



Harper College and NIU CEET Transfer Guidelines for B.S. Degree in Industrial and Systems Engineering

The 2+2 Plan for Community College Students

The **Department of Industrial and Systems Engineering** welcomes transfer students from Illinois community colleges. Students find it easy to continue their studies at NIU if they plan well. Therefore, following the course guidelines in this brochure while completing an Associate in Engineering Science (AES) Degree is highly recommended [1]. Students should always work closely with their community college advisor.

Courses at Harper College

Courses at Harper College		Equivalent courses at NIU
*SPE 101	Fundamentals of Speech Communication	COMS 100
**ENG 101	Composition	ENGL 103
**ENG 102	Composition	ENGL 203
***ECO 211 OR ***ECO 212	Microeconomics OR Macroeconomics	ECON 260 OR ECON 261
***PSY 101	Introduction to Psychology	PSYC 102
CHM 121	General Chemistry I	CHEM 210 and CHEM 212
CSC 121 +122	Computer Science I	CSCI 240 (see CSCI Department for adjustment)
MTH 200	Calculus w/ Analytic Geometry I	MATH 229
MTH 201	Calculus w/ Analytic Geometry II	MATH 230
MTH 202	Calculus w/ Analytic Geometry III	MATH 232
MTH 212	Differential Equations	MATH 336
PHY 201	General Physics I – Mechanics	PHYS 253
PHY 202	General Physics II – Electricity and Magnetism	PHYS 273
EGR 120	Engineering Graphics I (CAD)	MEE 270
EGR 210	Analytical Mechanics (Statics)	MEE 210
EGR 211	Analytical Mechanics (Dynamics)	MEE 211
EGR 260	Introduction to Circuit Analysis	ELE 210
EGR 100	Introduction to Engineering	UEET 101

*Satisfies NIU Foundational Studies Oral Communication Requirement.

**Satisfies NIU Foundational Studies Writing Requirement.

***Satisfies NIU Society and Culture Knowledge Domain (Gen Ed) Requirement.



[1] Only A.A. and A.S. degrees satisfy NIU's general education requirements.

General Education Requirements

NIU's College of Engineering and Engineering Technology no longer requires special sequences in Social Sciences and Humanities. Therefore, students only need to satisfy NIU's general education requirements. When choosing general education ("knowledge domain") courses, please consult with your advisor, verify general education requirements in the NIU Undergraduate Catalog, and check the NIU Community College Articulation Tables for transferability. Students are also required to fulfill a Human Diversity requirement, which may be fulfilled by a knowledge domain course.

Courses at NIU

Remaining classes to be taken at NIU's College of Engineering and Engineering Technology to earn a Bachelor of Science Degree in **Industrial and Systems Engineering**:

ISYE 220	Engineering Economy
ISYE 250	Introduction to Lean Systems Engineering
ISYE 310	Work Measurement and Work Design
ISYE 335	Probability and Statistics for Engineers
ISYE 350	Principles of Manufacturing Processes
ISYE 370	Operations Research: Deterministic Models
ISYE 371	Operations Research: Probabilistic Models
ISYE 410	Human Factors Engineering
ISYE 430	Quality Control
ISYE 435	Experimental Design for Engineering
ISYE 440	Production Planning and Control
ISYE 450	Lean Manufacturing Systems
ISYE 460	Facilities Planning and Design
ISYE 480	Simulation Modeling and Analysis
ISYE 492	Industrial and Systems Engineering Senior Design Project Proposal
ISYE 495	Senior Design Project

15-18 semester hours of Technical Electives

In addition to the courses listed above, students are required to complete 15-18 hours of electives within CEET. Specific electives will be reviewed with student's assigned faculty advisor and academic catalog.

For More Information

Department of Industrial and Systems Engineering
CEET EB 230



NORTHERN ILLINOIS UNIVERSITY

College of Engineering and Engineering Technology

Northern Illinois University
DeKalb, IL 60115-2854
(815) 753-1282

Visit our [Home Page](#). This site provides information on course descriptions, course syllabi, lab tours, faculty profiles, student organizations, suggested 4-year degree plan, other useful links, etc.

For undergraduate application materials, contact:

Office of Admissions
Northern Illinois University
DeKalb, IL 60115-2857
admissions@niu.edu

Apply online at: <http://www.admissions.niu.edu/admissions/>

For more information on transfer programs at NIU:

Call **(815) 753-0446** or **(800) 892-3050 (toll free)** and ask to speak with a Transfer Counselor.

For more information about the Engineering Transfer Program at Harper College, contact: Academic Advising and Counseling Center at (847) 925-6393.

Disclaimer: Although NIU attempts to accommodate the course requests of all students, some course offerings may be limited by financial, space, and staffing considerations, or may otherwise be unavailable. Nothing in this brochure may be construed to promise or guarantee registration in any course or course of study (whether required or elective), nor may anything be construed to promise or guarantee the completion of an academic program within a specific length of time. All degree requirements are subject to the provisions and notices in the Undergraduate Catalog. Information in this brochure is valid through August 2018.

Revised 8/2019