acts as a resource to community and University law enforcement agencies, hospitals and crisis centers.

The Emergency Dean can send a letter for extended absences due to an illness, accident or family crisis. However, the faculty has authority and responsibility for excusing students from class, accepting late assignments and giving make-up tests.

<http://odos.illinois.edu/community-of-care/emergency-dean/>

## **Free Electives—Restrictions**

- Kinesiology: A maximum of 3 hours of basic kinesiology courses (skill courses)
- Religious foundations: A maximum of 4 hours

- Remedial courses: No credit—for example, math courses below [MATH 220](#) ([MATH 112](#), [MATH 114](#), etc.); [CHEM 101](#); [PHYS 100](#)
- Duplicate courses: No credit—for example, for [MATH 225](#) if [MATH 415](#) is taken
- Military science courses: No restriction
- Foreign language: only if a language placement examination has been taken and the college hours used do not duplicate more than the last two years of high school work. Credit earned in the student's native language is not allowed.

For additional information on free electives see the following link: <https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements#DegreeRequirements-FreeElectives>

## **General Education Requirements / Liberal Education Electives**

The College of Engineering requires all students to complete 18 hours of [Liberal Education Electives](#). Of the 18 hours, 6 hours of humanities and the arts and 6 hours of social and behavioral science are required. At least one Western cultures course and one non-Western cultures course must be completed. Also, Mechanical Engineering students (only) are required to take [ECON 102](#) or [ECON 103](#).

By judicious selection, courses can be picked that satisfy multiple requirements. For example, [ENGL 208](#) (3 hours) and [ENGL 285](#) (3 hours) meet: (i) the campus General Education requirement of 6 hours of humanities and arts; and (ii) the campus cultural studies requirement of one Western cultures course ([ENGL 208](#)) and one non-Western cultures course ([ENGL 285](#)).

## **Grade Replacement**

All undergraduate students on campus can repeat courses and use the new grade to replace the grade earned in the first attempt. The policy places some limits on the course and hours that can be replaced. Grade replacement may be requested for up to four distinct courses, totaling no more than 10 credit hours.

You can find more information regarding grade replacement at the following links:

College of Engineering guidelines:

<https://wiki.illinois.edu/wiki/display/ugadvise/Course+Registration#CourseRegistration-GradeReplacement>

Student Code:

[http://studentcode.illinois.edu/article3\\_part3\\_3-309.html](http://studentcode.illinois.edu/article3_part3_3-309.html)

## **Graduate Credit for Undergraduates**

### **Taking graduate courses for graduate credit**

Undergraduate students may take graduate courses for graduate credit if they are within 14 hours of graduation and have at least a 3.0 GPA. If a student meets these qualifications, then the student must receive written permission from the course instructor and the head of the department offering the course. Once this is done, the student must receive a level override from

the Undergraduate Programs Office, 154 MEB. This process must be completed before the tenth day of classes.

### **Early admission to UIUC graduate school**

Students may apply for early admission to the UIUC Graduate College if they are within 5 hours of graduation and have at least a 3.0 GPA. To do this, they must complete the Petition for Early Admission to the Graduate College in addition to the usual graduate application for admission required of all prospective graduate students. Students should be directed to the MechSE Graduate Admissions Office, 162 MEB, for assistance.

### **Graduation**

Students intending to graduate **must declare their intent to graduate with the College of Engineering**. This is normally done at the same time you register for your final semester of classes through the student registration system. If you do not complete this step, your name will not appear on the pending degree list, you will not receive information regarding the Graduation Convocation Ceremony, and the date of your degree award and diploma will be delayed. See the following link for more information:

<http://engineering.illinois.edu/current-students/graduation>

### **Honors**

#### **Bronze Tablet**

The Bronze Tablet is a recognition of continuous high academic achievement. The student's name is inscribed on the Bronze Tablet, which hangs on a wall in the Main Library Building.

Undergraduate students must meet the following qualifications:

1. They must have a minimum 3.5 cumulative grade-point average for all work taken through the academic term before graduation (academic term before graduation means: for August graduates, the preceding spring semester; for October graduates, the preceding summer session; for May graduates, the preceding fall semester).
2. They must rank, on the basis of the cumulative grade-point average through the academic term before graduation, in the **top three percent** of the students in their college graduating class. (College graduating class means all students receiving bachelor's degrees from the same college between July 1 of each year and June 30 of the next.)  
In addition to the above rules, transfer students must meet the following qualifications.
3. They must have cumulative University of Illinois at Urbana-Champaign grade-point averages as high as the lowest ones listed for students in their college who qualify on the basis of having completed all of their work at the University of Illinois at Urbana-Champaign.
4. They must earn 40 or more semester hours at the University of Illinois at Urbana-Champaign through the academic term before graduation.

