



EASTERN MICHIGAN UNIVERSITY EQUIVALENCY GUIDE

COLLEGE OF ENGINEERING AND SCIENCE

ENGINEERING PROGRAMS

Entrance Requirements: 2.5 GPA based on at least 24 semester hours of credit. If less than 24 credits have been taken, high school transcripts are required.

The following courses will transfer into a University of Detroit Mercy Engineering program [Civil/Environmental, Electrical/Computer, Manufacturing or Mechanical]. Students may transfer a maximum of 96 semester hours of credit. According to transfer policy, additional courses not on this guide may also be transferable.

To arrange a campus visit, contact an Admissions Counselor at 313-993-1245, 800-635-5020 or admissions@udmercy.edu. In order to determine when you may begin the cooperative education program (sometimes even prior to taking classes at UDM), contact Carolyn Rimle at 313-993-1530 or rimlec@udmercy.edu as soon as possible.

UDM website: www.udmercy.edu

EASTERN MICH UNIVERSITY COURSES

UDM EQUIVALENCIES

Math, Science, Engineering Courses:

CHEM 121	General Chemistry I	CHM 107	General Chemistry I
CHEM 122	General Chemistry I Laboratory	CHM 110	Chemistry Laboratory I
CHEM 123	General Chemistry II ¹	CHM 108	General Chemistry II
CHEM 341	Fundamentals of Material Science ¹	E 317	Science of Materials
CNST 206	Surveying ²	CE 340/341	Civil Engr: Surveying, CAD, GIS
COSC 111	Introduction to Programming	E 204	Intro to Engineering Computing
COSC 405	Switching Theory ³	EE 264	Digital Logic
COSC 422	Intro to Microprocessors ³	EE 386	Intro to Microprocessors
COSC 439	Computing Network Principles ³	EE 468	Computer Networks
MATH 120	Calculus I	MTH 141	Analytic Geometry & Calculus I
MATH 121	Calculus II	MTH 142	Analytic Geometry & Calculus II
MATH 223	Multivariable Calculus	MTH 241	Analytic Geometry & Calculus III
MATH 122	Elementary Linear Algebra and		
MATH 325	Differential Equations	MTH 372	Differential Equ w/Linear Algebra
MATH 360	Statistical Methods	MTH 427	Applied Probability and Statistics
PHY 223	Mechanics and Sound	PHY 160/161	General Physics I/ Lab
PHY 224	Electricity and Light	PHY 162/163	General Physics II/ Lab
PHY 229	Strength & Elasticity of Materials ¹	E 326/327	Mech of Deformable Bodies/Lab
PHY 230	Engineering Dynamics ¹	E 313	Dynamics
PHY 370	Introduction to Modern Physics ³	PHY 367	Modern Physics
PHY 485	Fluid Dynamics ¹	E 314	Fluid Mechanics

- If EMU's PHY 223, 229 and 230 courses are all taken, UDM's E312 Statics will also transfer.
- Additional COSC and PHY 400 level courses may transfer as Technical Electives. Contact UDM advisor.

¹ **Not** required by Electrical/Computer Engineering program. Note: CHEM 123 or another science course may be used to fulfill a requirement for Mechanical and Manufacturing Engineering – consult with UDM advisor

² Required by Civil/Environmental Engineering program only.

³ Required by Electrical/ Computer Engineering program only.

Core Curriculum Courses:

EMU

ENGL 121 Comp II: Researching the Pub Exp
CTAC 224 Public Speaking **or**
CTAS 124 Fundamentals of Speech
ENGL 324 Principles of Technical Comm
PHIL 100 Introduction to Philosophy
HIST 100 Comparative Study of Religion
 (or other Religious Studies course)

PHIL or Religious Studies related course

UDM

ENL 131 Academic Writing (Obj 1)

CST 101 Fundamentals of Speech (Obj 1)

ENL 303 Technical Writing

PHL 100 Introduction to Philosophy (Obj 4)

Choose 1 Religious Studies Course (Obj 4)

Choose 1 add'l Philosophy or Religious Studies (Obj 4)

UDM's Objective 5:

- Choose two courses (6 credits total) with a focus on Historical, Literary, or Aesthetic Experiences.
- Choose one course (3 credits) with a focus on Comparative Experiences (study of another culture) or a Foreign Language class.

Contact UDM Engineering and Science Transfer Director, Carolyn Rimle, at 313-993-1530 or rimlec@udmercy.edu for clarifications.

UDM HIGHLIGHTS

Great Reputation – For the eighth consecutive year, University of Detroit Mercy is listed in the top tier of Midwestern Master's Universities in the 2009 edition of the *U.S. News and World Report's* "America's Best Colleges." The University was ranked one of the top 25 schools in its category and the highest-ranking school in Michigan. Also, UDM engineering programs are accredited by ABET.

UDM is affordable! About 75% of UDM students receive financial aid and/or scholarships. Combining co-op income and potential scholarships and financial aid, you may have little out-of-pocket expenses. To determine if you qualify for any of UDM's scholarships (including full tuition grants) established for transfer students, contact the Admissions office at 800-635-5020, 313-993-1245 or admissions@udmercy.edu.

Co-op Leader – For all engineering students at UDM, co-op integrates real engineering practice with a rigorous on-campus education that includes computing and laboratory intensive components. UDM has one of the few four-year engineering programs in the country where all students obtain one full year of experience prior to graduation. Besides valuable experience, students earn an average of nearly \$30,000 during their three co-op rotations. This provides a significant amount of income for tuition. Previous engineering related work experience can be considered for transfer credits.

Get a Job! - 100% of UDM graduating engineering students in August 2007 either had a job offer in their field or had been accepted to graduate school on their graduation day.

Excellent Faculty – UDM's small classes are taught by experienced professors (not teaching assistants) who help foster a positive learning environment. Engineering faculty conduct research, receive grant money for lab equipment and curriculum development, work in industry, and win national teaching awards.

Dual Enrollment – To ease the transition between EMU and UDM, it is an option to take one or more engineering courses at UDM while completing courses at EMU. Contact Carolyn Rimle (see contact information above) for specific courses, which vary by department.

Campus Activities – To gain professional, technical and social connections, we highly encourage participation in at least one of the many Engineering and Science organizations or University clubs.

Location - UDM, located in a residential area of Northwest Detroit, is close to numerous corporations including many companies' headquarters. The Metro Detroit area is also home to a wide variety of cultural activities, entertainment, and sports teams. UDM is easily accessible from most major freeways, including I-94. Come visit!