BACHELOR OF SCIENCE IN ELECTRICAL & COMPUTER ENGINEERING, 2023-24

For more information about policies and requirements, please see the UMKC 2023-24 Catalog.

FIRST YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
MATH 210 Calculus I	4	MATH 220 Calculus II	4
Life Science (BIOLOGY 102/102L or CHEM 211/211L)	4	PHYSICS 240 Physics for Scientists & Engineers I	5
MEC-ENGR 130 Engineering Graphics	3	ENGLISH 225 English II: Intermed Academic Prose	3
ENGLISH 110 English I: Intro to Academic Prose	3	GECRT-SS Critical Thinking in Social & Behavioral Sciences	3
GEFSE 101 First Semester Experience	3		
TOTAL	**17**	**TOTAL**	**15**

SECOND YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
E&C-ENGR 216 Engineering Computation	4	E&C-ENGR 228 Intro to Computer Design	3
E&C-ENGR 226 Logic Design	3	E&C-ENGR 229 Intro to Computer Design Lab	1
E&C-ENGR 227 Logic Design Lab	1	E&C-ENGR 276 Circuit Theory I	3
E&C-ENGR 241 Applied Engineering Analysis I	3	E&C-ENGR 277 Circuit Theory I Lab	1
PHYSICS 250 Physics for Scientists & Engineers II	5	E&C-ENGR 341R Applied Engineering Analysis II	3
		COMP-SCI 394R Applied Probability	3
		Communication Requirement (COMM-ST 110, 140, 212 or 277)	3
TOTAL	**16**	**TOTAL**	**17**

THIRD YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
E&C-ENGR 334 Semiconductors & Devices	3	E&C-ENGR 302 Electromagnetic Waves and Fields (Meets GECRT-SC req)	3
E&C-ENGR 376 Circuit Theory II	3	E&C-ENGR 303 Electromagnetic Waves and Fields Lab	1
E&C-ENGR 377 Circuit Theory II Lab	1	E&C-ENGR 330 Electronic Circuits	3
E&C-ENGR 380 Signals & Systems	3	E&C-ENGR 331 Electronic Circuits Lab	1
E&C-ENGR 381 Signals & Systems Lab	1	E&C-ENGR 428R Embedded Systems	3
E&C-ENGR 426 Microcomputer Architecture & Interfacing	3	E&C-ENGR 429 Embedded Systems Lab	1
E&C-ENGR 427 Microcomputer Lab	1	E&C-ENGR 466 Power Systems I	3
TOTAL	**15**	**TOTAL**	**15**

FOURTH YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
E&C-ENGR 358 Intro to Control Systems **OR** E&C-ENGR 474 Intro to Communication Systems	3	COMP-SCI 304 Ethics & Professionalism (Meets GECUE req)	3
E&C-ENGR 402 Senior Design I	3	E&C-ENGR 403 Senior Design II	2
E&C-ENGR 416 Neural & Adaptive Systems	3	E&C-ENGR Elective (400-level)	3
E&C-ENGR Elective (400-level)	3	E&C-ENGR Elective (400-level)	3
GECRT-AH Critical Thinking in Arts & Humanities	3	GECDV Culture & Diversity	3
		Constitution Requirement (HIST 101 OR 102; POL-SCI 210, CJC 364, or HON 230)	3
TOTAL	**15**	**TOTAL**	**17**

Additional Graduation Requirements: Civics Exam, HEIghten Exit Exam.

Total Credits to Graduate: 127