



Dual Degree Program
BS Physics
BS Mechanical Engineering



Millikin—Fall Semester 1		Millikin—Spring Semester 1		Millikin—Summer Semester 1	
	Hrs		Hrs		Hrs
MA 140 Calculus I	4	MA 240 Calculus II	4		
IN 140 University Seminar	3	Humanities in the United States	3		
EN 181 University Writing	3	ICS/Historical Studies	3		
CH 121/151 General Chemistry with Lab	4	PY 152/172 University Physics II	4		
PY 151/171 University Physics I	4				

Millikin—Fall Semester 2		Millikin—Spring Semester 2		Millikin—Summer Semester 2	
	Hrs		Hrs		Hrs
PY 262 Experimental Physics I	4	PY 362 Experimental Physics II	4		
ICS	3	Social Sciences in the United States	3		
MA 340 Calculus III	3	MA 305 Differential Equations	3		
MA 208 Discrete Math	3	Creative Arts	3		
EN 281 Writing in the Disciplines	3	PY 201 Statics	3		

Millikin —Fall Semester 3		Millikin —Spring Semester 3		UMKC—Summer Semester 3	
	Hrs		Hrs		Hrs
CS 135 Intro to Computer Science	3	PY 303 Physical Chemistry	3	CE 276 Strength of Materials*	3
Global Issues	3	MA 303 Linear Algebra	3		
PY 253 Modern Physics	4	PY 325 Mathematical Physics	3		
CO 200 Public Speaking	3	MA 313 Numerical Analysis	3		
PY 352 Classical Dynamics	4	Literature	3		

UMKC—Fall Semester 4		UMKC—Spring Semester 4		UMKC—Summer Semester 4	
	Hrs		Hrs		Hrs
ME 130 Engineering Graphics	3	ME 306 Numerical Analysis	3		
ME 324 Engineering Materials Lab	4	ME 352 Mechanical Instruments Lab	3		
ME 351 Fluid Mechanics	3	ME 380 Manufacturing Methods	3		
ME 360 Applied Thermodynamics	3	ME 385 System Dynamics	3		
		ME 399/399L Heat Transfer/Lab	4		

UMKC—Fall Semester 5		UMKC—Spring Semester 5		UMKC—Summer Semester 1	
	Hrs		Hrs		Hrs
ME 492 Mechanical Design Synthesis I	3	ME 496WI Mechanical Design Synthesis II	3		
ME 4XX Design Elective	3	ECE 276/277 Circuit Theory I/Lab	4		
ME 4XX Technical Elective**	3	ME 4XX Technical Elective	3		
ME 415 Control Systems Theory I	3	ME 4XX Technical Elective	3		
ME 356 Mechanical Component Design	3				

*If UMKC is not able to offer Strength of Materials in the summer, students can take an equivalent course at Metropolitan Community College of Kansas City.

**Can petition to have one upper-level Millikin course count toward a Technical Elective requirement.

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