

ENGINEERING PHYSICS – BIOENGINEERING

82
BS.ENGR.PHYS.BIOE
Fall 2008-Spring 2009

Bachelor of Science

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

Student Name _____ ID # _____ Date _____

E-mail _____ Signature _____

Academic or Faculty Advisor _____ Date _____

GENERAL EDUCATION CORE	48 HOURS			MAJOR REQUIREMENTS	80 HOURS		
	HRS	GR	SEM		HRS	GR	SEM
COMMUNICATION REQUIREMENT	9 hours			SUPPORT COURSES	20 hours		
ENGL 1301 Composition I	3	†		MATH 2413 Calculus I	1*	†	
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		MATH 2414 Calculus II	4		
SPCH 1315 Applied Communication	3			MATH 2321 Differential Equations & Linear Algebra	3		
				MATH 2415 Calculus III	4		
MATH REQUIREMENT	3 hours			CHEM 1311, 1111 General Chemistry I & Laboratory I	3,1		
MATH 2413 Calculus I	3*	†		CHEM 1312, 1112 General Chemistry II & Laboratory II	3,1		
SCIENCE REQUIREMENT	8 hours			PHYSICS CORE COURSES	14 hours		
PHYS 2325 & PHYS 2125 University Physics I & Lab I	3,1			PHYS 3400 Modern Physics w/lab	4		
PHYS 2326 & PHYS 2126 University Physics II & Lab II	3,1			PHYS 3490 Mathematical Methods I	4		
				PHYS 4330 Electromagnetic Theory	3		
HUMANITIES REQUIREMENT	6 hours			PHYS 4390 Computational Methods for Engineers and Phys.	3		
Literature (ENGL 2000 level)	3						
ARTS 1301 Art Appreciation <i>or</i> ARTS 1303 Art History <i>or</i>				ENGINEERING CORE COURSES	28 hours		
MUSI 1306 Music Appreciation <i>or</i> MUSI 1308 Music Lit.	3			ENGR 2301 Engineering Mechanics I: Statics	3		
				ENGR 2302 Engineering Mechanics II: Dynamics	3		
SOCIAL SCIENCE REQUIREMENT	12 hours			ENGR 2332 Mechanics of Materials	3		
HIST 1301 United States to 1877	3			ENGR 3320 Linear Circuits	3		
HIST 1302 United States since 1877	3			ENGR 3421 Electronics I	4		
GOVT 2301 American and Texas Government	3			ENGR 4441 Control Systems	4		
GOVT 2302 American Government and Policy	3			ENGR 3303 Thermodynamics	3		
				ENGR 4242 Senior Design Project I	2		
BEHAVIORAL SCIENCE REQUIREMENT	3 hours			ENGR 4243 Senior Design Project II	2		
ANTH 2351 Cultural Anthropology				ENGR 1101 Introduction to Engineering	1		
BUSI 1301 Introduction to Business							
ECON 2301 Macroeconomics				COMPUTER SCIENCE CORE COURSES	4 hours		
GEOG 1303 General World Geography				COSC 1437 Programming Fundamentals II	4		
PSYC 2301 Introduction to Psychology							
SOCI 1301 Introduction to Sociology				BIOENGINEERING TRACK	14 hours		
SOCI 2319 The Mexican American Experience				BIOL 1306 General Biology I	3		
				BIOL 1106 General Biology I Laboratory	1		
KINESIOLOGY REQUIREMENT	1 hour			PHYS 3315 Physics of Biological Systems	3		
KINE 11__ (One hour of activity/health/wellness/ fitness)	1			PHYS 4315 Analysis of Biomolecules by Physical Methods	3		
				BENG 4120 Molecular Bioengineering Laboratory	1		
MODERN LANGUAGE REQUIREMENT	6 hours			BENG 4320 Molecular Bioengineering	3		
Six hours of same modern language, other than English.							
	3			TOTAL CREDIT HOURS FOR GRADUATION	128		
	3			TOTAL ADVANCED HOURS (minimum)	36		

† Grade of "C" or better is required for graduation.

* MATH 2413-3 sch for general education and 1 sch toward major requirement.