Illinois Valley Community 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 Illinois Valley Community College

S 100 L 103 L 203 M 210 and CHEM 212 240 (see CSCI Department to adjust)
L 203 M 210 and CHEM 212
M 210 and CHEM 212
240 (see CSCI Department to adjust)
H 229
H 230
H 232
H 336
S 253
S 273
270
210 and MEE 211

^{*}Satisfies NIU Foundational Studies Oral Communication Requirement.

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 IVCC 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.

^{**}Satisfies NIU Foundational Studies Writing Requirement.

^[1] Only A.A. and A.S. degrees satisfy NIU's general education requirements.

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 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 352 Heat Transfer MEE 381 Computational Methods in Engineering Design OR OR OR Computational Methods and Programming in Engineering Design MEE 383 Engineering Analysis MEE 390 Experimental Methods in Mechanical Engineering I MEE 430 Computer-Aided Design and Manufacturing MEE 470 Design of Machine Elements MEE 485 Senior Mechanical Engineering Design I MEE 486 Senior Mechanical Engineering Design II ELE 210 AND Engineering Circuit Analysis MEE 220 Engineering Economy UEET 101/301 Introduction to Engineering/Transition to the Profession of Engineering		
MEE 321 Mechanical Vibrations I MEE 322 OR OR OR Control 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 Computational Methods in Engineering Design OR Computational Methods and Programming in Engineering Design MEE 383 Engineering Analysis MEE 390 Experimental Methods in Mechanical Engineering I MEE 430 Computer-Aided Design and Manufacturing MEE 470 Design of Machine Elements MEE 486 Senior Mechanical Engineering Design II ELE 210 AND Engineering Circuit Analysis AND Engineering Circuit Laboratory Project ISYE 220 Engineering Economy	MEE 212	Mechanics of Materials
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 MEE 383 Engineering Analysis MEE 390 Experimental Methods in Mechanical Engineering I MEE 430 Computer-Aided Design and Manufacturing MEE 470 Design of Machine Elements MEE 486 Senior Mechanical Engineering Design I MEE 486 Senior Mechanical Engineering Design I ELE 210 AND Engineering Circuit Laboratory Project ISYE 220 Engineering Economy	MEE 320	Mechanism Design and Analysis
OR ELE 380 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 OR OR Computational Methods in Engineering Design OR Computational Methods and Programming in Engineering Design MEE 383 Engineering Analysis MEE 390 Experimental Methods in Mechanical Engineering I MEE 430 Computer-Aided Design and Manufacturing MEE 470 Design of Machine Elements MEE 485 Senior Mechanical Engineering Design I ELE 210 AND Engineering Circuit Analysis AND Engineering Circuit Laboratory Project ISYE 220 Engineering Economy	MEE 321	Mechanical Vibrations I
MEE 331 Manufacturing Processes MEE 340 Fluid Mechanics MEE 350 Engineering Thermodynamics MEE 352 Heat Transfer MEE 380 OR OR OR Computational Methods in Engineering Design MEE 381 Computational Methods and Programming in Engineering Design MEE 383 Engineering Analysis MEE 390 Experimental Methods in Mechanical Engineering I MEE 430 Computer-Aided Design and Manufacturing MEE 470 Design of Machine Elements MEE 485 Senior Mechanical Engineering Design I MEE 486 Senior Mechanical Engineering Design II ELE 210 AND Engineering Circuit Analysis AND Engineering Circuit Laboratory Project ISYE 220 Engineering Economy	OR	OR
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MEE 350 Engineering Thermodynamics MEE 352 Heat Transfer MEE 380 OR OR Computational Methods in Engineering Design OR Computational Methods and Programming in Engineering Design MEE 381 Engineering Analysis MEE 390 Experimental Methods in Mechanical Engineering I MEE 430 Computer-Aided Design and Manufacturing 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 ELE 210U Engineering Circuit Laboratory Project ISYE 220 Engineering Economy	MEE 331	Manufacturing Processes
MEE 352 Heat Transfer MEE 380 Computational Methods in Engineering Design OR Computational Methods and Programming in Engineering Design MEE 383 Engineering Analysis MEE 390 Experimental Methods in Mechanical Engineering I MEE 430 Computer-Aided Design and Manufacturing MEE 470 Design of Machine Elements MEE 485 Senior Mechanical Engineering Design I MEE 486 Senior Mechanical Engineering Design II ELE 210 Engineering Circuit Analysis AND ELE 210U Engineering Circuit Laboratory Project ISYE 220 Engineering Economy	MEE 340	Fluid Mechanics
MEE 380 OR OR MEE 381 Computational Methods in Engineering Design OR MEE 383 Engineering Analysis MEE 390 Experimental Methods in Mechanical Engineering I MEE 430 Computer-Aided Design and Manufacturing 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	MEE 350	Engineering Thermodynamics
OR MEE 381 Computational Methods and Programming in Engineering Design MEE 383 Engineering Analysis MEE 390 Experimental Methods in Mechanical Engineering I MEE 430 Computer-Aided Design and Manufacturing 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 ELE 210U Engineering Circuit Laboratory Project ISYE 220 Engineering Economy	MEE 352	Heat Transfer
MEE 390 Experimental Methods in Mechanical Engineering I MEE 430 Computer-Aided Design and Manufacturing MEE 470 Design of Machine Elements MEE 485 Senior Mechanical Engineering Design I MEE 486 Senior Mechanical Engineering Design II ELE 210 Engineering Circuit Analysis AND ELE 210U Engineering Circuit Laboratory Project ISYE 220 Engineering Economy	OR	OR
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ELE 210 AND ELE 210U Engineering Circuit Analysis AND Engineering Circuit Laboratory Project ISYE 220 Engineering Economy	MEE 485	Senior Mechanical Engineering Design I
AND ELE 210U Engineering Circuit Laboratory Project ISYE 220 Engineering Economy	MEE 486	Senior Mechanical Engineering Design II
	AND	AND
UEET 101/301 Introduction to Engineering/Transition to the Profession of Engineering	ISYE 220	Engineering Economy
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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 Illinois Valley Community College, contact: Counseling and Advising at (815) 224-0360.

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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