Bioelectrical Engineering Plan of Study 2021-2022

Semester 1	Cr.	Semester 2	Cr.
MATH 131 Calculus I	4	ME 102 Computer-Aided Design	1
CORE 110 Human Experience	4	ME 125 Computer Prog. For Mech Engr.	1
PHYS 141 Mechanics (lect.)	3	GE 109 Mechanics-Statics	3
PHYS 141L Mechanics (lab)	1	CORE 115 The Human Experience	4
GE 100 Fundamentals of Engineering w/Lab	2	MATH 132 Calculus II	4
KIN 101 Stress and Wellness	1	PHYS 142 Electricity, Mag., & Waves	3
Total	**15**	**Total**	**16**

Semester 3	Cr.	Semester 4	Cr.
MATH 253 Calculus III	4	Humanities, SS, THEO Elective	3
BIO 151 Anatomy and Physiology I w/Lab	4	MATH 270 Differential Equations	3
CHEM 115 Chemistry w/Lab	4	MATH 260 Linear Algebra	1
ECE 281 Fund. of Electrical Engineering	2.5	STAT 240 Statistical Analysis	3
ME 209 Mechanics - Dynamics	3	BIO 152 Anatomy and Physiology II w/Lab	4
		ME 201 Tech. Writing for ME's	1
		ME 261 Analog Circuits Lab	0.5
Total	**17.5**	**Total**	**15.5**

Semester 5	Cr.	Semester 6	Cr.
ECE 221 Digital Logic Design	3	GE 311 Financial Decision in Engineering	1.5
ECE 251 Engineering Programming I	3	GE 312 Ethical Decisions in Engineering	1.5
BE 317 Sustainable Engineering	2	BE 320 Bioengineering Technologies Lab	1
ME 333 Measurement w/Lab	4	BE 340 Bioelectricity	3
ME 355 System Modeling & Numerical Methods	3	BE 369 Biomechanics	3
		ME 252 Material Science	2.5
		BE Tech. Elective	3
Total	**15**	**Total**	**15.5**

Semester 7	Cr.	Semester 8	Cr.
THEO 200 The Christian Trad.	3	World Language or Diversity Elective	3
GE 497 Sr. Design Proj. I	3	Humanities, SS, THEO Elective	3
ECE 322 Embedded Microcontrollers	3	GE 498 Sr. Design Proj. II	3
ECE 360 Signals and Systems	3	ECE 452 Digital Signal Processing	3
BE 415 Biomaterials	3	BE Technical Elective	3
ME 352 Materials Science & Mechanics Lab	0.5	BE Technical Elective	1
Total	**15.5**	**Total**	**16**
		Total Credits:	**126**