Bachelor of Science in Physics (BS) 2020–22 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 Tags 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	
1. Core Writing Flag (cannot also fulfill another core		PHY 353L Modern Physics Laboratory PHY 336K Classical Dynamics	
curriculum requirement)		PHY 352K Classical Electrodynamics I	
2. Additional Writing Flag 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	
One Global Cultures Flag		Mechanics (373 is prerequisite or co-requisite)	
One Cultural Diversity in the U.S. Flag		1 scientific computation specialization, 12 hours total:	12
One Ethics and Leadership Flag		A. 1st choice	12
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;	
of the following:	6–12	BME 335	
a. Beginning level proficiency in a foreign language	0-12	Other computing topics: M 346, 362M, 368K, 372K, 376C; SDS 329D, 374C, 374D,	
o. 1 course in a foreign language & 1 three-hour		374E; CS 324E, 327E, 329E, 377; ME 367S	
course in the culture of the same language area		B. 2nd choice 12 hours from: EE 306, 312, 316, 319K, and	
c. 2 three-hour courses from the same foreign culture area		422C	
Foreign culture courses selected from approved lists			
maintained by the college. Bit.ly/19Ao6pc		ELECTIVES Enough elective hours to reach 126 total	VARY
INTRODUCTORY		(The number of elective hours needed may vary depending on	VANT
INTRODUCTORY 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, 301C, or 301H	3	☐ 126 hours total overall ☐ Minimum grade of C- & minimum 2.0 GPA in al	l Mathematics &
CH 302, 302C, or 302H	3	 ☐ Minimum grade of C- & minimum 2.0 GPA in all Mathematics & 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 ☐ 2020–22 Catalog expires August 2028	