

**Dual Degree Program  
BS Mathematics  
BS Electrical & Computer Engineering**

UCM—Fall Semester 1		UCM—Spring Semester 1		UCM—Summer Semester 1	
	Hrs		Hrs		Hrs
ENG 1020 Composition I	3	ENGL 1030 Comp II OR CTE 2060 Tech Writing	3	US/Missouri Constitution Course	3
MATH 1151 Calculus I	5	MATH 1152 Calculus II	5		
Fine Arts Course	3	MATH 2410 Discrete Math	3		
CS 1100 Computer Programming I	3	PHYS 2121 University Physics I	4		
MATH 1040 Intro to Mathematical Science	1	COMM 1000/1050 or MKT 1401	3		

UCM—Fall Semester 2		UCM—Spring Semester 2		UCM—Summer Semester 2	
	Hrs		Hrs		Hrs
MATH 2153 Calculus III	3	MATH 3151 Differential Equations	3	Social/Behavioral Sciences II Course	3
ACST 2310 Statistics & Data Analysis	3	Natural Science with Lab Course	4	Additional Knowledge Area I Course	3
MATH 3710 Linear Algebra	3	Social/Behavioral Sciences I Course	3		
PHYS 2122 University Physics II	4	MATH 4233 Sci, Hist, Soc Impact of Math	3		
ENGT 1400 Fundamentals of Eng Design	3	Managing Information Course	2		

UCM—Fall Semester 3		UCM/UMKC—Spring Semester 3		UMKC—Summer Semester 3	
	Hrs		Hrs		Hrs
ACST 3311 Intro to Probability & Statistics	3	MATH 4711 Modern Algebra I @UCM (online)	3		
MATH 4150 Advanced Calculus I	3	ECE 226/227 Logic Design/Lab	4		
CHEM 1131 General Chemistry I	5	ECE 276/277 Circuit Theory I/Lab	4		
MATH 4710 Algebraic Structures	3	ECE 341R Applied Engineering Analysis II	3		
Natural Science Non-Lab Course	3	ECE 217 Engineering Computation	2		

UMKC—Fall Semester 4		UMKC—Spring Semester 4		UMKC—Summer Semester 4	
	Hrs		Hrs		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 380/381 Signals & Systems/Lab*	4	ECE 428R/429 Embedded Systems/Lab	4		
CS 304WI Ethics & Professionalism	3	ECE 466 Power Systems	3		

UMKC—Fall Semester 5		UMKC—Spring Semester 5		UMKC—Summer Semester 1	
	Hrs		Hrs		Hrs
ECE 358 or 474 Control or Comm Systems	3	ECE 228/229 Intro to Computer Design/Lab	4		
ECE 402 Senior Design I	3	ECE 403 Senior Design II	2		
ECE 416 or 472 Neural Systems or Power Gen	3	ECE 4XX ECE Elective	3		
ECE 426/427 Microcomputer Architecture/Lab	4				
ECE 4XX ECE Elective	3				

\*Any 9 credit hours of these courses (with grade C or better) will count as math electives in the BS Math degree at UCM.