University of Nebraska - Lincoln (UNL) Transfer Guides for Community Colleges

Achievement Centered Education (ACE)

Western Nebraska Community College **College of Engineering**

webraska Community College, for UNL's College of Engineering. Guide revised Fall 2011. CONFIRM YOUR COURSE SELECTIONS WITH A UNL COLLEGE ADVISER!

Students anticipating transferring to UNL's College of Engineering may use this guide for selecting Western Nebraska Community College courses. Check the UNL Bulletin http://bulletin.unl.edu/undergraduatel/index.shtml) for information about specific curriculum requirements or visit the College of Engineering website (http://engineering.unl.edu). Students interested in transferring to UNL should communicate regularly with an UNL academic adviser to confirm course selections. To contact an academic adviser in the College of Engineering call (402-472-3181). To facilitate the transfer of credit, all grades should be a "C" or higher. The University of Nebraska - Lincoln applies a maximum of 66 semester hours (99 quarter hours) in transfer from community colleges toward a

IMPORTANT CHANGE: Beginning Fall Semester 2012 UNL will apply 60 semester hours or 90 quarter hours from community colleges toward a UNL degree.

Transfer students must present a minimum cumulative transfer GPA of 2.50 (for Nebraska residents) or 3.0 (for non-residents) on a 4.0 grading scale. Additionally, students must complete specific con requirements. In general, it is very important that students take a least one unit each of physics and chemistry and also complete two units of algebra, one unit of geometry, 1/2 unit of precalculus and 1/2 unit of trigonometry. One unit is considered one year of high school level work or one semester of college level work. Students who do not meet the stated admission criteria may be admitted to the Division of General Studies until they have met all admission requirements.

See (http://www.engineering.unl.edu/specialty-units/STEP/) for information and a list of Nebraska community colleges participating in S.T.E.P. (Strengthening Transitions into Engineering Programs), a program offering beginning engineering courses at community colleges. Contact unlstep@unl.edu or (402) 472-4940 with questions

The programs of study offered by the UNL College of Engineering are very structured and involve specific prerequisites and course sequencing. Students who elect to complete the math, science and all humanities and social science (ACE) requirements prior to transferring to UNL may experience course sequencing problems

Achievement-Centered Education (ACE) is the UNL general education curriculum. Students must complete at least one 3 hour course to meet the ACE outcome described below. A course may only apply to one outcome. Following is a list of ACE courses recommended for students planning on majoring in this UNL college. The transfer guides vary significantly by UNL college. Thus students considering more than one major should consult the guides for all of the colleges they are considering. Courses may apply to only one ACE outcome. The UNL course numbers are in [] behind the credit hours:

ACE 1 (Complete 3 semester hours minimum): Write texts, in various forms, with an identified purpose, that respond to specific audience needs, incorporate research or existing knowledge, and use applicable documentation and appropriate conventions of format and structure. All College of Engineering majors must complete the equivalent of UNL's JGEN 200 (Technical Communication I). Note: Two English composition courses equivalent to UNL's ENGL 150 AND ENGL 151 (*) may be substituted for the technical writing requirement. Exception-Construction Management requires one English Composition and JGEN 200. (*) If your school does not offer six hours of English composition equivalent to UNL's ENGL 150 and 151, plan to complete the ACE 1 requirement at UNL.

ENGL 1500 English Composition 1 (3) [ENGL150]

ACE 2 (3 semester hours minimum): Demonstrate communication competence in one or more of the following ways: (a) by making oral presentations with supporting materials, (b) by leading and participating in problem-solving teams, (c) by employing a repertoire of communication skills for developing and maintaining professional and personal relationships, or (d) by creating and interpreting visual information. COMM 286 Business and Professional Communications (previously COMM 311) is recommended. If your school does not offer courses for the ACE 2 requirement, take the requirement at

SPCH 1200 Speech Communication (3) [COMM109]

SPCH 1390 Public Speaking (3) [COMM209]

ACE 3: All College of Engineering majors, with the exception of Construction Management, must complete the equivalent of UNL's MATH 106-Analytic Geometry and Calculus I, MATH 107-Analytic Geometry and Calculus II. MATH 208-Analytic Geometry and Calculus III and MATH 221-Differential Equations. Construction Management majors must complete the equivalent of UNL's MATH 106-Analytic Geometry and Calculus I and STAT 218-Intro to Statistics. If your school does not offer courses for the ACE 3 requirement, take the requirement at UNL.

