

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING, 2019-2020

For more information about policies and requirements, please see the [UMKC 2019-20 Catalog](#).

FIRST YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
MATH 266 Accelerated Calculus I	4	MATH 268 Accelerated Calculus II	3
CHEM 211 General Chemistry I (FOCUS B)	4	PHYS 240 Physics for Scientists & Engineers I (FOCUS Elective)	5
CHEM 211L General Chemistry I Lab	1	ME 130 Engineering Graphics	3
Anchor I Reasoning and Values Recommend: ANCH 150 Computing, Engineering & Society	3	Anchor II Culture and Diversity	3
DISC 100 Discourse I	3	DISC 200 Discourse II	3
Shop Safety Class (Take CIMM 101 at MCC)*	1		
TOTAL	16	TOTAL	17

SECOND YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
ME 272 Engineering Analysis	3	MATH 250 Calculus III	4
PHYS 250 Physics for Scientists & Engineers II	5	CE 276 Strength of Materials	3
CE 275 Engineering Statics	3	ECE 276 Circuit Theory I	3
ECE 216 Engineering Computation	4	ECE 277 Circuit Theory I Lab	1
FOCUS C Human Actions, Values & Ethics Recommend: HIST 101, 102, or POL-SCI 210 to fulfill the Constitution Requirement	3	ME 285 Engineering Dynamics	3
		ME 299 Engineering Thermodynamics	3
TOTAL	18	TOTAL	17

THIRD YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
CE 319 Engineering Computation and Statistics	3	ME 306 Computer Aided Engineering	3
ME 324 Engineering Materials	3	ME 352 Mechanical Instruments Lab	2
ME 324L Engineering Materials Lab	1	ME 353 Heat Transfer/Fluid Mechanics Lab	2
ME 351 Fluid Mechanics	3	ME 380 Manufacturing Methods	3
ME 356 Mechanical Component Design	3	ME 385 System Dynamics	3
ME 360 Thermal System Design	3	ME 399 Heat and Mass Transfer	3
TOTAL	16	TOTAL	16

FOURTH YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
ANCH 309 (ME 492) Mechanical Design Synthesis I	3	ME 496WI Mechanical Design Synthesis II	3
DISC 300 Discourse III	3	ME 4XX Design Elective (ME440, ME451, ME457)	3
ME 4XX Core Elective	3	ME 4XX Core Elective	3
ME 4XX Core Elective	3	ME 4XX Core Elective	3
ME 4XX Open Elective	3	FOCUS A Arts and Humanities	3
TOTAL	15	TOTAL	15

*Can be taken any semester before ME 324L.

Total Credits to Graduate: 130

ME Core Elective Areas: Materials; Thermal & Fluid Sciences; Robotics & Controls; Biomechanics; General.