



Transfer Guide

Associate in Engineering with Core 42

BS-Biomedical Engineering

(entering UMKC Fall 2023 or later)



MCC—Fall Semester 1	Hrs	MCC—Spring Semester 1	Hrs	MCC—Summer Semester 1	Hrs
CHEM 111 General College Chemistry I	5	ENGL 102 Composition & Reading II	3	AE Humanities Course*	3
ENGL 101 Composition & Reading I	3	MATH 190 Analytic Geometry & Calculus II	5		
ENGR 101 Intro to Engineering Profession	1	CHEM 112 General Chemistry II	5		
MATH 180 Analytic Geometry & Calculus I	5				

MCC—Fall Semester 2	Hrs	MCC—Spring Semester 2	Hrs	MCC—Summer Semester 2	Hrs
MATH 210 Analytic Geometry & Calculus III	5	ENGR 229 Statics	3		
PHYS 220 Engineering Physics I	5	MATH 230 Differential Equations	3		
ENGR 204 Programming for Eng & Sci	3	PHYS 221 Engineering Physics II	5		
COMM 100 Fundamentals of Speech (AE Comm)	3	AE History & Social Sciences Course**	3		

MCC—Fall Semester 3	Hrs	MCC—Spring Semester 3	Hrs	UMKC—Summer Semester 3	Hrs
BIOL 123 General Biology for Majors I	4	ENGR 223 Thermodynamics & Heat Transfer	4	BIOL 202 Cell Biology	3
ENGR 233 Circuit Analysis I	4	ENGR 230 Dynamics	3		
ENGR 234 Circuit Analysis Lab	1	Core 42 Social/Behavioral Sciences Requirement	3		
AE History and Social Science Course***	3	Core 42 Humanities/Arts Requirement	3		
Core 42 Humanities/Arts Requirement	3				

UMKC—Fall Semester 4	Hrs	UMKC—Spring Semester 4	Hrs	UMKC—Summer Semester 4	Hrs
BMED-ENGR 1XX Intro to Biomedical Engineering	1	BMED-ENGR 2XX 3D Modeling & Printing	1		
BIOL 304 Biostatistics I	3	BMED-ENGR 3XX Biomedical Systems Physiology	3		
BIOL 316 Principles of Physiology	3	BMED-ENGR 3XX Biomed Instrumentation	3		
ECE 380/381 Signals & Systems/Lab	4	Biomedical Elective	3		
ME 411 Intro to Biomechanics	3	Biomedical Elective	3		

UMKC—Fall Semester 5	Hrs	UMKC—Spring Semester 5	Hrs	UMKC—Summer Semester 4	Hrs
ME 492 Mechanical Design Synthesis I	3	BMED-ENGR 4XX Biomedical Capstone Design	3		
ME 406 Intro to Biomaterials	3	Biomedical Elective	3		
BMED-ENGR 3XX Biomedical Transport Phenomena	3				
BMED-ENGR 4XX Bioelectromagnetics & Bioelectricity	3				

*Acceptable courses include ART 108, ART 150, ART 151, ENGL 214, ENGL 216, ENGL 240, ENGL 254, ENGL 262, HIST 133, HIST 134, MUSI 108, MUSI 160, PHIL 100, THEA 106

**Acceptable courses include HIST 120, HIST 121, POLS 136

***Acceptable courses include HIST 120, HIST 121, ECON 210, ECON 211, POLS 136

Students should consult with an academic advisor to be sure that courses for the MDHE Core 42 satisfy the requirements before enrolling.

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