

# INTERNATIONAL ENGINEERING MINOR

## Description

This minor is for engineering majors ONLY.

This minor is designed to encourage and recognize undergraduate students who enhance their engineering education with courses and experiences consistent with the global nature of engineering and the economy.

The College of Engineering enables its students to participate in this approved minor subject to the following conditions:

1. A minor will not reduce or alter the existing course or degree requirements for students electing to pursue a minor.
2. A student's minor program must be organized and approved by an advisor prior to the submission of the senior check to the department chair or head.
3. The minor must be approved by the advisor, the department chair or head, the Dean, and the cognizant program offering the minor.

## College Requirements

### College Admission

#### College Entrance Requirements

Students must meet both the University and College of Engineering entrance requirements. The following includes both the University and College of Engineering entrance requirements.

Students must have high school credit for (one unit is equal to one high school year):

1. Mathematics – 4 units: 2 of algebra, 1 of geometry, and 1 of precalculus and trigonometry
2. English – 4 units
3. Natural sciences – 3 units that must include 1 unit of physics and 1 unit of chemistry (chemistry requirement waived for students in construction management or computer science)
4. Foreign language – 2 units of a single foreign language
5. Social studies – 3 units
6. Students having a composite ACT score of 28 or greater (or equivalent SAT score) will be admitted to the College of Engineering even if they lack any one of the following: trigonometry, chemistry, or physics. Students without test scores who are missing a full unit of trigonometry/pre-calculus/calculus or chemistry or physics will be evaluated through College Review.
7. Students having an ACT score of 19 or less in English (or equivalent SAT score) or a grade lower than B in high school English, must take ENGL 150 Writing and Inquiry or ENGL 151 Writing for Change.

A total of 16 units is required for admission.

Engineering requires that student performance meet one of the following standards: composite ACT of 24, SAT of 1180, ACT Math subscore of 24, SAT Math subscore of 580, or a 3.5 cumulative GPA.

Any domestic first-year student who does not gain admission to Engineering but does gain admission to the University of Nebraska-Lincoln (UNL) will be reviewed through College Review. College Review

is conducted through the College Review Committee which considers factors beyond standardized testing. Any first-year student who is not admitted through college review is placed in Pre-Engineering (PENG) with the Exploratory and Pre-Professional Advising Center (Explore Center). Students in the Explore Center can transfer to the College of Engineering once college admission requirements are met.

Students for whom English is not their language of nurture must meet the minimum English proficiency requirements of the University.

Students who lack entrance units may complete precollege training by Independent Study through the University of Nebraska–Lincoln Office of On-line and Distance Education, in summer courses, or as a part of their first or second semester course loads while in the Explore Center or other colleges at UNL.

Students should consult their advisor, their department chair, or Engineering Student Services (ESS) if they have questions on current policies.

### Other Admission Requirements

Students who transfer to the University of Nebraska–Lincoln from other accredited colleges or universities and wish to be admitted to the College of Engineering (COE) must meet COE first-year student entrance requirements, have a minimum cumulative GPA of 2.5, and be calculus-ready. Students not meeting either of these requirements must enroll in the Explore Center or another University college until they meet COE admission requirements. Students transferring from UNO, UNL, or UNK to the College of Engineering must be in good academic standing with their institution.

The COE accepts courses for transfer for which a C or better grade was received from colleges outside of the NU system. Although the University of Nebraska–Lincoln and the College of Engineering in general accepts C- and D grades from the University of Nebraska Kearney and the University of Nebraska Omaha, not all majors in the COE accept such low grades. Students must conform to the requirements of their intended major and, in any case, are strongly encouraged to repeat courses with a grade of C- or less.

Students who were previously admitted to COE and are returning to the College of Engineering must demonstrate a cumulative GPA of 2.5 to be readmitted to COE.

## College Degree Requirements

### Grade Rules

#### Grade Appeals

In the event of a dispute involving any college policies or grades, the student should appeal to their instructor, and appropriate department chair or school director (in that order). If a satisfactory solution is not achieved, the student may appeal their case through the College Academic Appeals Subcommittee.

## Catalog Rule

Students must fulfill the requirements stated in the catalog for the academic year in which they are first admitted at the University of Nebraska–Lincoln. In consultation with advisors, a student may choose to follow a subsequent catalog for any academic year in which they are admitted to and enrolled as a degree-seeking student at Nebraska in the College of Engineering. Students must complete all degree requirements from a single catalog year. The catalog which a student follows for

degree requirements may not be more than 10 years old at the time of graduation.

