



## ALPENA COMMUNITY COLLEGE EQUIVALENCY GUIDE

### COLLEGE OF ENGINEERING AND SCIENCE

### ENGINEERING PROGRAMS

Entrance Requirements: Minimum 2.5 GPA based on at least 24 credits. If less than 24 credits have been taken, high school transcripts are required. Only grades of “C” (2.0) or higher will transfer.

The following courses will transfer into University of Detroit Mercy Engineering programs [Architectural, Civil/Environmental, Electrical/Computer, or Mechanical]. Additional courses not on this guide may also transfer.

To arrange a campus visit, contact an Admissions Counselor at 313-993-1245, 800-635-5020 or [admissions@udmercy.edu](mailto:admissions@udmercy.edu).

UDM website: [www.udmercy.edu](http://www.udmercy.edu)

#### ALPENA COMMUNITY COLLEGE COURSES

#### UDM EQUIVALENCIES

##### Engineering, Math, and Science Courses:

CEM 121	General and Inorganic Chemistry	CHM 1070/1100	General Chemistry I/Lab
CEM 122	Inorganic Chem & Qualitative Analysis <sup>1</sup>	CHM 1080/1120	General Chemistry II/Lab
EGR 122	Intro to Engineering (recommended but optional)		
EGR 125	Engineering Graphics Communications <sup>2</sup>	ENGR 1050	Engr Graphics and Design
EGR 221	Statics <sup>3</sup>	ENGR 3120	Statics
EGR 222	Mechanics of Materials <sup>3</sup>	ENGR 3260	Mechanics of Materials
EGR 231	Dynamics <sup>3</sup>	ENGR 3130	Dynamics
MTH 131	Analytic Geometry and Calculus I	MTH 1410	Analytic Geom & Calculus I
MTH 132	Analytic Geometry and Calculus II	MTH 1420	Analytic Geom & Calculus II
MTH 231	Analytic Geometry and Calculus III	MTH 2410	Analytic Geom & Calculus III
MTH 232	Differential Equations	MTH 3720	Diff Equ w/Linear Algebra
MTH 221	C++ Programming <sup>4</sup>	ENGR 2040 or CSSE 1710	Engr Computing/Prog I
PHY 221	Physics	PHY 1600/1610	General Physics I/Lab
PHY 222	Physics	PHY 1620/1630	General Physics II/ Lab
Approved Biology/Ecology/Geology Course <sup>5</sup>			Natural Science Requirement

##### Core Curriculum Courses:

SPE 121	Speech Communication	CST 1010	Fund of Speech (OB1)
ENG 112 or ENG 122	English	ENL 1310	Academic Writing (OB1)
ENG 123	Technical Communication	ENL 3030	Technical Writing
PHL 225	Philosophy	PHL 1000	Intro to Philosophy (OB4A)
ANP 239; HUM 110, 114			Choose 1 Religious Studies course (OB4B)
ANP 239; HUM 110, 114; PHL 125, 228			Choose 1 Phil or Relig Studies course (OB4C)

<sup>1</sup> Required by Mechanical Engineering program only. CEM 122 *or another science course* may be used to fulfill this requirement – consult with a UDM advisor.

<sup>2</sup> ENGR 125 may transfer as ENGR 1050 **only** for students with an Associate’s degree from Alpena CC.

<sup>3</sup> Not required by Electrical/Computer Engineering programs.

<sup>4</sup> Not required by Architectural Engineering program.

<sup>5</sup> Required by Civil/Environmental Engineering program - consult with a UDM advisor.

### **Objective 5 Courses (select up to two or three\*):**

With further review, additional courses not listed may possibly transfer also.

HST 121, 221, 222	Historical Experience courses (OB5A)
ENG 204, 205	Literary Experience courses (OB5B)
PFA 108, 223	Aesthetic Experience courses (OB5C)
ANP 229; FRN 121, 122; GEO 126; GER 123, 124; LTN 125, 126; PLS 230; PSY 230; SPN 125, 126;	Comparative Experience courses (OB5D)

\*Select two courses total from Objectives 5A, 5B, and 5C above and one course from Objective 5D. Arch Engineers select just *one* course from Objectives 5A or 5B and one course from Objective 5D.

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## **UDM HIGHLIGHTS**

**Great Reputation** – For the tenth consecutive year, University of Detroit Mercy is listed in the top tier of Midwestern Master's Universities in the 2011 edition of the *U.S. News and World Report's* "America's Best Colleges." UDM was once again ranked one of the top 30 schools in its category and the highest ranking Michigan university on the list. This year UDM's Engineering programs are celebrating 100 years of education! 1911-2011

**UDM is affordable!** Nearly 80% 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](mailto:admissions@udmercy.edu).

*Students from Alpena and surrounding areas are encouraged to inquire about the Hank Nickol-Alpena Scholarship. Up to \$10,000 is available for qualified students.*

**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. Through a portfolio process, previous engineering related work experience can be considered for transfer credits.

**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.

**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, has close proximity 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. We invite you to visit!