In recent semesters, the GPAs of Bronze Tablet recipients from the College of Engineering have been above a 3.93.

[http://studentcode.illinois.edu/article3\\_part4\\_3-404.html](http://studentcode.illinois.edu/article3_part4_3-404.html)

## **Campus Honors Program**

Information about the Campus Honors Program can be viewed at <http://honors.illinois.edu/>

## **Dean's List**

The Dean's List is prepared each semester to honor undergraduate students who have achieved a grade point average in the top 20 percent of their college class. To be eligible for Dean's List recognition, students must successfully complete at least 14 hours of course work in which traditional letter grades are earned. Credits earned during the semester through proficiency, CLEP, and advanced placement examinations are not counted toward the 14 semester hour requirement.

[http://studentcode.illinois.edu/article3\\_part4\\_3-401.html](http://studentcode.illinois.edu/article3_part4_3-401.html)

## **James Scholar Program**

The honors program in Engineering is part of the Illinois James Scholar program established to recognize and encourage the talents of academically outstanding students. Students in the program are expected to perform at a superior level throughout their undergraduate careers: students applying to become a James Scholar starting in Spring 2016 are expected to maintain a 3.5 GPA. Students already enrolled in the James Scholar program prior to Spring 2016 are expected to maintain a 3.3 GPA, according to the previous agreement. They must also take one course for "Honors" per academic year. Detailed James Scholar information and requirements can be viewed at:

<http://engineering.illinois.edu/academics/undergraduate/honors.html>

Applications for admission are available at the front desk in 206 Engineering Hall and will be accepted during the first two weeks of any Fall or Spring semester. Students can also apply at the James Scholar portal:

<https://my.engr.illinois.edu/james-scholar/>

## **Freshman James Scholars**

At least one honors activity is required during the freshman year. The following courses and activities are recognized as freshman honors experiences:

- Completion of an honors section of any course
- Completion of a course with an honors credit learning agreement (HCLA) that indicates additional work to be completed to receive honors credit. (MechSE honors credit options include [ME 170](#), [ME 199](#) and/or [TAM 251](#))

## Upperclass James Scholars

- Sophomores must: (1) complete the design of their honors contract; and (2) take one honors course, OR complete an Honors Credit Learning Agreement for a regular course, OR complete at least one course in their honors contract if the contract has already been filed.
- Juniors and seniors must take at least one course per academic year from their honors contract.
- An honors contract must be comprised of a minimum of 12 credit hours and must show coherence, focus, and purpose. Minors and dual degrees can be used to fulfill an honors contract.

## Help in making a class schedule

The following page may be helpful to you in generating you class schedule:

<http://illinois.edu/students/>

## The MechSE Innovation Trophy Competition

The Innoventor Trophy Competition is a phased competition, designed to let students pursue an original idea that has significant mechanical engineering content, addresses a societal need and has potential for commercialization. Selected projects satisfy the [ME 470](#) Senior Design requirement and are supplemented with a project budget. The final winning team receives an additional cash award with the ultimate goal being to form a startup company or commercialize the idea in some other manner, such as licensing or selling it to another company. For additional information, students can stop by 154 MEB or email [mekhse-ug-advise@illinois.edu](mailto:mekhse-ug-advise@illinois.edu).

## Internships/Coops/CPT/Engineering Career Services

We encourage students to pursue the following activities as they give students an opportunity to synthesize and practice what they have learned in the classroom in the real world and help students obtain full time employment:

- Internships (work with a company over the summer or a semester)
- Co-ops (work with a company for two or more semesters)
- Curricular Practical Training (CPT- option for domestic and international students to obtain work experience and course credit)
- This also provides students the opportunity to explore employment options before graduation. Students should contact/register with Engineering Career Services (ECS) to pursue these opportunities:

<http://engineering.illinois.edu/current-students/career-services>

Typically for coops and internships you should work with ECS and register for a course, depending on your Program of choice (see table below)

Program	Domestic	International <sup>2</sup>
Summer internship <sup>1</sup>	No need for enrollment	<a href="#">ENG 310</a> (0 hours)
Fall or Spring internship	<a href="#">ENG 310</a> (0 hours) <sup>3</sup>	<a href="#">ENG 310</a> (0 hours)

<sup>1</sup> Students can also choose to enroll in [ENG 451](#) (2 hours) during the Summer, which is a course offered online.

<sup>2</sup> For more information regarding the CPT process, please refer to the ISSS website at:

<http://www.issis.illinois.edu/students/employment/flcpt.html>

<sup>3</sup> Domestic students are not required to register for [ENG 310](#) during Fall or Spring semesters. However, in order to maintain full-time student status with the University of Illinois for the purposes of deferring loan repayment, maintaining insurance discounts, retaining time ticket for class registration for the returning semester, and access to EWS, students are strongly encouraged to sign up for [ENG 310](#). Students that are planning to not register in [ENG 310](#) need to contact the College of Engineering (217-333-2280 or [engineering@illinois.edu](mailto:engineering@illinois.edu)) and apply for re-entry in the following semester.

