Frequently Asked Questions

Exceptions, substitutions and variations from published curricula are inevitable in students’ programs of study. The following answers are provided to explain department policies on typical questions about departures from published curricula for AGEN and BSEN in the Undergraduate Bulletin. Departures are authorized by the Department of Biological Systems Engineering Curriculum Committee through its Exceptions Committee.

On AP/Co-Enrolled Courses

**Question:** I've got AP credit and college credit from a course I took in high school. Will those be accepted by the medical schools?

**Answer:** If those credits are for mathematics or science courses, probably not! You should take the next higher math or science course to be sure the medical schools will accept your transcript.

On Chemistry

**Question:** May I substitute CHEM 109 and 110 for CHEM 113 and 114?

**Answer:** Yes, but realize that 109+110 is an 8-credit sequence with two labs while 113+114 is 7-credits with only one lab.

**Question:** If I take CHEM 113, can I follow up with CHEM 110 instead of CHEM 114?

**Answer:** Yes, but it can be an awkward transition because 113 ends at a slightly different point in content than does 110.

**Question:** Both CHEM 251/253 and CHEM 261/263 are listed. How do I choose, or does it matter?

**Answer:** There is a difference! CHEM 261/263 is designed to follow CHEM 113/114. This sequence is oriented to Chemistry majors; CHME’s take 261/263. The 251/253 sequence follows 109/110 and is oriented to the biological sciences, agriculture, and pre-med.

**Question:** I heard there is an organic chemistry course and lab called CHEM 255/257. May I substitute it for CHEM 251/253?

**Answer:** You may, but if you are in the Pre-Med track you will want to take the CHEM 251/253, 252/254 sequence. CHEM 255 is one-semester series targeted at preparing you for BIOC 321 and would be a good course for those in the Environmental and Water Resources emphasis area, and for those not contemplating medical school.
**Question:** I took CHEM 191H (and 192H) upon invitation from the Chemistry Department. Will either of these courses count toward my engineering degree?

**Answer:** No, neither will count.

**On Biological Sciences & Biochemistry**

**Question:** Can I take BIOS 101/101L instead of LIFE 120 or 121?

**Answer:** No, LIFE 120 and 121 are prerequisites for many of the degree applicable biological science courses.

**Question:** I am a transfer student into BSEN. Before transferring I took BIOS 101/101L and a second biology course. Can I count this 2nd course as a BIOS elective in my BSEN program of study?

**Answer:** Yes, but only if you do not request credit for more than a total of eight hours of 100-level BIOS course work. For example, this means you will not be given credit for BIOS 101, LIFE 120 as well as LIFE 121 (or another 100-level BIOS course). You can be granted credit for only 8 hours of 100-level BIOS courses, whether from UNL or from another institution.

**Question:** I am required to take 4 hours of Biological Sciences Electives. Which courses can I choose from?

**Answer:** In addition to the core biology series (LIFE 120/121, and BIOC 321), you must take at least four more credit hours of BIOS or biologically-related classes. They can be any biological science course approved by your advisor. Your advisor will be open to biologically-related courses in the College of Agriculture and Natural Resources as well. Most medical schools require at least 8 hours of biology courses with a lab (usually in addition to biochemistry). If you are thinking about medical school, be sure you fulfill the appropriate laboratory requirement. At UNL, most BIOS courses are taught in 4 credit blocks, so achieving the 4 hour requirement is usually not a problem - if it is, see your advisor.

**Question:** I have transfer credit for BIOS 109 (4 cr) Plant Biology and BIOS 112/112L (4 cr) Animal Biology, could I substitute either for the LIFE 121/121L (4cr)?

**Answer:** Yes, one of those could be used for 121/121L and the other could possibly be used for your 4 credit BIOS elective requirement. However, keep in mind that some classes require both LIFE 120 and LIFE 121 as prerequisites.

**Question:** How many hours of biology laboratory do I need?

**Answer:** You must have two laboratory experiences in the 16 hour Biological Sciences/Biochemistry block. A two credit-hour laboratory counts as one experience. There does not have to be a credit hour associated with the experience, but there must be a documented course/laboratory component of the experience. Pre-medical students must have two BIOS-based courses with laboratories as this is a requirement of most medical schools.
**Question:** Am I required to take the laboratory for biochemistry (BIOC 321L)?
**Answer:** No, though BIOC 321L (or BIOC 433) could be one of the two required laboratory experiences mentioned in the previous question, depending which bulletin you are using.

**Question:** Will BIOS 203 (Ethics) count as a BIOS elective?
**Answer:** No.

On ACE and Communications Substitutions

**Question:** I think I’ve figured out a way to double-count an ACE course as an ACE 6 course, and as an ACE 9 course. This would really open up my program for other courses! Is this acceptable?
**Answer:** No. Double-counting ACE courses is not acceptable at UNL.

**Question:** I took a course at a community college in another state one summer that seems to be very similar to an ACE-certified UNL course. Is there any way I can determine if the course can count towards my ACE course requirements?
**Answer:** Consult with your advisor and take a look at the “ACE Policy for transfer students” site found through its link on [http://ace.unl.edu/transfers.shtml](http://ace.unl.edu/transfers.shtml).

**Question:** Can I satisfy my ACE requirements in ways other than taking courses?
**Answer:** Yes. The ACE program allows for students to meet their ACE requirements through courses, co-curricular experiences, or study abroad. To explore how co-curricular experiences may be used, check out the details on [http://ace.unl.edu/ace-co-curricular-study-abroad](http://ace.unl.edu/ace-co-curricular-study-abroad).

