

Associate of Engineering to Bachelor of Science in Mechanical Engineering – 4 Year Plan

Metropolitan Community College			University of Missouri - Kansas City		
FALL Semester - 1			FALL Semester - 3		
MATH 180	Analytic Geometry and Calculus I	5	CIV-ENGR 319	Engineering Computation and Statistics	3
ENGR 101	Intro to Engineering Profession Engineering Design Microcomputer	1	MEC-ENGR 324	Engineering Materials with Lab	4
ENGR 113	Apps	3	MEC-ENGR 356	Mechanical Component Design	3
ENGL 101	Composition and Reading I	3	CIV-ENGR 351	Fluid Mechanics	3
CHEM 111	General College Chemistry I	5	MEC-ENGR 360	Thermal System Design	3
		17			16
SPRING Semester - 1			SPRING Semester - 3		
MATH 190	Analytic Geometry and Calculus II	5	MEC-ENGR 306	Computer Aided Engineering	3
PHYS 220	Engineering Physics I	5	MEC-ENGR 399	Heat and Mass Transfer Instrumentation and Measurement Lab	3
ENGL 102	Composition and Reading II	3	MEC-ENGR 352WI	Manufacturing Methods	5
ME 130	Engineering Graphics (at UMKC)	3	MEC-ENGR 380	Sytem Dynamics	3
		16	MEC-ENGR 385		3
SUMMER Semester - 1			SUMMER Semester - 3		
		3	FALL Semester - 4		
Humanities Elective		3	DISC 300	Civic and Community Engagement	3
History and Social Sciences		3	ANCH 309	Mechanical Design Synthesis I	3
		6	MEC-ENGR 415	Feedback Control Systems	3
FALL Semester - 2			FALL Semester - 2		
MATH 210	Analytic Geometry and Calculus III	5	MEC-ENGR 4XX	Technical Elective	3
PHYS 221	Engineering Physics II	5	MEC-ENGR 4XX	Technical Elective	3
ENGR 229	Statics	3			15
ENGR 223	Thermodynamics and Heat Transfer	4	SPRING Semester - 4		
		17	MEC-ENGR 496WI	Mechanical Design Synthesis II Design Elective (MEC-ENGR 440, 451, 468, or 457)	3
SPRING Semester - 2			SPRING Semester - 2		
MATH 230	Differential Equations	3	MEC-ENGR 4XX	Technical Elective	3
Programming for Engineers & Scientists		3	MEC-ENGR 4XX	Technical Elective	3
ENGR 204	Dynamics	3			12
ENGR 233	Circuit Analysis I	4			
ENGR 240	Mechanics of Materials	3			
		16			
SUMMER Semester - 2			SUMMER Semester - 2		
CIMM 101	Shop Safety	1			
Choose two: CIMM 102, 103, or WELD 100		2			
		3			