

## Dual Degree Program BS Mathematics BS Mechanical 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 1	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	Managing Information Course	2		
		CMGT 2020 Statics**	3		

UCM—Fall Semester 3		UCM—Spring Semester 3		MCC—Summer Semester 3	
	Hrs		Hrs		Hrs
ACST 3311 Intro to Probability & Statistics	3	MATH 4233 Sci, Hist, Soc Impact of Math	3	ENGR 240 Strength of Materials (at MCC)	3
MATH 4150 Advanced Calculus I	3	MATH 4711 Modern Algebra I	3		
CHEM 1131 General Chemistry I	5	GE Elective Course	3		
MATH 4710 Algebraic Structures	3	ENGT 3600 Applied Thermodynamics***	3		
Natural Science Non-Lab Course	3	Free Elective Course	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 Heat & Mass 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 ME Design Elective	3	ECE 276/277 Circuit Theory I/Lab	4		
ME 4XX ME Technical Elective	3	ME 4XX ME Technical Elective	3		
ME 415 Control Systems Theory I	3	ME 4XX ME Technical Elective	3		
ME 356 Mechanical Component Design*	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.

\*\*CMGT 2020 will only be accepted with completion of MATH 1151 (Calc I)

\*\*\*ENGT 3600 will only be accepted with completion of MATH 1151 (Calc I)