

# BAYLOR BOUND MAJOR ACADEMIC PLANNER

## Bachelor of Science in Physics - Computational Physics Concentration

*A Suggested Sequence of Required Courses for a South Texas transfer student (2017-2018 Catalog)*

Freshman Year							
Fall				Spring			
SOUTH TEXAS	BU	Title	Hours	SOUTH TEXAS	BU	Title	Hours
	CHA 1088	Chapel	0		CHA 1088	Chapel	0
See Reverse		Foreign Language	4	See Reverse		Foreign Language	4
	CSI 1430	Intro to Computer Science w/Lab	4		CSI 1440	Intro to Computer Science II w/Lab	4
See Reverse		Lifetime Fitness	1	See Reverse		Lifetime Fitness	1
MATH 2413	MTH 1321	Calculus I	3	MATH 2414	MTH 1322	Calculus II	3
PHYS 2425	PHY 1420	General Physics I	4		PHY 1430	General Physics II	4
			16				16
Sophomore Year							
Fall				Spring			
SOUTH TEXAS	BU	Title	Hours	SOUTH TEXAS	BU	Title	Hours
See Reverse		Foreign Language	3	See Reverse		Foreign Language	3
	CSI 2350	Discrete Structures	3	ENGL 1301	ENG 1302	Thinking and Writing	3
	MTH 2311	Linear Algebra	3		CSI 2334	Intro to Computer Systems	3
MATH 2415	MTH 2321	Calculus III	3		MTH 3325	Ordinary Differential Equations	3
	PHY 2135	Basic Electronics Lab	1		PHY 2190	Intro to Research	1
	PHY 2350	Modern Physics	3		PHY 2360	Math and Computational Physics	3
			16				16
Junior Year							
Fall				Spring			
SOUTH TEXAS	BU	Title	Hours	SOUTH TEXAS	BU	Title	Hours
	REL 1310	Christian Scriptures	3		ENG 3300	Professional and Technical Writing	3
	CSI 3324	Numerical Methods	3		REL 1350	Christian Heritage	3
	MTH 3326	Partial Differential Equations	3	See Reverse		Lifetime Fitness	1
	PHY 3175	Intermediate Physics Lab I	1			Upper Level PHY or CSI Course	3
	PHY 3320	Intermediate Classical Mechanics	3		PHY 3330	Inter. Electricity & Magnetism	3
	PHY 3372	Intro to Quantum Mechanics I	3		PHY 3373	Intro to Quantum Mechanics II	3
			16				16
Senior Year							
Fall				Spring			
SOUTH TEXAS	BU	Title	Hours	SOUTH TEXAS	BU	Title	Hours
	PHY 4190	Dissemination of Research Results	1		PHY 4360	Computer Models in Physics	3
	PHY 4340	Statistical & Thermal Physics	3			Upper Level PHY or CSI Course	3
		Upper Level PHY or CSI Course	3	See Reverse		Lifetime Fitness	1
	PHY 4001	Exit Exam	0	See Reverse		History/Social Science	3
ENGL 2321	ENG 2301	British Literature	3	ENGL 2326 or 2331	ENG 2304 or ENG 2306	American or World Literature	3
See Reverse	PSC 2302	American Constitutional Development	3			Elective	3
See Reverse		History/Social Science	3				
			16				16

**Notes about major requirements:**

- English requirement: It is recommended that science majors take ENG 3300 during their junior year rather than ENG 1304.
- Prior to taking PHY 4190, students are expected to make substantial progress on a research project. Research typically begins when PHY 2190 is taken in the sophomore year. Students involved in research during their junior year should enroll in PHY 3V95 (Undergraduate Research). In addition, students are strongly encouraged to participate in summer research opportunities.
- Many required courses are offered only one time each year in either the fall semester or the spring semester.
- For more information, see the Baylor Undergraduate Catalog.

