## **ECU Biomedical Engineering**

(Unofficial Community Colleges to ECU Curriculum)

Degree Earned: ECU Bachelor of Engineering – Concentration in Biomedical Engineering Transfer GPA = 2.5

Effective: 2017 Grey Highlighted Courses – Take Courses at ECU

		<b>FRESHM</b>	AN YEAR		
	Fall Semester	Credit		Spring Semester	Credit
DFT 170	ENGR 1012 Engineering Graphics	2	ECU	ENGR 1016 Intro to Engineering Design	2
EGR 150	ENGR 1000 Intro to Engineering	1	ECU	ENGR 2050 Computing Applications in	3
				Engineering	
BIO 111	BIOL 1050.1051 Gen. Bio & Lab or	4	MAT 272	MATH 2152 Calculus II	3
	BIOL 1100/1101 Principles of Bio & Lab				
MAT 271	MATH 2171 Calculus I	4	CHM 151	CHEM 1150/1151 General Chemistry I &	4
				Lab	
ENG 111	ENGL 1100 Composition I	3	ENG 112	ENGL 2201 Writing about the Disciplines	3
HIS, POL, PSY, SOC	Social Science Elective	3			
		17			15
		SOPE	HOMORE YEAR		
	Fall Semester	Credit		Spring Semester	Credit
EGR 220	ENGR 2022 Statics	3	EGR 225	ENGR 2450 Dynamics	3
ECU	ENGR 2000 Engineering Design/PM I	1	ECU	ENGR 3800 Quality Control for	3
				Engineers	
ECU	ENGR 2070 Materials and Processing	3	MAT 285 &	MATH 2154 Differential Equations &	4
			MAT 280	Linear Algebra	
PHY 251	PHYS 2350 University Physics I	4	PHY 252	PHYS 2360 University Physics II	4
MAT 273	MATH 2153 Calculus III	3	ECU	BIME 2080 Foundations in Biomedical Engr	2
	MATH 3307 Engineering Statistics	3			
		17			16
		JUNIO	R YEAR		
	Fall Semester	Credit		Spring Semester	Credit
ECU	ENGR 3024 Mechanics of Materials	3	ECU	ENGR 3034 Thermal & Fluid Systems	4
ECU	ENGR 2514 Circuit Analysis	4	ECU	ENGR 3050 Sensors Meas & Controls	3
ECU	ENGR 3420 Engineering Economics	2	ECU	ENGR 3000 Engr. Design & PM II	2
ECU	BIME 4040 Physiological Systems I	3	ECU	BIME 4050 Physiological Systems II	3
PED XXX	KINE 1000 Lifetime Physical Activity	1		Humanities/Fine Arts Elective	3
ECO 251	ECON 2113 Microeconomics	3	PED XXX	HLTH 1000 Health in Modern Society	2
		16			17
		SENIO	R YEAR		
	<u>Fall Semester</u>	Credit		Spring Semester	Credit
ECU	ENGR 4010 Senior Capstone Design I	2	ECU	ENGR 4020 Senior Capstone Design I	2
ECU	BIME 4200 Biomedical Instrumentation	4	ECU	BIME 4030 Biomechanics and Materials	4
PHI 240	Social Science Elective	3	ECU	Technical Elective	3
ECU	Technical Elective	3	HIS, POL, PSY, SOC	Social Science Elective	3
HUM 110	Humanities/Fine Arts Elective	3		Humanities and Fine Arts Elective	3
15					15
ECU - Minimum Credit Hours Required for Graduation in Biomedical Engineering:					1