



2025-2026 Transfer Guide

Associate of Engineering with Core 42 BS-Electrical & Computer Engineering



MCC—Fall Semester 1	Hrs	MCC—Spring Semester 1	Hrs	MCC—Summer Semester 1	Hrs
CHEM 111 General Coll Chem I	5	ENGL 102 Composition & Reading II	3		
ENGL 101 Composition & Reading I	3	MATH 190 Analytic Geometry & Calculus II	5		
AE Humanities & Fine Arts Course*	3	PHYS 220 Engineering Physics I	5		
MATH 180 Analytic Geometry & Calculus I	5	AE History & Social Science Course**	3		
		ENGR 101 Intro to the Engineering Profession	1		

MCC—Fall Semester 2	Hrs	MCC—Spring Semester 2	Hrs	MCC—Summer Semester 2	Hrs
COMM 100 Fundamentals of Speech	3	Core 42 Humanities/Arts Requirement	3		
MATH 210 Analytic Geometry & Calculus III	5	ETEC 152 Engineering Graphics & CADD I	5		
PHYS 221 Engineering Physics II	5	MATH 230 Differential Equations	3		
AE Humanities & Fine Arts course*	3	AE History and Social Science Course***	3		

MCC—Fall Semester 3	Hrs	UMKC—Spring Semester 3	Hrs	UMKC—Summer Semester 3	Hrs
CSIS 123 Programming Fundamentals	3	E&C-ENGR 226/227 Logic Design/Lab^	4		
ENGR 233 Circuit Analysis I	3	E&C-ENGR 341R Applied Eng Analysis II^^	3		
ENGR 234 Circuit Analysis Lab	1	MEC-ENGR 131 Engineering Graphics	1		
Core 42 Social/Behavioral Sciences Requirement	3	E&C-ENGR 348 Discrete Math & Probability	3		
Core 42 Elective	2				

UMKC—Fall Semester 4	Hrs	UMKC—Spring Semester 4	Hrs	UMKC—Summer Semester 4	Hrs
E&C-ENGR 334 Semiconductors & Devices	3	E&C-ENGR 302/303 Electromagnetic Waves & Fields/Lab	4		
E&C-ENGR 376/377 Circuit Theory II/Lab	4	E&C-ENGR 330/331 Electronic Circuits/Lab	4		
E&C-ENGR 380/381 Signals & Systems/Lab	4	E&C-ENGR 428R/429 Embedded Systems/Lab	4		
E&C-ENGR 426/427 Microcomputer Arch/Lab	3	E&C-ENGR 466 Power Systems I	3		

UMKC—Fall Semester 5	Hrs	UMKC—Spring Semester 5	Hrs	UMKC—Summer Semester 5	Hrs
E&C-ENGR 358 Intro to Control Systems or E&C-ENGR 474 Intro to Comm Systems	3	E&C-ENGR 403 Senior Design II	2		
E&C-ENGR 402 Senior Design I	3	E&C-ENGR 228/229 Intro to Computer Design	3		
E&C-ENGR 486 Pattern Recognition	3	COMP-SCI 304 Ethics and Professionalism	3		
E&C-ENGR 4XX Major Elective	3	E&C-ENGR 4XX Major Elective	3		
		E&C-ENGR 4XX Major Elective	3		

^Reverse transfer this course back to MCC in place of Statics for the Associate of Engineering degree.

^^Reverse transfer this course back to MCC in place of an engineering elective for the Associate of Engineering degree.

*The Associate of Engineering designates certain courses as acceptable for this requirement. Please visit MCC's website or meet with an advisor to get the specific course options.

**Select from the following courses: HIST 120, HIST 121, POLS 136.

***Select from the following courses: HIST 120, HIST 121, ECON 210, ECON 211, POLS 136. Must have a different designator than the first Social/Behavioral Sciences.

UMKC School of Science & Engineering · SS&C Student Services Center
 336 Flarsheim Hall · 5110 Rockhill Road
 816-235-2399 · sse@umkc.edu · http://sse.umkc.edu

Metropolitan Community College
 Blue River · Longview · Maple Woods · Penn Valley
 816-604-1000 · www.mccck.edu/advising