

# Elgin 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 Elgin Community College**

Courses at Elgin Community College		Equivalent courses at NIU
*CMS 101	Fundamentals of Speech	COMS 100
**ENG 101	English Composition I	ENGL 103
**ENG 102	English Composition II	ENGL 203
CHM 142	General Chemistry I	CHEM 210 and CHEM 212
CIS 123 + CIS 223	Computer Science for Engineers	CSCI 240 (contact CSCI Department to adjust)
MTH 190 <b>AND</b> MTH 210	Calculus w/ Analytic Geometry I AND Calculus w/ Analytic Geometry II	MATH 229 <b>AND</b> MATH 230
MTH 230	Calculus w/ Analytic Geometry III	MATH 232
MTH 250	Differential Equations	MATH 336
PHY 111	Engineering Physics	PHYS 253
PHY 112	Engineering Physics	PHYS 273
CAD 111	Pro/E Adv Part & Assembly Design	MEE 270
EGR 152	Statics	MEE 210
EGR 252	Dynamics	MEE 211
*Satisfies NIU Foundational Studies Oral Communication Requirement. **Satisfies NIU Foundational Studies Writing Requirement.		

[1] Only A.A. and A.S. degrees automatically 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 **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 <b>OR</b> 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 <b>OR</b> UEET 301	Introduction to Engineering <b>OR</b> Transition to the Profession of 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 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 Elgin Community College,** contact: ECC Academic and Transfer Advising at (847) 214-7390 or <u>advising@elgin.edu</u>.

**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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