<http://ecs.engineering.illinois.edu/careers-for-your-major/internships-co-ops/>

In addition, attending employment fairs on campus held in the spring and the fall semesters are good opportunities for students connect with companies to pursue these opportunities. ECS can provide the dates of these employment fairs.

## **Laptop/software recommendations**

Memory:

4G or higher

Operating System

Windows 7 64 bit SP1 or better

Mac OS X 10.7 or better\*\* with Windows also installed

\*\*Some engineering software will require Windows. You can run it under a Windows on a Mac, but performance will take a hit. It is also available in the Engineering Workstation Labs

Processor: i5 or better

Software:

Microsoft Office, others depending on your courses. Purchase from [webstore.illinois.edu](http://webstore.illinois.edu) for a student price.

Pro/E (used for ME classes). This is available for free from [webstore.illinois.edu](http://webstore.illinois.edu).

Monitor:

1280x1024 or higher.

If you have too low a resolution or too small a monitor on a laptop, you may end up needing an external monitor for some programs or using the lab.

## **Minors**

Students are encouraged to pursue a minor in a field of their interest. To obtain a minor, a student must complete at least 6 credit hours towards the minor in addition to the minimum credit hours required for the major. Information about minors can be found at:

<https://provost.illinois.edu/educational-innovation/advising-resources/pursuing-undergraduate-minor/>



## **Probation Rules**

### **The 2.25 GPA Rule**

To qualify for registration in the ME or TAM courses shown in the third (junior) year of the curriculum in either EM or ME, a student must have completed, with a combined GPA of at least 2.25, the courses indicated on the “2.25 GPA” column of the curriculum pages of the Engineering Mechanics or Mechanical Engineering flowsheet:

- EM flowsheet: [https://mechanical.illinois.edu/sites/default/files/PDFs/2018-04-05-EM\\_flowsheet.pdf](https://mechanical.illinois.edu/sites/default/files/PDFs/2018-04-05-EM_flowsheet.pdf)
- ME flowsheet: [https://mechanical.illinois.edu/sites/default/files/PDFs/2018-04-05\\_ME\\_flowsheet.pdf](https://mechanical.illinois.edu/sites/default/files/PDFs/2018-04-05_ME_flowsheet.pdf)

Students who fail to meet the 2.25 GPA Rule requirement will have to repeat strategic courses in order to raise their grades.

### **Technical Grade-Point Average (TGPA)**

To remain in good academic standing and to graduate from the EM or ME curriculum, a student must have a GPA of at least 2.00 in curriculum-specific courses under the “TGPA Requirements for Graduation” column:

<https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements#DegreeRequirements-TechnicalGPAREquirement>

Students who have completed 6 or more hours of courses in the TGPA subset with a TGPA below 2.00 will be placed on probation. If the probation level is not met the following semester, the student may be dropped from the respective curriculum.

### **UIUC GPA Rule**

To remain in good academic standing and graduate from the University of Illinois, all students must have a cumulative UIUC GPA greater than 2.0. The grades in transfer courses do *not* contribute to the UIUC GPA.

For more information see

<https://wiki.illinois.edu/wiki/display/ugadvise/Probation+and+Drop>

### ***Minimum Grade Requirement for Individual Course***

The minimum grade requirement to pass an individual class in the Engineering Mechanics and Mechanical Engineering curriculum is a grade of D- (0.67/4.0 scale).

## **Research**

Participating as an undergraduate research assistant with a professor or graduate student can be a very rewarding educational experience. It allows students to explore topics in which they are interested to greater depth than is possible in a classroom setting, and can lead to an interest in graduate school. UG Research Assistants typically dedicate 5-15 hours per week on their research activities.

Types of researcher positions:

- Volunteer
- Course credit
- Paid

Note that students cannot receive course credit and get paid during the same semester.

Course credit option:

- Students need to pick up MechSE Independent Study Approval Form in 154 MEB
- Students and advisors must read and sign complete form
- 1-3 credit hours per semester
- Suggested number of hours: 1 credit hour = ~ 5 hours per week on project
- [ME 297](#):
  - Free elective credit only.
  - Limit of 6 credit hours of graded coursework.
- [ME 497/TAM 497](#):
  - Limited to juniors and seniors.
  - Project activity must be at 400-level course.
  - MechSE elective credit.
  - For ME majors, only 3 credit hours can be used to satisfy MechSE/Technical elective requirement
- Must submit graded report to UPO at end of the semester. Quality and quantity of the report should be commensurate with faculty-student expectations for the registered course level and number of credit hours.