Students who have transferred from a community college may be eligible to fulfill the requirements as stated in the catalog for an academic year in which they were enrolled at the community college prior to attending the University of Nebraska-Lincoln. This decision should be made in consultation with the student's College of Engineering academic advising team (e.g., ESS professional advisor and the chief faculty advisor for the student's declared degree program). The chief faculty advisor has the final authority for this decision. Eligibility is based on a) enrollment in a community college during the catalog year the student wishes to utilize, b) maintaining continuous enrollment of at least 12 credit hours per semester at the previous institution for at least 2 semesters, and c) continuous enrollment at the University of Nebraska-Lincoln within 1 calendar year from the student's last term at the previous institution. Students must complete all degree requirements from a single catalog year and within the timeframe allowable for that catalog year.

## Requirements for Minor Offered by Department

### International Engineering (18 credits)

1. Twelve (12) credit hours of courses in international engineering and internationally related courses.
  - a. A minimum of 3 credit hours must be ENGR 490 Global Experiences or a 3-credit education abroad course from another University of Nebraska-Lincoln college (such as AGRI 310 Study Tours in International Agriculture or BSAD 491 International Studies in Business and Economics) or from another university. Substitution for ENGR 490 with related COE courses, participation in a study abroad experience, or courses from another college or university must be pre-approved by the Engineering Student Services office. International students should meet this requirement in countries other than their own or the U.S.
  - b. At least one of the following internationally-related economics, development, leadership, marketing, or trade courses (3 hours):

AECN 346	World Food Economics	3
AECN 367	Agricultural Development in Developing Countries	3
AECN 420	International Food and Agricultural Trade	3
AECN 425	Agricultural Marketing in a Multinational Environment	3
ECON 321	Introduction to International Economics	3
MNGT 414	International Management	3

- c. Elective courses (6 hours) to complete the 12-credit requirement must be chosen from the list below. A minimum of 3 of these credits must be 200-level or above.

### Elective Course List

AGRI 282, AHIS 101, AHIS 102, AHIS 211, AHIS 221, AHIS 231, AHIS 256, AHIS 341, ANTH 212, ANTH 252, ARCH 240, CZEC 3\*\*, CZEC 4\*\*, CLAS 180, CLAS 183, CLAS 245, CLAS 252, CLAS 281, CLAS 283, CLAS 286, CLAS 305, CLAS 307, CLAS 331, CLAS 381, CLAS 409, CLAS 483, CHIN 3\*\*, CHIN 4\*\*, COMM 311, COMM 380, ENGL 210P, ENGL 240A, ENGL 240B, ENGL 362, ENGL 363, ENGL 364, ENGL 381, ENGL 440, ETHN 150, ETHN 171, ETHN 212, ETHN 217, ETHN 244A, ETHN 310, ETHN 311, ETHN 486, FREN 282, FREN 3\*\*, FREN 4\*\*, GEOG 140, GEOG 250, GEOG 272, GERM 3\*\*, GERM 4\*\*, HIST 121, HIST 150, HIST 171, HIST 181, HIST 209, HIST 210, HIST 211, HIST 212, HIST 217, HIST 218, HIST 219, HIST 221, HIST 231, HIST 232, HIST 261, HIST 262, HIST 271, HIST 272, HIST 282, HIST 307, HIST 309, HIST 329, HIST 331, HIST 332, HIST 333, HIST 339, HIST 357, HIST 372, HIST 382, HIST 486, JAPN 3\*\*, JAPN 4\*\*, JUDS 177, JUDS 205, JUDS 209, JUDS 217, JUDS 331, JUDS 332, JUDS 333, JUDS 334, MUNM 280, MUSC 280, NUTR 253, PHIL 116, PHIL 220, PHIL 231, PHIL 232, PHIL 327, PHIL 332, PHIL 336, PHIL 337, PHIL 338, POLS 160, POLS 171, POLS 260, POLS 261, POLS 263, POLS 268, POLS 277, POLS 281, PSYC 310, RELG 332, RELG 409, RUSS 3\*\*, RUSS 4\*\*, SPAN 3\*\*, SPAN 4\*\*, TEAC 330, THEA 335, THEA 336, WMNS 329, WMNS 202

- d. Limits: A maximum of 3 credits from special problems (projects) or honors thesis-type courses (e.g., departmental 390, 396, 398, 399, 491, 498, 499 courses) may be used toward the 12-credit requirement. A maximum of 6 credit hours may be taken Pass/No Pass.
2. Complete six (6) credits of modern language consisting of at least two (2) courses from the following: ARAB 101, ARAB 102, CZEC 101, CZEC 102, CZEC 201, CZEC 202, FREN 101, FREN 102, FREN 201, FREN 202, FREN 203, FREN 210, GERM 101, GERM 102, GERM 201, GERM 202, GERM 210, GREK 101, GREK 102, GREK 301, GREK 302, GREK 373, JAPN 101, JAPN 102, JAPN 201, JAPN 202, LATN 101, LATN 102, LATN 151, LATN 301, LATN 302, RUSS 101, RUSS 102, RUSS 201, RUSS 202, SPAN 101, SPAN 102, SPAN 201, SPAN 202, SPAN 203, SPAN 210
  - a. Limits: These courses may not be taken Pass/No Pass. International students may not use modern language courses of origin in their native (first) language.

