



2025-2026 Transfer Guide

Associate in Engineering with Core 42 BS-Biomedical Engineering



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	COMM 100 Fundamentals of Speech	3
ENGL 101 Composition & Reading I	3	MATH 190 Analytic Geometry & Calculus II	5	Core 42 Humanities/Arts Requirement	3
ENGR 101 Intro to Engineering Profession	1	PHYS 220 Engineering Physics I	5	AE History and Social Science Course***	3
MATH 180 Analytic Geometry & Calculus I	5	AE History & Social Sciences Course**	3		
AE Humanities Course*	3				

MCC—Fall Semester 2	Hrs	MCC—Spring Semester 2	Hrs	MCC/UMKC—Summer Semester 2	Hrs
ENGR 229 Statics	3	ENGR 204 Programming for Eng & Sci	3	Core 42 Social/Behavioral Sciences Requirement	3
MATH 210 Analytic Geometry & Calculus III	5	Core 42 Humanities/Arts Requirement	3	BIOL 202 Cell Biology (at UMKC)	3
PHYS 221 Engineering Physics II	5	ENGR 230 Dynamics	3		
CHEM 112 General Chemistry II	5	BIOL 123 General Biology for Majors I	4		
		MATH 230 Differential Equations	3		

UMKC—Fall Semester 3	Hrs	UMKC—Spring Semester 3	Hrs	UMKC—Summer Semester 3	Hrs
BMD-ENGR 115 Intro to Biomedical Engineering	1	BMD-ENGR 215 3D Modeling & Printing	1		
BIOLOGY 304 Biostatistics I	3	BMD-ENGR 315 Biomed Instrumentation	3		
BIOLOGY 316 Principles of Physiology	3	BMD-ENGR 335 Biomedical Transport Phenomena	3		
E&C-ENGR 380/381 Signals & Systems/Lab	4	E&C-ENGR 276/277 Circuit Theory I/Lab [^]	4		
		MEC-ENGR 299 Thermodynamics ^{^^}	3		

UMKC—Fall Semester 4	Hrs	UMKC—Spring Semester 4	Hrs	UMKC—Summer Semester 4	Hrs
MEC-ENGR 492 Mechanical Design Synth I	3	BMD-ENGR 495WI Biomedical Capstone Design	3		
MEC-ENGR 406 Intro to Biomaterials	3	BMD-ENGR 325 Biomedical Systems Physiology	3		
BMD-ENGR 415 Bioelectromag & Bioelectricity	3	Biomedical Elective	3		
MEC-ENGR 411 Intro to Biomechanics	3	Biomedical Elective 300/400 level	3		
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*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, ECON 210, ECON 211, POLS 136

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[^] Students may reverse transfer this course back to MCC to complete the Associate of Engineering degree.

^{^^} Students may reverse transfer this course back to MCC to complete the Associate of Engineering degree.

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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