



Joliet Junior 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 of Science (AS) Degree is highly recommended [1]. Students should always work closely with their community college advisor.

Courses at Joliet Junior College

Courses at Joliet Junior College		Equivalent courses at NIU
*COMM 101	Principles of Speech	COMS 100
**ENG 101	Rhetoric	ENGL 103
**ENG 102	Rhetoric	ENGL 203
***ECON 104 OR ***ECON 103	Principles of Economics II (Micro) OR Principles of Economics I (Macro)	ECON 260 OR ECON 261
***PSYC 101	General Psychology	PSYC 102
CHEM 101	General Chemistry I	CHEM 210 and CHEM 212
CIS 236	Programming in C	CSCI 240 (see CSCI department to adjust)
MATH 170	Calculus w/ Analytic Geometry I	MATH 229
MATH 171	Calculus w/ Analytic Geometry II	MATH 230
MATH 172	Calculus w/ Analytic Geometry III	MATH 232
MATH 220	Differential Equations and Orthogonal Functions	MATH 336
PHYS 201	Engineering Physics I	PHYS 253
PHYS 202	Engineering Physics II	PHYS 273
EGR 201	Analytical Mechanics – Statics	MEE 210
EGR 202	Analytical 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.		
[1] Only A.A. and A.S. degrees satisfy NIU's general education requirements.		

General Education Requirements



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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 Joliet Junior College 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
ELE 210 OR BOTH TECH 175 AND TECH 175A	Engineering Circuit Analysis OR BOTH Electricity and Electronics Fundamentals AND Electricity and Electronics Fundamentals Laboratory
MEE 270	Engineering Graphics
UEET 101/301	Introduction to Engineering/Transition to the Profession of 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



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434, MATH 435, MATH 439, MGMT 333, OMIS 351, OMIS 442, PSYC 345, PSYC 372, STAT 400/ACSC 400X, STAT 435, STAT 438/ACSC 438X.

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 Joliet Junior College, contact: Main Campus Counseling Office at (815) 280-2673 or Romeoville Campus Counseling Office at (815) 886-3000.

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 2020.

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