

## Dual Degree Program BS Physics BS Electrical & Computer 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			
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	MA 271 Calculus III		4			
CH 137/L General Chemistry I/Lab		4	PC 332 Electronics		4			
CS 175 Introduction to Computer Science		4	PC 381 Statics		3			
Humanities Core		3	General Elective		3			

Baker—Fall Semester 3		Hrs	Baker—Spring Semester 3		Hrs	UMKC—Summer Semester 3		Hrs
PC 470 Electricity & Magnetism I		3	Humanities Core		3			
MA 372 Differential Equations		3	PC 490 Quantum Mechanics		3			
Social Sciences Core		3	Creative Arts Core		3			
World Languages Requirement		4	300-400 Level Physics Elective*		3			
CS 180 C++		2	PC 491 Senior Project		1			

Baker—Fall Semester 4		Hrs	UMKC—Spring Semester 4		Hrs	UMKC—Summer Semester 4		Hrs
MA 281 Linear Algebra		4	ECE 226/227 Logic Design/Lab		4	ECE 276/277 Circuit Theory I/Lab		4
300-400 Level Physics Elective*		3	ECE 216 Engineering Computation		4			
Core Capstone		3	ECE 341R Applied Engineering Analysis II		3			
Creative Arts Core		3	ECE 348 Discrete Mathematics & Probability		3			

UMKC—Fall Semester 5		Hrs	UMKC—Spring Semester 5		Hrs	UMKC—Summer Semester 5		Hrs
ECE 334 Semiconductors & Devices		3	ECE 302/303 Electromagnetic Waves & Fields/Lab		4			
ECE 376/377 Circuit Theory II/Lab		4	ECE 330/331 Electronic Circuits/Lab		4			
ECE 380 Signals & Systems/Lab		4	ECE 428R/429 Embedded Systems/Lab		4			
ECE 426/427 Microcomputer Architecture/Lab		4	ECE 466 Power Systems		3			

UMKC—Fall Semester 6		Hrs	UMKC—Spring Semester 6		Hrs	UMKC—Summer Semester 6		Hrs
ECE 358 OR ECE 474		3	ME 130 Engineering Graphics		3			
ECE 402 Senior Design I		3	CS 304 Ethics & Professionalism		3			
ECE 486 Pattern Recognition		3	ECE 228/229 Computer Design/Lab		4			
ECE Elective (400 level)**		3	ECE 403 Senior Design II		2			
ECE Elective (400 level)		3						

\*Students can count an approved 300-400 Baker Physics course as one of the required upper-level ECE electives at UMKC.

\*\*Students can count an approved 400-level UMKC ECE course as one of the required upper-level Physics electives at Baker.

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