### International Engineering (12 credits)

1. Nine (9) credit hours of courses in international engineering and internationally related courses.
  - a. A minimum of 3 credit hours must be ENGR 490 Global Experiences or a 3-credit education abroad course from another University of Nebraska-Lincoln college (such as AGRI 310 Study Tours in International Agriculture or BSAD 491 International Studies in Business and Economics) or from another university. Substitution for ENGR 490 with related COE courses, participation in a study abroad experience, or courses from another college or university must be pre-approved by the Engineering Student



Services office. International students should meet this requirement in countries other than their own or the U.S.

- b. At least one of the following internationally related economics, development, leadership, marketing, or trade courses (3 hours):

AECN 346	World Food Economics	3
AECN 367	Agricultural Development in Developing Countries	3
AECN 420	International Food and Agricultural Trade	3
AECN 425	Agricultural Marketing in a Multinational Environment	3
ECON 321	Introduction to International Economics	3
MNGT 414	International Management	3

- c. Elective courses (3 hours) to complete the 9-credit requirement must be chosen from the list below. These 3 credits must be at the 200-level or above.

**Elective Course List**

AGRI 282, AHIS 211, AHIS 221, AHIS 231, AHIS 256, AHIS 341, ANTH 212, ANTH 252, ARCH 240, CZEC 3\*\*, CZEC 4\*\*, CLAS 245, CLAS 252, CLAS 281, CLAS 282, CLAS 283, CLAS 286, CLAS 305, CLAS 307, CLAS 331, CLAS 381, CLAS 409, CLAS 483, CHIN 3\*\*, CHIN 4\*\*, COMM 311, COMM 380, ENGL 210P, ENGL 240A, ENGL 240B, ENGL 362, ENGL 363, ENGL 364, ENGL 381, ENGL 440, ETHN 212, ETHN 217, ETHN 244A, ETHN 310, ETHN 311, ETHN 486, FREN 282, FREN 3\*\*, FREN 4\*\*, GEOG 272, GEOG 372, GERM 3\*\*, GERM 4\*\*, HIST 209, HIST 210, HIST 211, HIST 212, HIST 217, HIST 218, HIST 219, HIST 221, HIST 231, HIST 232, HIST 261, HIST 262, HIST 271, HIST 272, HIST 282, HIST 307, HIST 309, HIST 329, HIST 331, HIST 332, HIST 333, HIST 339, HIST 357, HIST 372, HIST 382, HIST 486, JAPN 3\*\*, JAPN 4\*\*, JUDS 205, JUDS 209, JUDS 217, JUDS 331, JUDS 332, JUDS 333, JUDS 334, MUNM 280, MUSC 280, NUTR 253, PHIL 220, PHIL 231, PHIL 232, PHIL 327, PHIL 332, PHIL 336, PHIL 337, PHIL 338, POLS 260, POLS 261, POLS 263, POLS 268, POLS 277, POLS 281, PSYC 310, RELG 205, RELG 206, RELG 208, RELG 217, RELG 305, RELG 308, RELG 331, RELG 332, RELG 409, RUSS 3\*\*, RUSS 4\*\*, SPAN 3\*\*, SPAN 4\*\*, TEAC 330, THEA 335, THEA 336, WMNS 329, WMNS 202

- d. Limits: A maximum of 3 credits from special problems (projects) or honors thesis-type courses (e.g., departmental 390, 396, 398, 399, 491, 498, 499 courses) may be used toward the 9-credit requirement. A maximum of 6 credit hours may be taken Pass/No Pass.

2. Complete three (3) credits of modern language from the following: ARAB 101, ARAB 102, CZEC 101, CZEC 102, CZEC 201, CZEC 202, FREN 101, FREN 102, FREN 201, FREN 202, FREN 203, FREN 210, GERM 101, GERM 102, GERM 201, GERM 202, GERM 210, GREK 101, GREK 102, GREK 301, GREK 302, GREK 373, JAPN 101, JAPN 102, JAPN 201, JAPN 202, LATN 101, LATN 102, LATN 151, LATN 301, LATN 302, RUSS 101, RUSS 102, RUSS 201, RUSS 202, SPAN 101, SPAN 102, SPAN 201, SPAN 202, SPAN 203, SPAN 210

- a. Limits: This course may not be taken Pass/No Pass. International students may not use modern language courses of origin in their native (first) language.