



Oakton 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 of Science in Engineering (ASE) Degree is highly recommended [1]. Students should always work closely with their community college advisor.

Courses at Oakton Community College

| Courses at Oakton Community College | | Equivalent courses at NIU |
|---|--|----------------------------|
| *SPE 103 | Effective Speech | COMS 100 |
| **EGL 101 | Composition I | ENGL 103 |
| **EGL 102 | Composition II | ENGL 203 |
| ***ECO 202 OR ***ECO 201 | Principles of Microeconomics OR Principles of Macroeconomics | ECON 260 OR ECON 261 |
| ***PSY 101 | Introduction to Psychology | PSYC 102 |
| CHM 121 | General College Chemistry I | CHEM 210 and CHEM 212 |
| CIS 220 | Intro to C Programming | CSCI 240 |
| MAT 250 | Calculus I | MATH 229 |
| MAT 251 | Calculus II | MATH 230 |
| MAT 252 | Calculus III | MATH 232 |
| MAT 262 | Ordinary Differential Equations | MATH 336 |
| PHY 221 | General Physics I | PHYS 253 |
| PHY 222 | General Physics II | PHYS 273 |
| ENG 120 | Engineering Graphics | MEE 270 |
| ENG 211 | Analytical Mechanics (Statics) | MEE 210 |
| ENG 212 | Analytical Mechanics (Dynamics) | MEE 211 |
| ENG 220 | Engineering Circuit Analysis | ELE 210 |
| *Satisfies NIU Foundational Studies Oral Communication Requirement. **Satisfies NIU Foundational Studies Writing Requirement. ***Satisfies NIU Society and Culture Knowledge Domain (Gen Ed) Requirement. | | |



NORTHERN ILLINOIS UNIVERSITY

College of Engineering and Engineering Technology

Bridging Theory with Practice

[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 Oakton 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 |
| UEET 301 | Transition to the Profession of Engineering |

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.



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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 Oakton Community College contact:

Advising Services at (847) 635-1700 (Des Plaines campus) or (847) 635-1400 (Skokie campus).

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.