

Dual Degree Program BS Physics 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 Languages Requirement	4	Creative Arts Core	3		
BC 110 Freshman Seminar I	3	Social Sciences 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
PC 325 General Physics III	4	PC 332 Electronics	4		
CH 137/L General Chemistry I/Lab	4	CH 138/L General Chemistry II/Lab	4		
MA 281 Linear Algebra	4	PC 381 Statics	3		
MA 372 Differential Equations	3	Social Sciences Core	3		
Humanities Core	3	Humanities Core	3		

Baker—Fall Semester 3	Hrs	Baker—Spring Semester 3	Hrs	UMKC—Summer Semester 3	Hrs
PC 361 Thermodynamics	3	PC 490 Quantum Mechanics	3	ME 285 Engineering Dynamics*	3
PC 470 Electricity & Magnetism I	3	MA 271 Calculus III	4	CE 276 Strength of Materials*	3
300-400 Level Physics Elective**	3	Core Capstone	3		
MA 221 Statistics I	3	PC 491 Senior Project	1		
Creative Arts Core	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 219 Computer Programming for Engineers	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				

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

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^{**}Students can count an approved 300-400 Physics course at BU toward one of the four required upper-level ME electives at UMKC.

[^]Students can count an approved UMKC ME elective toward one of their Baker Physics electives.