## **DEGREE PLAN BACHELOR DEGREE IN BIOMEDICAL ENGINEERING**

Catalog: 2020 - 21

## **TISSUE ENG**

Date Date Hrs Ernd

Student ID:			Expected	Date of Graduation:	-	
Prepared by:				Approved by:		
Da Approved by:		Date		Certified by:		
Approved by.		Date		Certified by:		
		Hrs				
Taken Grade	Transf Hrs	Ernd	Taken Gra	ade Trans	f Hrs	
COMMUNICATION			MA	JOR: BIOMEDICAL ENGINEERING (TE concer	tration)	
ENGL 1301 Rhetoric & Composition I		3		BE 1105 Medical Appl of Engineering		
COMS 2302 Prof, Tech Commu, Sci Eng		3		BE 1325 Intro to Bioengineering		
Total Hrs.		6		BE 3301 Cell Physiology for Bioengineers		
US HISTORY				BE 3317 Linear Systems in Bioengineering		
HIST 1301 US Hist to 1865 (or HIST 1331)		3		BE 3320 Measurement Lab		
HIST 1302 US Hist, post-1865 (or HIST 1332)		3		BE 3380 Human Physiology in BE		
Total Hrs.		6		BE 3415 Fundamentals of Biomolecular Eng		
GOVERNMENT/POLITICAL SCIENCE				BE 4350 Senior Design Project I		
POLS 2311 US Gov't		3		BE 4355 Senior Design Project II		
POLS 2312 State & Local Gov't		3		BE 4382 Laboratory Principles		
Total Hrs.		6		BE 3310 or BE 4312 (choose one)		
CREATIVE ARTS				BE 3367 or BE 4365 or BE 4373 (choose one)		
(Choose one from list of Creative Arts core		3		BE 4368 or BE 4364 or BE 4372 (choose one)		
Total Hrs.		3		BE 4333 or BE 4331 (choose one)		
LANGUAGE, PHILOSOPHY AND CUL	TURE			BE 4337 or BE 4314 (choose one)		
PHIL 1304 (Contemporary Moral Problems	s)	3		Total Hrs.		
Total Hrs.	•	3		BIOMED ENG ELECTIVES (Choose 3 from bel	ow)	
SOCIAL AND BEHAVIOR SCIENCE				BE 2310 Eng Appro solving Clinical challenges		
(Choose one from list of Soc/Behav core)		3		BE 3343 MATLAB Appl for Bioengineers		
Total Hrs.	<u> </u>	3		BE 3344 Bioinstrumentation		
SCIENCE				BE 4329 Neural Engineering		
CHEM 1441 General Chem I (w/ Lab)		4		BE 4366 Process Control in Biotech		
CHEM 1442 General Chem II (w/ Lab)		4		BE 3346 Medical Imaging		
BIOL 1441 Cell & Molecular Biology		4		BE 3352 Digital Process of Biol Signals		
PHYS 1443 Gen Tech Phys I (w Lab)		4		BE 4324 Biomedical Optics Lab		
PHYS 1444 Gen Tech Phys II (w Lab)		4		BE 3325 Fluorescence Microscopy		
Total Hrs.		20		BE 3327 Tissue Optics		
MATHEMATICS				BE 4326 Tissue Ultrasound-optical Imag		
MATH 1426 Calculus I		4		BE 4331 Biopolymer and biocompatibility		
MATH 2425 Calculus II		4		BE 4368 An Intro Tissue Eng, Drug Delivery		
MATH 2326 Calculus III		3		BE 3372 Drug Delivery lecture	+	
MATH 3319 Diff Eqs & Linear Algebra		3		BE 4385 Stem Cell Tissue Engineering	$\dashv$	
MATH 3316 or IE 3301 Statistics Inference	e	3		BE 4312 Tissue Biomechanics & Bioeng	$\dashv$	
Total Hrs.		17		BE 4314 Medical Implants		
UNIV, ENGR, BE, EE Prep courses				BE 4388 Biomed product design & develop		
UNIV 1131 Stu Success (ENGR 1101 - transf)		1		BE 4364 Tissue Eng Lecture	+	
ENGR 1250 Eng Prob Solv (or ENGR 1251)		2		BE 4365 Tissue Eng Lab	+-	
BE 2315 Intro Compul Tools for BE		3		BE 4372 Drug Delivery	+	
EE 2440 or CSE 2440 Ckt Anal w/ Lab (choose o	ne)	4		BE 4373 Drug Delivery Lab	+	
Total Hrs.		10		BIOL 3315 Genetics		
				Total Hrs.		

Student Name:

updated 10/21/2020

**Hours Earned Total Hours Required**