NORTHERN ILLINOIS UNIVERSITY
College of Engineering and Engineering Technology
Bridging Theory with Practice

Heartland Community 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 Heartland Community College

Courses at Heartland Community College		Equivalent courses at NIU
*COMM 101	Introduction to Oral Communication	COMS 100
**ENGL 101	Critical Reading and Writing	ENGL 103
**ENGL 102	Multimodal Composition	ENGL 203
***ECON 101 **OR** ***ECON 102	Principles of Microeconomics **OR** Principles of Macroeconomics	ECON 260 **OR** ECON 261
***PSY 101	Intro to Psychology	PSYC 102
CHEM 161	General Chemistry I	CHEM 210 and CHEM 212
CSCI 130 **AND** CSCI 131 **AND** CSCI 221	Computer Science I **AND** Computer Science II **AND** C++ Programming	CSCI 240 and CSCI 241 (only 240 is required for ISYE)
MATH 161	Calculus I	MATH 229
MATH 162	Calculus II	MATH 230
MATH 163	Calculus III	MATH 232
MATH 272	Differential Equations	MATH 336
PHYS 171	Mechanics	PHYS 253
PHYS 172	Electricity and Magnetism	PHYS 273
ENGR 110	Engineering Graphics	MEE 270
ENGR 271	Engineering Mechanics: Statics	MEE 210
ENGR 272	Engineering Mechanics: Dynamics	MEE 211

*Satisfies NIU Foundational Studies Oral Communication Requirement.
**Satisfies NIU Foundational Studies Writing Requirement.
***Satisfies NIU Society and Culture Knowledge Domain (Gen Ed) Requirement.

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[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 Heartland CC advisor, verify general education requirements in the NIU Undergraduate Catalog, and check the NIU Community College Articulation Tables for transferability.

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	Integrated Manufacturing Systems
ISYE 460	Facilities Planning and Design
ISYE 480	Simulation Modeling and Analysis
ISYE 495	Senior Design Project
ELE 210 **OR** **BOTH** TECH 175 **AND** TECH 175A	Engineering Circuit Analysis **OR** **BOTH** Electricity and Electronics Fundamentals **AND** Electricity and Electronics Fundamentals Laboratory
UEET 101	Introduction to Engineering

15 semester hours of Technical Electives
At least 9 semester hours must be from non-required ISYE courses at the 300- or 400-level. The remaining 6 semester hours may be chosen from: non-required ISYE 300- or 400-level courses **or** 300- or 400-level courses from ELE or MEE with the exception of MEE 330 and MEE 331 **or** from the following: ACCY 206, ACCY 207, ACCY 288, BIOS 311, COMS 302, COMS 361, ECON 301, ECON 361, ECON 386, MATH 240, MATH 360, MATH 380, MATH 434, MATH 435, MATH 439, MGMT 333, OMIS 351, OMIS 442, PSYC 345, PSYC 372, STAT 470, STAT 473, STAT 473A, STAT 474, STAT 478.

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For More Information

Department of Industrial and Systems Engineering
CEET EB 230
Northern Illinois University
DeKalb, IL 60115-2854
(815) 753-1269

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 Heartland Community College, contact Lauren Denofrio-Corrales, Instructional Chair of Science, at lauren.denofrio@heartland.edu or (309) 268-8639.

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 2016.

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