



City Colleges of Chicago 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 City Colleges of Chicago

| Courses at City Colleges of Chicago | | Equivalent courses at NIU |
|-------------------------------------|---|--|
| *SPEECH 101 | Fundamentals of Speech Communication | COMS 100 |
| **ENGLISH 101 | Composition | ENGL 103 |
| **ENGLISH 102 | Composition II | ENGL 203 |
| ***ECON 201 OR ***ECON 202 | Principles of Economics I OR Principles of Economics II | ECON 261 OR ECON 260 |
| ***PSYCH 201 | General Psychology | PSYC 102 |
| CHEM 201 | General Chemistry I | CHEM 210 and CHEM 212 |
| CIS 142 AND CIS 242 | C-Based Programming Language AND Advanced C or C++ Language | CSCI 240 and CSCI 241 (only 240 required for ISYE) |
| MATH 207 | Calculus & Analytic Geometry I | MATH 229 |
| MATH 208 | Calculus & Analytic Geometry II | MATH 230 |
| MATH 209 | Calculus & Analytic Geometry III | MATH 232 |
| MATH 210 | Differential Equations | MATH 336 |
| PHYSICS 235 | Engineering Physics I: Mechanics and Wave Motion | PHYS 253 |
| PHYSICS 236 | Engineering Physics II: Electricity and Magnetism | PHYS 273 |
| ENGR 131 | Engineering Graphics and Intro to Design | MEE 270 |
| PHYSICS 215 | Statics | MEE 210 |
| PHYSICS 216 | Dynamics | MEE 211 |
| ENGR 215 | Electrical Circuit Analysis | ELE 210 and ELE 210U |
| ENGR 111 | Intro to the Engineering Profession | 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.

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.

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 3/5/2024