

## BACHELOR OF SCIENCE IN ELECTRICAL & COMPUTER 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 210 Calculus I (FOCUS B)	4	MATH 220 Calculus II	4
Life Science with Lab Recommend: CHEM 115/115L or 211/211L	5	PHYS 240 Physics for Scientists & Engineers I (FOCUS Elective)	5
Anchor I Reasoning & Values Recommend: ANCH 150 Computing, Engineering & Society	3	Anchor II Culture & Diversity	3
DISC 100 Discourse I	3	DISC 200 Discourse II	3
ME 130 Engineering Graphics	3		
<b>TOTAL</b>	<b>18</b>	<b>TOTAL</b>	<b>15</b>

### SECOND YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
ECE 216 Engineering Computation	4	ECE 228 Intro to Computer Design	3
ECE 226 Logic Design	3	ECE 229 Intro to Computer Design Lab	1
ECE 227 Logic Design Lab	1	ECE 250 Engineering Mechanics & Thermodynamics	3
ECE 241 Applied Engineering Analysis I	3	ECE 276 Circuit Theory I	3
		ECE 277 Circuit Theory I Lab	1
PHYS 250 Physics for Scientists & Engineers II	5	ECE 341R Applied Engineering Analysis II	3
		CS 394R Applied Probability	3
<b>TOTAL</b>	<b>16</b>	<b>TOTAL</b>	<b>17</b>

### THIRD YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
ECE 334 Semiconductors & Devices	3	ECE 302 Electromagnetic Waves & Fields	3
ECE 376 Circuit Theory II	3	ECE 303 Electromagnetic Waves & Fields Lab	1
ECE 377 Circuit Theory II Lab	1	ECE 330 Electronic Circuits	3
ECE 380 Signals & Systems	3	ECE 331 Electronic Circuits Lab	1
ECE 381 Signals & Systems Lab	1	ECE 420 Advanced Engineering Computation	2
ECE 426 Microcomputer Architecture	3	ECE 428R Embedded Systems	3
ECE 427 Microcomputer Architecture Lab	1	ECE 429 Embedded Systems Lab	1
		ECE 466 Power Systems I	3
<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>17</b>

### FOURTH YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
ECE 358 OR 474 Intro to Control Systems OR Intro to Communication Systems	3	ANCH 308 (CS 304WI) Ethical Issues in Computing & Engineering	3
ECE 402 Senior Design I	2	DISC 300 Discourse III	3
ECE 4XX ECE Elective (400-level)	3	ECE 403 Senior Design II	1
ECE 4XX ECE Elective (400-level)	3	ECE 4XX ECE Elective (400-level)	3
FOCUS C Human Actions, Values & Ethics Recommend: HIST 101, 102, or POL-SCI 210 to fulfill the Constitution Requirement	3	ECE 4XX ECE Elective (400-level)	3
		FOCUS A Arts & Humanities	3
<b>TOTAL</b>	<b>14</b>	<b>TOTAL</b>	<b>16</b>

**Total Credits to Graduate: 128**