**Question:** MNGT 361 sounds like a good ACE and Organizational Skills elective. Is it?
**Answer:** No, it has not been ACE-certified, nor does it satisfy the Organizational Skills requirement of AGEN or BSEN.

**Question:** I took the Chancellor’s Leadership Class (ALEC 153) for credit. Can I use it as an ACE elective?
**Answer:** No, ALEC 153 is not ACE-certified. However, it will count in AGEN and BSEN for their Organizational Skills requirement.
On Engineering Classes

Question: Do all transfer students have to take AGEN/BSEN 100?
Answer: That depends! If you had an equivalent introductory engineering course such as MECH 100, CIVE 112, CHME 113, or ENGR 101, those course will substitute for AGEN/BSEN 100. If you've no background in engineering, whether you take 100 depends on a joint decision by your advisor and you.

Question: I have an equivalent course to Computer Science 150 or 155A – 155T from another college or university. Will it count as a substitute for AGEN/BSEN 112?
Answer: Perhaps. The AGEN/BSEN program relies on MATLAB which is taught in AGEN/BSEN 112 and 212a. Thus, this decision is made on a case-by-case basis, depending on how familiar you are with MATLAB.

Question: Will all 3 credits of CSCE 150, or 3 credits from CSCE 155A – 155T count toward my degree?
Answer: Maybe, the intent of the computer programming requirement is to ensure skills in "... problem analysis and specification, algorithm development, program design, and implementation in a high-level language.” Though the 1-credit courses CSCE 251 (Unix), 251K (C++), and 252A (Fortran) are sufficient to ensure those skills. The extra hours in CSCE 150E and 155 won't count toward your degree.

Question: Is there a substitute for BSEN 244?
Answer: Yes. You can substitute MECH 200 or CHME 322.

Question: Are there any courses that will not be allowed for credit toward my engineering degree?
Answer: Yes, for example NRES 100 and 101, GEOG 150 and 155, ASCI 100 and 150, NUTR 100, 170 and 171, AGRO 101, AGRI 103, ALEC 134, and FDST 101 and 131 will not be allowed, and there may be others. When in doubt always check with your advisor.

Question: If I took MATH 198 EXCEL as a 1 credit course, can this hour be used toward my degree?
Answer: No.

Question: Can I substitute MSYM 245 for ELEC 211?
Answer: No.

Question: Students in other colleges get academic credit for internships and coop experiences. Is this possible in our majors?
Answer: Sometimes. We are very careful about quality control of academic credit for your engineering degree. Coop students do sign up for academic credit, but only to meet insurance and scholarship requirements, and to maintain full-time student status while away from UNL. Exceptions are made with prior
approval and substantiation of academic rigor and acceptability. A contract form is available for such exceptions.

On the Honors Program and Graduation with Distinction

Question: The BSEN and AGEN curricula do not list many honors courses. So how do I fill my Honors Program requirements?
Answer: Instructors teaching 100, 200, 300, and 400-level courses that don’t show an honors section in the Undergraduate Bulletin will generally “contract” to create an honors section for anyone needing honors credit. Please ask the instructor about this ahead of time.

Question: Is graduating with “Distinction” different than graduating in the Honors Program?
Answer: Yes, it is very different! You do not have to be in the Honors Program to graduate with “Distinction.” You can graduate with either “Distinction, High Distinction, or Highest Distinction.” The top 6 percent (~>3.90 gpa) of the College of Engineering senior class may graduate with “Distinction.” The top 2 percent (~>3.98) can graduate with “High or Highest Distinction.” The difference between “High and Highest” depending on whether you have published a technical paper, done an honors thesis, or completed an honor project. Several other accomplishments could also qualify you for Highest Distinction. An application is necessary. See your advisor for details.

Question: Can I take Honors classes if I am not in the Honors Program?
Answer: Yes, if you have an invitation and have met the criteria for the honors class (e.g. MATH 107H, PHYS 211H). Exceptions are the 189H and 395H seminars which are open only to Honors Program students.

Scholarships

Question: I have a Regents Scholarship, can I use it for summer school?
Answer: Regents and National Merit Scholarships can be used for periods of summer enrollment at UNL, but only after completion of the first academic year. To activate summer benefits, you need to complete a Summer Aid Application. This is available via through MyRed. You ought to preregister for the course first and then complete the application as you must be specific in defining how many hours you will be taking within each summer session. When in doubt, contact the Office of Scholarships & Financial Aid.
Other Frequently Asked Questions

**Question:** Can I take a course Pass/No Pass and have it count in AGEN or BSEN?

**Answer:** The only courses taken as Pass/No Pass that would count are those that would fill your ACE 5, 6, 7, 8 and 9 requirements, and ENGR 10, 20 and 400. This is a College of Engineering policy. BSEN/CONE 206 cannot be take Pass/ No Pass.

**Question:** I heard that D’s do not count in AGEN and BSEN, is that true?

**Answer:** It depends! D+, D, and D- grades do not count in AGEN or BSEN, except for ACE 5, 6, 7, 8 or 9 where such a grade is accepted (the exception is BSEN/CONE 206 ACE 8 where D’s do not count). Note that a C- does not count for MATH courses if you need to use that course as a prerequisite for the next higher MATH course. This may also be true in certain other College of Engineering courses where a hidden “C or better practice” is used for prerequisites but is not published in the Bulletin or MyRed. Generally, if you receive a C-, or a D grade in a course you likely do not understand certain material in the course, and should retake it, especially if it is a Mathematics, science, or engineering course.