

### **EASTERN MICHIGAN UNIVERSITY TRANSFER GUIDE**

# College of Engineering and Science Engineering Programs – NEW CORE

This guide includes the New Core Curriculum effective Fall 2017. Transfer students starting at Detroit Mercy between Fall 2017 and Summer 2021 will have the option to select this New Core or the Old Core. See Transfer Guides indicating "OLD CORE" for prior Core requirements. Course grades must be a C or better. Additional courses not on this guide may also transfer.

The following courses will transfer into Detroit Mercy's Engineering programs (Architectural, Civil, Electrical, Mechanical, or Robotics & Mechatronic Systems). Students may transfer a maximum of 96 credits. Detroit Mercy Admissions: admissions@udmercy.edu or 313-993-1245. Website: udmercy.edu

#### **Courses which fulfill Detroit Mercy Core Curriculum Knowledge Area Requirements**

Eastern Michigan University Courses	Detroit Mercy Equivalencies	Core Areas
CTAC 124 or 224	CST 1010 Fundamentals of Speech	A1
ENGL 121 Comp II: Researching the Pub Exp	ENL 1310 Academic Writing	A2
Satisfied by program requirement	Quant/Symbolic Reasoning course	B1
Satisfied by program requirement	Statistical/Prob Reasoning course	B2
Satisfied by program requirement	Physical Sciences course	C1
Satisfied by program requirement	Social Sciences course	C2
PHIL 100 Introduction to Philosophy	PHL 1000 Introduction to Philosophy	D1
HIST 201-204, 303, 304, 306, 307, 334; PHIL 291	Choose 1 Religious Knowledge course	D2
<b>ANTH</b> 338; <b>HIST</b> 201-204, 303, 304, 306, 307, 334;	Choose 1 PHL/RELS Elective course	D3
any PHIL course (min 3 credits) except PHIL 100 or 220		
<b>AFC</b> 102; <b>HIST</b> 101, 106, 109, 110, 123, 124, 311, 315, 316,	Choose 1 Historical Experiences course	E1
319, 330, 341, 356, 457		
LITR 100, 101, 102, 103, 160	Choose 1 Literary Experiences course	E2
<b>AFC</b> 370; <b>ARTH</b> 100, 151, 161, 162, 263, 264, 267, 368,	Choose 1 Aesthetic Experiences course	E3
369, 467, 468, 469, 470, 471, 472, 473, 474, 476; <b>ARTS</b>		
101; CTAR 100, 157, 158, 450, 451; MUSC 107, 108, 301W,		
302L3; <b>PHIL</b> 310		
Architectural Engineering – satisfied by program		
requirement		
HLAD 308; PHIL 220, 221, 223	Choose 1 Ethics course	F1

### **Core Integrating Themes**

Eastern Michigan University Courses	Detroit Mercy Equivalencies
Most of these may be fulfilled by program requirements or	Integrating Themes
other Knowledge Area courses. See a Detroit Mercy advisor	IT1, IT2, IT3, IT4, IT5, IT6
for a defined list of approved courses and more information.	

# These courses fulfill requirements for Detroit Mercy's Engineering Programs:

# **All Engineering Disciplines**

	Eastern Michigan University Courses			Detroit Mercy Equivalencies		
CHEM	121/12	22 General Chemistry I/Lab	СНМ	1070/1100 General Chemistry I/Lab		
MATH	120	Calculus I	MTH	1410 Analytic Geometry & Calculus I		
MATH	121	Calculus II	MTH	1420 Analytic Geometry & Calculus II		
MATH	223	Multivariable Calculus	MTH	2410 Analytic Geometry & Calculus III		
MATH	325	Differential Equations	MTH	3720 Differential Equations w/Linear Algebra		
PHY	223	Mechanics and Sound	PHY	1600/1610 General Physics I/Lab		
PHY	224	Electricity and Light	PHY	1620/1630 General Physics II/Lab		
STAT	370	Probability and Statistics I	MTH	4270 Applied Probability and Statistics		
Additio	nal COS	C & PHY 400-level courses may transfer as				
Techni	cal Elect	ives. Contact a Detroit Mercy advisor.				

# **Additional Courses for Architectural Engineering**

	Eastern Michigan University Courses			Detroit Mercy Equivalencies		
BIO 105, 107, 110, 120; CHEM 123; MATH 122		Choose 1 approved Science or Math course				
(or ano	ther ap	proved science or math course)				
CHEM	341	Fundamentals of Material Science	ENGR	3170	Science of Materials	
PHY	229	Strength & Elasticity of Materials	ENGR	3260/3270	Mechanics of Materials/Lab	
PHY	230	Engineering Dynamics	ENGR	3130	Dynamics	
PHY	360	Heat and Thermodynamics	ENGR	3150	Thermodynamics I	
PHY	485	Fluid Dynamics	ENGR	3140	Fluid Mechanics	

## **Additional courses for Civil Engineering**

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Eastern Michigan University Courses			Detroit Mercy Equivalencies		
BIO 105, 107, 110, 120 (or another approved Bio course)		110, 120 (or another approved Bio course)	Choose 1 approved Biology Course		
CHEM	341	Fundamentals of Material Science	ENGR 3170 Science of Materials		
CNST	206	Surveying	CIVE 3400/3410 Civil Engr: Surveying, CAD, GIS/Lab		
PHY	229	Strength & Elasticity of Materials	ENGR 3260/3270 Mechanics of Materials/Lab		
PHY	230	Engineering Dynamics	ENGR 3130 Dynamics		
PHY	360	Heat and Thermodynamics	ENGR 3150 Thermodynamics I		
PHY	485	Fluid Dynamics	ENGR 3140 Fluid Mechanics		

# **Additional courses for Electrical Engineering**

	Eastern Michigan University Courses			Detroit Mercy Equivalencies		
COSC	246	Programming in C++	CSSE	1712	Intro to Programming I	
COSC	405	Switching Theory	ELEE	2640	Digital Logic	
COSC	422	Intro to Microprocessors	ELEE	3860	Intro to Microcontrollers	
COSC	439	Computing Network Principles	ELEE	4680	Computer Networking	
			(Tech l	Elective (	or Required for Comp Engr Concentration)	
PHY	450	Electricity and Magnetism II	ELEE	3660	Electromagnetics I	

# **Additional courses for Mechanical Engineering**

	Easte	rn Michigan University Courses	Detroit Mercy Equivalencies		
CHEM	341	Fundamentals of Material Science	ENGR 3170 Science of Materials		
PHY	229	Strength & Elasticity of Materials	ENGR 3260/3270 Mechanics of Materials/Lab		
PHY	230	Engineering Dynamics	ENGR 3130 Dynamics		
PHY	360	Heat and Thermodynamics	ENGR 3150 Thermodynamics I		
PHY	485	Fluid Dynamics	ENGR 3140 Fluid Mechanics		

# **Additional courses for Robotics & Mechatronic Systems Engineering**

	Easte	rn Michigan University Courses	Detroit Mercy Equivalencies		
COSC	246	Programming in C++	CSSE	1712	Intro to Programming I
COSC	405	Switching Theory	ELEE	2640	Digital Logic
COSC	422	Intro to Microprocessors	ELEE	3860	Intro to Microcontrollers
PHY	229	Strength & Elasticity of Materials	ENGR	3260/3	3270 Mechanics of Materials/Lab
PHY	230	Engineering Dynamics	ENGR	3130	Dynamics

If EMU's PHY 223, 229, and 230 courses are all taken, Detroit Mercy's ENGR 3120 Statics will also transfer.