Bachelor of Science in Physics (BS) 2018–20 Checklist

CORE CURRICULUM Core courses must be chosen from approved lists.	Minimum Hours Required	OPTION 2: COMPUTATION	Minimum Hours Required
bit.ly/1d6oP6l		Designed to provide the necessary foundation and hands-on skill in computation for the	
First Year Signature Course	3	student who plans a career or further study in computational physics or computer science.	
English Composition	3	Students who complete this option may	
Humanities	3	simultaneously fulfill some of the requirements of the Scientific Computation and Data Sciences	
American & Texas Government	6	Certificate.	
American History	6	Additional Science:	6
Social & Behavioral Science	3	6 hours in BIO, GEO, or AST Note: courses that cannot count toward major requirements	
Mathematics (Fulfilled by course in major)	0	in department that offers it cannot be applied.	
Science & Technology-I (Fulfilled by courses in major)	0	Upper-division mathematics and statistics	
Science & Technology-II (Fulfilled by courses in major)	0	and data sciences:	14
Visual & Performing Arts	3	M 427J or 427K M 427L 6 additional hours of upper-division Mathematics or SDS	
SKILLS & EXPERIENCE FLAGS Flags attached to courses are displayed in the online		SDS 329C and M 362K are recommended	
Course Schedule.		Upper-division physics:	24
Two Writing Flags:		PHY 355 Modern Physics & Thermodynamics PHY 338K Electronic Techniques	
Core Writing Flag (cannot also fulfill another core		PHY 353L Modern Physics Laboratory PHY 336K Classical Dynamics	
curriculum requirement) 2. Additional Writing Flag		PHY 352K Classical Electrodynamics I	
Note: One of the two writing flags must be upper-division.		PHY 329 Introduction to Computational Physics PHY 373 Quantum Physics I: Foundations	
One Quantitative Reasoning Flag		PHY 369 Thermodynamics & Statistical Mechanics (373 is prerequisite or co-requisite)	
One Global Cultures Flag			
One Cultural Diversity in the U.S. Flag		1 scientific computation specialization, 12 hours total:	12
One Ethics and Leadership Flag		A. 1st choice	
One Independent Inquiry Flag		CS 303E, and CS 313E or SDS 322 2 courses from 2 areas listed below:	
		Numerical methods: M 348; SDS 335; CS	
FOREIGN LANGUAGE		323E, 323H, 367; CHE 348 Statistical Methods: M 358K, 378K;	
1 of the following:	6–12	BME 335 Other computing topics: M 346, 362M,	
a. Beginning level proficiency in a foreign language		368K, 372K, 376C; SDS 329D, 374C, 374D,	
b. 1 course in a foreign language & 1 three-hour		374E; CS 324E, 327E, 329E, 377; ME 367S B. 2nd choice	
course in the culture of the same language area c. 2 three-hour courses from the same foreign		12 hours from: EE 306, 312, 316, 319K, and	
culture area		422C	
Foreign culture courses selected from approved lists maintained by the college. Bit.ly/19Ao6pc			
maintaineu by the college. bit.19/19/400pc		ELECTIVES Enough elective hours to reach 126 total	VARY
INTRODUCTORY		(The number of elective hours needed may vary depending on	
MATHEMATICS & SCIENCE		course selections.)	
M 408C & 408D or 408N, 408S, & 408M	8-12	ADDITIONAL GRADUATION	
PHY 301 & 101L*, 316 & 116L*, and 315 & 115L	12	REQUIREMENTS	
* PHY 303K & 103M and 303L & 103N, substitute for PHY 301 & 101L and 316 & 116L. However, they are not preferred preparation for PHY 315 & 115L.		 ☐ Minimum 21 upper-division hours in residence, ☐ Minimum 60 hours in residence overall ☐ Minimum 36 upper-division hours 	including 12 in Physics
CH 301 or 301H	3	☐ 126 hours total overall☐ Minimum grade of C- & minimum 2.0 GPA in al	l Mathematics &
CH 302 or 302H	3	Natural Sciences courses Minimum UT-Austin Grade Point Average of 2.0	
Note: Introductory science is substantially different for Option 6		 ☐ Must apply to graduate during final semester ☐ 2018–20 Catalog expires August 2026 	