

Harper College and NIU CEET Transfer Guidelines for B.S. Degree in <u>Mechanical Engineering</u>

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 Harper College

Courses at Harper College		Equivalent courses at NIU
*SPE 101	Fundamentals of Speech Communication	COMS 100
**ENG 101	Composition	ENGL 103
**ENG 102	Composition	ENGL 203
CHM 121	General Chemistry I	CHEM 210 and CHEM 212
CSC 121 + 122	Computer Science I	CSCI 240 (see CSCI Department for adjustment)
MTH 200	Calculus w/ Analytic Geometry I	MATH 229
MTH 201	Calculus w/ Analytic Geometry II	MATH 230
MTH 202	Calculus w/ Analytic Geometry III	MATH 232
MTH 212	Differential Equations	MATH 336
PHY 201	General Physics I – Mechanics	PHYS 253
PHY 202	General Physics II – Electricity and Magnetism	PHYS 273
EGR 120	Engineering Graphics I (CAD)	MEE 270
EGR 210	Analytical Mechanics (Statics)	MEE 210
EGR 211	Analytical Mechanics (Dynamics)	MEE 211
EGR 212	Mechanics of Solids	MEE 212
EGR 240	Thermodynamics	MEE 350
EGR 260 AND EGR 262	Introduction to Circuit Analysis AND Electrical Circuits Laboratory	ELE 210 and ELE 210U
EGR 100	Introduction to Engineering	UEET 101
*Satisfies NIU Foundational Studies Oral Communication Requirement. **Satisfies NIU Foundational Studies Writing Requirement.		
[1] Only A.A. and	d A.S. degrees satisfy NIU's general education requ	uirements.



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

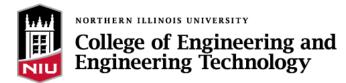
Remaining classes to be taken at NIU's College of Engineering and Engineering Technology to earn a Bachelor of Science Degree in **Mechanical Engineering**:

MEE 321Mechanical Vibrations IMEE 322Dynamic Systems and Control I OR ELE 380MEE 330Materials ScienceMEE 331Manufacturing ProcessesMEE 340Fluid MechanicsMEE 352Heat TransferMEE 380 OR OR OR OR OR OR OR DE 381Computational Methods in Engineering Design OR OR OR OR OR OR OR DE 383MEE 380 DE Experimental Methods in Mechanical Engineering IMEE 383Engineering AnalysisMEE 470Design of Machine Elements MEE 485MEE 485Senior Mechanical Engineering Design I			
MEE 322 OR OR ELE 380Dynamic Systems and Control I OR Control Systems IMEE 330Materials ScienceMEE 331Manufacturing ProcessesMEE 340Fluid MechanicsMEE 352Heat TransferMEE 380 OR OR MEE 381Computational Methods in Engineering Design OR Computational Methods and Programming in Engineering DesignMEE 390Experimental Methods in Mechanical Engineering IMEE 383Engineering AnalysisMEE 470Design of Machine ElementsMEE 485Senior Mechanical Engineering Design I	MEE 320	Mechanism Design and Analysis	
OR ELE 380OR Control Systems IMEE 330Materials ScienceMEE 331Manufacturing ProcessesMEE 340Fluid MechanicsMEE 352Heat TransferMEE 380 OR MEE 381Computational Methods in Engineering Design OR Computational Methods and Programming in Engineering DesignMEE 390Experimental Methods in Mechanical Engineering IMEE 383Engineering AnalysisMEE 470Design of Machine ElementsMEE 485Senior Mechanical Engineering Design I	MEE 321	Mechanical Vibrations I	
MEE 300Manufacturing ProcessesMEE 331Manufacturing ProcessesMEE 340Fluid MechanicsMEE 352Heat TransferMEE 380Computational Methods in Engineering Design OR Computational Methods and Programming in Engineering DesignMEE 390Experimental Methods in Mechanical Engineering IMEE 430Computer-Aided Design and ManufacturingMEE 383Engineering AnalysisMEE 470Design of Machine ElementsMEE 485Senior Mechanical Engineering Design I	MEE 322 OR ELE 380	OR	
MEE 340Fluid MechanicsMEE 352Heat TransferMEE 380 OR MEE 381Computational Methods in Engineering Design OR Computational Methods and Programming in Engineering DesignMEE 390Experimental Methods in Mechanical Engineering IMEE 430Computer-Aided Design and ManufacturingMEE 383Engineering AnalysisMEE 470Design of Machine ElementsMEE 485Senior Mechanical Engineering Design IMEE 486Senior Mechanical Engineering Design II	MEE 330	Materials Science	
MEE 352Heat TransferMEE 380 OR MEE 381Computational Methods in Engineering Design OR Computational Methods and Programming in Engineering DesignMEE 390Experimental Methods in Mechanical Engineering IMEE 430Computer-Aided Design and ManufacturingMEE 383Engineering AnalysisMEE 470Design of Machine ElementsMEE 485Senior Mechanical Engineering Design IMEE 486Senior Mechanical Engineering Design II	MEE 331	Manufacturing Processes	
MEE 380 OR MEE 381Computational Methods in Engineering Design OR Computational Methods and Programming in Engineering DesignMEE 390Experimental Methods in Mechanical Engineering IMEE 430Computer-Aided Design and ManufacturingMEE 383Engineering AnalysisMEE 470Design of Machine ElementsMEE 485Senior Mechanical Engineering Design IMEE 486Senior Mechanical Engineering Design II	MEE 340	Fluid Mechanics	
OR MEE 381OR Computational Methods and Programming in Engineering DesignMEE 390Experimental Methods in Mechanical Engineering IMEE 430Computer-Aided Design and ManufacturingMEE 383Engineering AnalysisMEE 470Design of Machine ElementsMEE 485Senior Mechanical Engineering Design IMEE 486Senior Mechanical Engineering Design II	MEE 352	Heat Transfer	
MEE 430Computer-Aided Design and ManufacturingMEE 383Engineering AnalysisMEE 470Design of Machine ElementsMEE 485Senior Mechanical Engineering Design IMEE 486Senior Mechanical Engineering Design II	-	OR	
MEE 383 Engineering Analysis MEE 470 Design of Machine Elements MEE 485 Senior Mechanical Engineering Design I MEE 486 Senior Mechanical Engineering Design II	MEE 390	Experimental Methods in Mechanical Engineering I	
MEE 470 Design of Machine Elements MEE 485 Senior Mechanical Engineering Design I MEE 486 Senior Mechanical Engineering Design II	MEE 430	Computer-Aided Design and Manufacturing	
MEE 485 Senior Mechanical Engineering Design I MEE 486 Senior Mechanical Engineering Design II	MEE 383	Engineering Analysis	
MEE 486 Senior Mechanical Engineering Design II	MEE 470	Design of Machine Elements	
	MEE 485	Senior Mechanical Engineering Design I	
ISYE 220 Engineering Economy	MEE 486	Senior Mechanical Engineering Design II	
	ISYE 220	Engineering Economy	

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 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

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 Harper College, contact: Academic Advising and Counseling Center at (847) 925-6393.

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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