**Please see reverse side for important information on general requirements.**

BACHELOR OF SCIENCE (BS) DEGREE CHECKLIST  
(2017-2018 BAYLOR UNDERGRADUATE CATALOG)

SOUTH TEXAS COURSE	BAYLOR COURSE	BAYLOR TITLE
<b>ENGLISH:</b>		
ENGL 1301	ENG 1302	Thinking and Writing
ENGL 1302	ENG 1304	Thinking, Writing & Research
ENGL 2321	ENG 2301	British Literature
ENGL 2326	ENG 2304	American Literature
ENGL 2331	ENG 2306	World Literature

<b>HISTORY/SOCIAL SCIENCE:</b>		
ANTH 2346	ANT 1305	Introduction to Anthropology
	ANT 3301	Science, Society, and Culture
	ECO 1305	Survey of Eco. Princ. For Non-bus. Majors
ECON 2302	ECO 2306	Principles of Microeconomics
	ECO 2307	Principles of Macroeconomics
	GEOG 1300	World Geography
HIST 2321	HIS 1305	World History to 1500
HIST 2322	HIS 1307	World History since 1500
HIST 1301	HIS 2365	History of the U.S. to 1877
HIST 1302	HIS 2366	History of the U.S. since 1877
PHIL 2303	PHI 1306	Logic
	PHI 1307	Critical Thinking
PHIL 2306	PHI 1308	Introduction to Ethics
PHIL 2307	PHI 1321	Introduction to Philosophy
	PHI 3301	Moral Philosophy
	PHI 3310	History of Philosophy: Classical
	PHI 3312	History of Philosophy: Modern Europe
GOVT 2302 or 2305	PSC 1305	American National Government
GOVT 2301 or 2306	PSC 1306	American State & Local Government
PSYC 2301	PSY 1305	Introductory Psychology
SOCI 1301	SOC 1305	Introduction to Sociology

<b>POLITICAL SCIENCE:</b>		
GOVT 2305 AND 2306	PSC 2302	American Constitutional Development
(Note: Both GOVT 2305 and 2306 must be complete before coming to Baylor to receive credit for PSC 2302. This course may not be transferred from another school after the student has earned hours at Baylor.)		

**LIFETIME FITNESS: Four activity courses are required**

SOUTH TEXAS COURSE	BAYLOR COURSE	BAYLOR TITLE
<b>SCIENCE:</b>		
BIOL 1406	BIO 1305-1105	Modern Concepts of Bioscience
BIOL 1407	BIO 1306-1106	Modern Concepts of Bioscience, Continued
GEOL 1403	GEO 1405	The Dynamic Earth
GEOL 1404	GEO 1406	Earth Through Time
	NSC 1306-1106	Introduction to Neuroscience
CHEM 1411	CHE 1301-1101	Basic Principles of Chemistry I
CHEM 1412	CHE 1302-1102	Basic Principles of Chemistry II
	PHY 1408	Gen. Physics for Nat. & Behavioral Sci.I
	PHY 1409	Gen. Physics for Nat. & Behavioral Sci.II
PHYS 2425	PHY 1420	General Physics I
	PHY 1430	General Physics II
	ENV 1301-1101	Exploring Environmental Issues and lab
	ENV 1303-1103	Wildlife Ecology and lab

<b>MATH:</b>		
	MTH 1320	Pre-Calculus
MATH 2413	MTH 1321	Calculus I
MATH 2414	MTH 1322	Calculus II

<b>FOREIGN LANGUAGE: To be fulfilled with one of the following options:</b>		
A. Complete ONE Modern or Classical language through the 2320 level <b>OR</b>		
B. Complete TWO Classical languages through the 1302 or 1402 level.		
Two languages from Latin, Greek, and Hebrew may be used. (It is strongly recommended that the language requirement be started during the first year of residence work. Chemistry, Biochemistry, and Mathematics majors are required to take a modern foreign language.)		
SPAN 1411	SPA 1401	Elementary Spanish I
SPAN 1412	SPA 1402	Elementary Spanish II
SPAN 2311	SPA 2310	Intermediate Spanish I
SPAN 2312	SPA 2320	Intermediate Spanish II

<b>Taught at Baylor; no equivalent course at South Texas</b>		
<u>Modern Languages:</u>		<u>Classical Languages:</u>
Arabic (ARB)	Japanese (JPN)	Hebrew (HEB)
Chinese (CHI)	Korean (KOR)	Greek (GKC)
French (FRE)	Portuguese (POR)	Latin (LAT)
German (GER)	Russian (RUS)	
Italian (ITA)	Swahili (SWA)	