

# Undergraduate Advising Guide 2008/2009

Mechanical, Industrial, Manufacturing, and General Engineering  
Oregon State University

-Commonly Asked Questions-



## Commonly Asked Questions

### **What if I don't have all courses completed when I apply to the professional program?**

The application process provides a place to list the courses in which you are currently enrolled. If you are lacking one or two required courses, you must fill out a petition form along with your application indicating when you will plan on taking the courses. If you are applying spring term and plan to take courses over the summer, these courses will be counted as if completed. In other words, they would not be included in the set of courses you might petition.

### **If my GPA is marginal, can I apply to more than one program?**

Yes. We encourage this because we do not wish to turn away any qualified students. There is a place in the electronic application form to indicate a second choice major.

### **What if I earn a "D" then a "C" in an engineering course?**

Earning a "C" on the second attempt indicates a sufficient understanding of the course material. The "C" grade will be factored into your Pre-engineering Core GPA. See the GPA calculation explanation in the Academic Policy section of this document for other examples.

### **If I apply to the MECOP Program, do I have a good chance of getting in?**

Yes. However, the companies make their selections based on several criteria, including GPA, GPA trends, essay questions, and the interview process.

### **When can I apply to MECOP?**

MECOP generally accepts applications in the spring of each year and you must have applied to the professional program or already be admitted to the professional program.

### **What if I am not accepted into the Professional Program?**

One option is to wait and apply to the professional program next year. More realistically, you should consider another major or consider another university. It is always a good idea to talk to your advisor.

### **I have just been accepted into the Professional Engineering Program. Does that mean that I can take any upper-division engineering course?**

Yes. However, you must have completed all pre-requisites for that course. Pre-requisites are specified in the *Oregon State University General Catalog* and the *OSU Registration Information Handbook*.

### **Can I take a course on Satisfactory/Unsatisfactory (S/U) basis instead of a grade basis?**

You may NOT take pre-engineering and professional engineering courses on an S/U basis. The only courses eligible for an S/U basis are: Lifetime Fitness for Health; Western Culture Elective; Cultural Diversity Elective; Literature and Arts Elective; Social Processes and Institutions Elective; Contemporary Global Issues Elective; Science, Technology, and Society Elective; and Biological Science Elective (Mechanical Engineering program only).

### **How is equivalent credit calculated?**

Conversion from semester credits to equivalent quarter credits is accomplished by multiplying semester credits by 1.5 (i.e., semester credits X 1.5 = quarter credits.)

### **May other courses be substituted for the courses listed in the pre-engineering curriculum?**

Yes, but only under certain circumstances. Advisors at Oregon colleges and community colleges are in frequent contact with engineering advisors at OSU. They can suggest which courses may be substituted for OSU courses. Special or unusual circumstances should be referred to the OSU Engineering Undergraduate Programs Office. Substitution of courses by students enrolled at OSU is normally not permitted.

### **Which courses may be substituted for Engineering Orientation?**

Engineering Orientation introduces students to the basic ideas of solving technical problems, computational tools frequently used to solve engineering problems, and the types of work common in engineering. Introductory courses covering material similar to subject matter in Engineering Orientation may be substituted. See a list of courses on the following page.

<b>Courses that may be substituted for Engineering Orientation</b>	
BioE 101	Bioengineering Focused
ChE 101	Chemical Engineering Focused
CE 101	Civil Engineering Focused
ECE 111	Electrical/Computer Science Focused
EcoE 101	Ecological Engineering Focused
EnvE 101	Environmental Engineering Focused
ENGR 111	General Engineering Focused
NE 114	Nuclear Engineering Focused

### **May required courses in engineering be taken at community colleges or at other schools with four-year programs?**

Other engineering schools with programs accredited by the Accreditation Board of Engineering and Technology (ABET) offer courses that are transferable to OSU. Some schools with four-year programs, and some community or junior colleges, offer courses equivalent to the introductory mechanics courses (ENGR 211, ENGR 212, ENGR 213) and courses similar to Electrical Fundamentals (ENGR 201, ENGR 202, ENGR 203). The head advisors at these schools are in close contact with the OSU engineering college and agree upon courses that may be substituted for required OSU courses. For specific information, students should contact the specific Engineering Undergraduate Programs Office.

