

## Dual Degree Program BS Mathematics BS Mechanical Engineering



Baker—Fall Semester 1	Hrs	Baker—Spring Semester 1	Hrs	Baker—Summer Semester 1	Hrs
MA 171 Calculus I	4	MA 172 Calculus II	4		
PC 225 General Physics I	4	PC 226 General Physics II	4		
World Language Requirement	4	Creative Arts Core	3		
BC 110 Freshman Seminar I	3	Humanities Core	3		
BK 101 Baker Experience	1	BC 120 Freshman Seminar II	3		

Baker—Fall Semester 2	Hrs	Baker—Spring Semester 2	Hrs	Baker—Summer Semester 2	Hrs
CH 137/L General Chemistry I/Lab	4	CH 138/L General Chemistry II/Lab	4		
CS 175 Introduction to Computer Science	4	MA 291 Introduction to Higher Mathematics	3		
MA 372 Differential Equations	3	MA 345 Problem Seminar in Mathematics	3		
Humanities Core	3	MA 271 Calculus III	4		
Social Sciences Core	3	Social Sciences Core	3		

Baker—Fall Semester 3	Hrs	Baker —Spring Semester 3	Hrs	UMKC—Summer Semester 3	Hrs
MA 281 Linear Algebra	4	MA 445 Senior Seminar in Mathematics	3	ME 285 Engineering Dynamics*	3
MA 362 OR MA 383 OR MA 491	3	Core Capstone	3	CE 276 Strength of Materials*	3
Creative Arts Core	3	300-400 Level Mathematics Elective**	3		
PC 361 Thermodynamics	3	300-400 Level Mathematics Elective**	3		
CS 180 C++	2	PC 381 Statics	3		

UMKC—Fall Semester 4	Hrs	UMKC—Spring Semester 4	Hrs	UMKC—Summer Semester 4	Hrs
ME 130 Engineering Graphics	3	ME 306 Numerical Analysis	3		
ME 324 Engineering Materials	3	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	Hrs	UMKC—Spring Semester 5	Hrs	UMKC—Summer Semester 5	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				

<sup>\*</sup> Students will need ME 285 & CE 276 (or equivalencies), prior to entering UMKC full-time. If UMKC is not offering these courses, in the 3<sup>rd</sup> summer semester, we can help students enroll elsewhere.

UMKC School of Science & Engineering · SS&C Student Services Center 336 Flarsheim Hall · 5110 Rockhill Road · KCMO 64110 816-235-2399 · sse@umkc.edu · sse.umkc.edu

Dr. Jamin Perry · Boyd Science Center 301 615 Dearborn · Baldwin City, KS 66006 785-594-8326 · jamin.perry@bakerU.edu · bakerU.edu

<sup>\*\*</sup>Students can count an approved 300-400 Math course at BU toward one of the four required upper-level ME electives at UMKC.