



Transfer Guide

Associate of Science BS-Mechanical Engineering



JCCC—Fall Semester 1	Hrs	JCCC—Spring Semester 1	Hrs	JCCC—Summer Semester 1	Hrs
CHEM 124/125 General Chemistry I/Lab	5	ENGL 122 Composition II	3		
ENGL 121 Composition I	3	MATH 242 Calculus II	5		
MATH 241 Calculus I	5	PHYS 220 Engineering Physics I	5		
		Social & Behavioral Sciences Course	3		

JCCC—Fall Semester 2	Hrs	JCCC—Spring Semester 2	Hrs	JCCC—Summer Semester 2	Hrs
ENGR 251 Statics	3	ENGR 131 Engineering Graphics	4		
MATH 243 Calculus III	5	MATH 254 Differential Equations	4		
PHYS 221 Engineering Physics II	5	Cultural Diversity Course	3		
Arts & Humanities Course	3	Social & Behavioral Sciences Course	3		

JCCC—Fall Semester 3	Hrs	UMKC—Spring Semester 3	Hrs	UMKC—Summer Semester 3	Hrs
CS 200 Programming with C++ or CS 202 Programming with Python	4	CIV-ENGR 276 Strength of Materials	3		
COMS 120 or 121 Communications Course	3	E&C-ENGR 276/277 Circuit Theory I/Lab	4		
MATH 246 Linear Algebra	3	MEC-ENGR 131 Engineering Graphics (3D)	1		
Arts & Humanities Course	3	MEC-ENGR 285 Engineering Dynamics	3		
		MEC-ENGR 299 Engineering Thermodynamics	3		

UMKC—Fall Semester 4	Hrs	UMKC—Spring Semester 4	Hrs	UMKC—Summer Semester 4	Hrs
MEC-ENGR 324 Engineering Materials	3	MEC-ENGR 306 Numerical Analysis	3		
MEC-ENGR 351 Fluid Mechanics	3	MEC-ENGR 352 Mechanical Instruments Lab	3		
MEC-ENGR 356 Mech Component Design	3	MEC-ENGR 380 Manufacturing Methods	3		
MEC-ENGR 360 Applied Thermodynamics	3	MEC-ENGR 385 System Dynamics	3		
		MEC-ENGR 399/399L Heat Transfer/Lab	4		

UMKC—Fall Semester 5	Hrs	UMKC—Spring Semester 5	Hrs	UMKC—Summer Semester 4	Hrs
MEC-ENGR 492 Mechanical Design Synth I	3	MEC-ENGR 496WI Mechanical Design Synth II	3		
MEC-ENGR 415 Control Systems Theory	3	MEC-ENGR 400 Technical Elective	3		
MEC-ENGR 400 Technical Elective	3	MEC-ENGR 400 Design Elective	3		
MEC-ENGR 400 Technical Elective	3				

To be exempt from the UMKC Essentials or Missouri Core 42 general education requirements, students are encouraged to complete the Associate of Science degree.

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