

BS-PHYSICS

Engineering Physics Specialization

2018-2019

Year 1	Semester 1 Fall	Semester 2 Spring	Summer	Total
	HIST 1301 or POLS 2305 US History I or Federal Government 3	HIST 1302 or POLS 2306 US History II or Texas Government 3		
	WRIT 1301 Composition I 3	WRIT 1302 Composition II 3		
	PSYC 1100 Learning Frameworks 1	CHEM 1312 & CHEM 1112 General Chemistry II & Lab II 4		
	CHEM 1311 & CHEM 1111 General Chemistry I & Lab I 4	MATH 2414 Calculus II 4		
	MATH 2413 Calculus I 4			
	Semester Hours 15	14	0	29
Year 2	Semester 1 Fall	Semester 2 Spring	Summer	Total
	HIST 1301 or POLS 2305 US History I or Federal Government 3	HIST 1302 or POLS 2306 US History II or Texas Government 3	PHYS 3303 & PHYS 3101 Modern Physics & Lab 4	
	MATH 2315 Calculus III 3	PHYS 2326 & PHYS 2126 University Physics II & Lab 4		
	PHYS 2325 & PHYS 2125 University Physics I & Lab 4	CORE Creative Arts 3		
	CORE Language, Philosophy & Culture 3	CORE Social and Behavioral Science 3		
	Semester Hours 13	13	4	30

Year 3	Semester 1 Fall	Semester 2 Spring	Summer	Total
	PHYS 3311 Mathematical Methods for Physics & Engineering I 3	PHYS 3312 Mathematical Methods for Physics & Engineering II 3	Approved Elective ** 3	
	PHYS 3351 Thermodynamics & Statistical Methods 3	PHYS 3321 Intermediate Mechanics 3		
	COMM 1315 Public Speaking 3	WRIT 3315 Technical Writing 3		
	CENG 3264 Engineering Design & Project Management 2	CENG 3312 & CENG 3112 Digital Circuits & Lab 4		
	CSCI 1320, 1470, 3311 or other approved CSCI programming course* C Programming, Computer Science I, Programming with Visual Basic or other 3-4			
	Semester Hours 14-15	13	3	31-32
Year 4	Semester 1 Fall	Semester 2 Spring	Summer	Total
	PHYS 4371 Undergraduate Physics Research 3	PHYS 4372 Research Seminar 2		
	PHYS 3331 Intermediate Electromagnetism 3	PHYS 3342 Quantum Theory 3		
	CENG 3313& 3113 Linear Circuits & Lab 4	PHYS 4322 Mechanics of Materials 3		
	PHYS 4352 Fluids & Heat Transfer 3	SENG 4310 Introduction to Systems Engineering 3		
	Approved Elective ** 3	Approved Elective ** 3		
	Semester Hours 16	15	0	31
	Total Plan Hours			120

*Students must show a demonstrated knowledge of a programming language (Visual Basic, Matlab, C, C++, or Fortran)

**Electives should be composed of 9 upper level hours (3000-4000) electives approved by Faculty Advisor

- State of Texas Core Curriculum Course. Please refer to the 2016-2017 UHCL Undergraduate Catalog (www.uhcl.edu/catalog) for approved options.
- This document is only intended as a guide. Please see an academic advisor for assistance with academic planning.