There are often opportunities in the summer, as well as during the fall and spring semesters. Students are encouraged to contact professors directly to inquire if they have any undergraduate research positions available. Often faculty are seeking students who show initiative and interest in their research. Please feel free to use the [MechSE faculty e-mail directory](#) to contact professors. It is best to make an appointment with them to discuss their research and to see if they have any openings. The Society for Experimental Mechanics in conjunction with the MechSE Undergraduate programs office offers and announces an Undergraduate Research Symposium every Fall semester. Students interested in undergraduate research are encouraged to attend.

The College of Engineering also offers the two-semester Illinois Scholars Undergraduate Research (ISUR) Program for US citizens and permanent residents.

[http://engineering.illinois.edu/research/undergraduate/college\\_programs.html](http://engineering.illinois.edu/research/undergraduate/college_programs.html)

## **Residency Requirements**

Students must comply with the following residency requirements for graduation:

<https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements#DegreeRequirements-ResidencyRequirements>

## **Scholarships/Awards**

The Department of Mechanical Science and Engineering offers a variety of scholarships and awards to eligible students. These scholarships and awards are internally selected by a departmental committee and students cannot apply for them.

## **Study Abroad**

Students are encouraged to study abroad. It is easier to study abroad early in the student's academic program, because the selection of transferable general education and introductory technical courses is greater than that for upper-level courses. Students interested in studying abroad should contact the International Programs in Engineering (IPENG) office:

<http://engineering.illinois.edu/ipeng/>

Students planning to study abroad should:

1. First speak with IPENG and have a green study abroad form filled out
2. Make sure to checked for prior articulations with IPENG
3. If students need MechSE related courses to be reviewed we need a detailed syllabus in English
4. Print out all above materials and bring it to 154 MEB for review at the time of a scheduled appointment

## **Transfer Credits / Proficiency / AP**

### **Chemistry**

Students who earn proficiency, advance placement (AP), or transfer credit for one or both chemistry classes receive 3 hours credit for each lecture class, but *not* the extra hour(s) for the laboratory course(s). The hour(s) missing must be offset by additional hours in other course work (including additional free electives).

### **AP/IB credits**

If a student has received AP credit, International Baccalaureate (IB) credit, or ACT English sub-score credit for [RHET 105](#), but the credit does not show up on the DARS audit, the student should contact the Office of Instructional Resources, Measurement, and Evaluation, 247 Armory, 217-333-3490, to correct the records.

### **Proficiency**

If a student is told by an examining department at UIUC that proficiency credit has been earned in a course, but the credit does not appear on the DARS audit, direct the student to 206 Engineering Hall.

### **Transfer credits**

If a student has taken or wants to take courses at another institution, the student should check if the course is eligible for transfer via the website below:

<https://www.transferology.com/welcome.htm>

Note you will need to create a log-in. Additionally, neither the transfer course equivalencies shown here, nor any report generated by it, constitute a contract between the students and the University of Illinois. Current University of Illinois students should contact their college offices prior to enrolling in the courses at other institutions to verify transfer credit eligibility.

NOTE: Transfer credit for fine arts skills courses are subject to audition and/or placement exam or portfolio review.

Instructions on how to properly transfer course credit from another institution can be found here: <http://registrar.illinois.edu/transcripts>

- If Advanced Level (A-Level) or other course work completed at another institution does not show up on the DARS audit, then the student should have the institution send an official transcript directly to the UIUC Office of Admissions and Records. It typically takes at least 4 weeks for the information to show up in DARS.

## Transfer Procedures

1. From institutions outside UIUC: The MechSE Department encourages interested outstanding undergraduate students attending other institutions to apply for admission. Please contact the UIUC Office of Admissions after consulting the Transfer Handbook on the UIUC Office of Admissions website: <http://admissions.illinois.edu/apply/Transfer/handbook>
2. Inter-college and inter-departmental transfer: The MechSE Department encourages interested outstanding UIUC undergraduate students, as measured by their high GPA, attending UIUC to petition to transfer into Mechanical Engineering or Engineering Mechanics majors. Please check the transfer procedures on the College of Engineering website: <http://go.engineering.illinois.edu/ExploreMajor>

## Tutoring Information

Students requiring help in courses should first seek the help of TA's and instructors. There is also free tutoring available for students through the Math, Chemistry, Physics, Molecular and Cellular Biology, Office of Minority Student Affairs, and student societies given in the following link:

<https://wiki.illinois.edu/wiki/display/ugadvise/Student+Resources#StudentResources-CampusResources>

The Center for Academic Resources in Engineering (CARE) creates a dynamic learning community where services, resources, and expertise converge to support engineering students as they work to realize their academic and professional aspirations. Please visit <http://publish.illinois.edu/engineering-care/>