### **What if I did my first two years of college at a community college, am I at a disadvantage coming into OSU at the time I apply to Pro-school?**

No. Students choose to attend community colleges for a variety of reasons. Your advisor has access to a matrix linking courses from most State of Oregon community colleges to their equivalent course here at OSU. If a course is on that list you can be assured that the content of the course you took at your community college is acceptable to OSU. Be cautioned, however, that there is more to college than academics. Many students who come from a community college perform poorly at OSU their first couple of terms due to an increase in distractions and freedoms. There is not a lot of room in the professional engineering program for “adjustment” terms. You should plan to arrive at campus ready to work hard.

### **I was advised at my community college that OSU would accept MTH 253 in place of MTH 306, but I don't see it as an acceptable substitute. Was I wrongly advised?**

No. MTH 253 is an acceptable substitute for MTH 306 in terms of calculating your Pre-Core GPA. If you are an IE or MfgE major, be sure to check with your advisor. Some community colleges' MTH 253 content are equivalent to OSU's MTH 306 while others' are not. You may be required to take MTH 341 to assure that you have an adequate understanding of linear algebra.

### **What are the University requirements for general education?**

General education requirements are met by completing Baccalaureate Core requirements. Each engineering program includes courses that satisfy the Baccalaureate Core requirements. See the “Advising Process” section of this advising guide for more details.

### **Which credits are transferable to OSU?**

The OSU Office of Admissions decides which courses will be accepted in the transfer. Admissions Offices at most universities use a catalog that lists transfer courses. Oregon's community colleges and state colleges and universities use a special course numbering system for transfer courses. This system consists of a departmental abbreviation of one to four letters followed by a three-digit number of 100 or higher. For example, Mathematics 251 is labeled “MTH 251.”

Vocational-technical courses at community colleges that are not normally transferable to OSU are numbered with a decimal system: e.g., a course in teaching vocational drafting skills might be numbered “4.101.”

### **Are vocational-technical courses ever accepted by OSU?**

OSU's academic regulations provide for the acceptance of community college vocational-technical course work by the College of Engineering under limited conditions. After a student has matriculated at OSU, he or she may petition the University and the College of Engineering to accept vocational-technical courses. Upon approval of the college and the university, as many as 24 credits may be accepted toward engineering requirements only.

### **Must students select a major for their first year?**

No. The first year of all College of Engineering degree programs are very similar. Students are advised to select a major by the start of their sophomore year if they plan to graduate in four years. If they are planning a five-year program, reaching a decision by the start of the sophomore year is not as critical.

### **Should students plan a four-year program?**

Students can graduate in four years, however, most students find the engineering program too rigorous to master in that period. Additionally, the pace of a four-year program in engineering does not allow students to take many courses outside the engineering curriculum or to engage in many student activities. On the average, students take 4.8 years to graduate in engineering. Unless students are exceptional, they are advised to plan a five-year program.

### **Is there a suggested plan for the five-year program?**

Since each student's goals are different, there is no single answer to this question. However, the following plan permits the greatest flexibility and choice of options:

First two years: Complete at least the lower division courses (engineering, science, mathematics, and Baccalaureate Core) required for admission to the Professional Program.

Third year: Complete the remaining lower division courses and those upper division courses for which you have prerequisites.

Final two years: Complete all remaining requirements and additional courses of interest.

By following this plan, a student's education can be enriched by including an additional area of interest (such as a minor, international exchange or cooperative education experience).

### **Is the five-year plan advantageous for transfer students?**

Yes. Most transfer schools offer the required courses in mathematics, science, humanities, and social sciences. However, most do not offer all of the specialized courses required in the second year of a four-year engineering program. By planning a five-year program, students at these institutions create a solid base for their engineering studies in the first two years, and then transfer to OSU for their last three.

### **Does the College of Engineering offer scholarships for new students in the first or second years?**

Most scholarships available through the college are awarded based on academic performance and are limited to upper division students currently enrolled at OSU. A few scholarships may be available for new and transfer students. Scholarship applications for new and transfer students are available from the OSU Engineering Undergraduate Office each year after March 1st. The deadline for submitting applications is April 10<sup>th</sup>. Student who receive an award usually are notified in June.

### **Is financial aid available?**

Many forms of financial aid are available through the OSU Office of Financial Aid. The type and amount depend on individual circumstances. Students should apply directly to the Office of Financial Aid. During the summer, students usually find jobs to help pay their expenses.

### **Where can students obtain advice for special situations?**

Students with special problems or unusual circumstances should contact their advisor in the Engineering Undergraduate Programs Office and explain the nature of their situation.

### **Is there a placement exam for mathematics?**

There is a placement exam for students who have not received college credit for mathematics. Students take this exam before they arrive on campus to start college studies. Students should review algebra, trigonometry, and geometry, as knowledge in these areas are required their first term in engineering studies.