MATH 1600 Calculus 1(5) [MATH106] MATH 2150 Calculus 2 (5) [MATH107] MATH 2200 Calculus 3 (4) [MATH208]

MATH 2210 Differential Equations (3) [MATH221]

STAT 1100 Statistics (3) [STAT218]

ACE 4: Use scientific methods and knowledge of the natural and physical world to address problems through inquiry, interpretation, analysis, and the making of inferences from data, to determine whether conclusions or solutions are reasonable. The College of Engineering majors are science intensive. Science requirements vary by major. We recommend students complete the equivalent of UNL's CHEM 109 General Chemistry I. Additionally, all majors except Construction Management, require the equivalent of UNL's PHYS 211-General Physics I (this course is calculus-based). Construction Management majors are required to complete the equivalent of UNL's GEOL 101 (Physical Geology for 4 semester credits). Some, but not all, majors require the equivalent of UNL's CHEM 110 General Chemistry II, If your school does not offer courses for the ACE 4 requirement, take the requirement at UNL.

BIOS 1200 General Biology (4) [BIOS101 AND 101L] CHEM 1600 General Chemistry 1(4) [CHEM109] CHEM 1640 General Chemistry 2 (4) [CHEM110]

PHYS 2400 Physics 1 with Calculus (5) [PHYS211 and 221]

PHYS 2450 Physics 2 with Calculus (5) [PHYS212 AND 222]
ACE 5: (3 semester hours minimum): Use knowledge, historical perspectives, analysis, interpretation, critical evaluation, and the standards of evidence appropriate to the humanities to address problems and issues. If your school does not offer courses for the ACE 5 requirement, take the requirement at UNL.

ENGL 2130 Survey of English Literature 1 (3) [ENGL230] ENGL 2050 American Lit. 1620-1865 [ENGL260]

ENGL 2070 American Lit. 1865-present (3) [ENGL261] HIST 2480 Early U.S. History (3) [HIST110 (previously 201)]

HIST 2530 Late U.S. History (3) [HIST111 (previously 202)]
ACE 6: (3 semester hours minimum): Use knowledge, theories, methods, and historical perspectives appropriate to the social sciences to understand and evaluate human behavior. MNGT 360 is recommended. Construction Management majors must take the equivalent of ECON 211 and 212. If your school does not offer courses for the ACE 6 requirement, take the requirement at UNL.

BSAD 2540 Principles of Management (3) [MNGT320] CRIM 1010 Introduction to Criminal Justice (3) [CRIM101] ECED 2050 Children with Exceptionalities (3) [SPED201] ECON 2260 Principles of Economics - Macro (3) [ECON211] ECON 2230 Principles of Economics - Micro (3) [ECON212] ENTR 1050 Intro Entrepreneurship (3) [ENTR121]
MNGT 2220 Principles of Management (3) [MNGT360]
POLS 2350 American Government and Politics (3) [POLS100] POLS 2350 American Government and Politics (3) [POLS100] PSYC 2100 Child Growth and Development (3) [CYAF160] PSYC 1050 Intro to Psychology (3) [PSYC181] PSYC 2140 Social Psychology (3) [PSYC288] PSYC 2150 Life Span: Human Growth and Development(3) [PSYC289] SOCI 2630 Principles of Sociology (3) [SOCI101]

SOCI 2150 Living in a Diverse Society (3) [SOCI217]
SOCI 2250 Marriage and Family (3) [SOCI225]
ACE 7 (3 semester hours minimum): Use knowledge, theories, or methods appropriate to the arts to understand their context and significance. If your school does not offer courses for the ACE 7 requirement, take the requirement at UNL.

MUSC 1400 Music Appreciation (3) [MUNM276G]

MUSC. 1400 Music Appreciation (3) [MUNM2/Not]
PHOT 1900 Black/White Photography 1 (3) [PHOT161]
SPCH 1250 Oral Interpretation (3) [COMM205]
THEA 1790 Introduction to Theatre (3) [THEA112G]
ACE 8 (3 semester hours minimum): Explain ethical principles, civics, and stewardship, and their importance to society. Construction Management majors must take the equivalent of ECON 211 and ECON 212. If your school does not offer courses for the ACE 8 requirement, take the requirement at UNL.

ECON 2260 Principles of Economics - Macro (3) [ECON211] ECON 2230 Principles of Economics - Micro (3) [ECON212] POLS 2350 American Government and Politics (3) [POLS100]

ACE 9 (3 semester hours minimum): Exhibit global awareness or knowledge of human diversity through analysis of an issue. If your school does not offer courses for the ACE 9 requirement, take the requirement at UNL.

GEOG 2060 Cultural Geography (3) [GEOG140] HIST 2100 World Civilization 4000 BC to 1500 AD (3) [HIST120] HIST 2110 World Civilization 1500 AD to present (3) [HIST121] POLS 2390 International Relations (3) [POLS160] SOCI 2150 Living in a Diverse Society (3) [SOCI217] SOCI 2250 Marriage and Family (3) [SOCI225]

Programs offered by the College of Engineering do not have a graduation foreign language requirement beyond the UNL admission requirement.

If your school does not offer courses for this requirement, take the requirement at UNL.