



## Heartland Community College and NIU CEET Transfer Guidelines for B.S. Degree in Mechanical Engineering

### The 2+2 Plan for Community College Students

The **Department of Mechanical 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
CHEM 161	General Chemistry I	CHEM 210 and CHEM 212
CSCI 130 <b>AND</b> CSCI 131	Computer Science I <b>AND</b> Computer Science II	CSCI 240 and CSCI 241 (only 240 is required for MEE)
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 171	Engineering Mechanics: Statics	MEE 210
ENGR 172	Engineering Mechanics: Dynamics	MEE 211
*Satisfies NIU Foundational Studies Oral Communication Requirement.		
**Satisfies NIU Foundational Studies Writing 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



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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 **Mechanical Engineering**:

MEE 212	Mechanics of Materials
MEE 320	Mechanism Design and Analysis
MEE 321	Mechanical Vibrations I
MEE 322 OR ELE 380	Dynamic Systems and Control I OR Control Systems I
MEE 330	Materials Science
MEE 331	Manufacturing Processes
MEE 340	Fluid Mechanics
MEE 350	Engineering Thermodynamics
MEE 352	Heat Transfer
MEE 380 OR MEE 381	Computational Methods in Engineering Design OR Computational Methods and Programming in Engineering Design
MEE 390	Experimental Methods in Mechanical Engineering I
MEE 430	Computer-Aided Design and Manufacturing
MEE 383	Engineering Analysis
MEE 470	Design of Machine Elements
MEE 485	Senior Mechanical Engineering Design I
MEE 486	Senior Mechanical Engineering Design II
ELE 210 AND ELE 210U	Engineering Circuit Analysis AND Engineering Circuit Laboratory Project
ISYE 220	Engineering Economy
UEET 101	Introduction to Engineering

#### **A total of 15-18 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 Mechanical Engineering



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## College of Engineering and Engineering Technology

CEET EB 226  
Northern Illinois University  
DeKalb, IL 60115-2854  
(815) 753-9979

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

**For undergraduate application materials, contact:**

Office of Admissions  
Northern Illinois University  
DeKalb, IL 60115-2857  
[admissions@niu.edu](mailto: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](mailto: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 2018.

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