

A.S. in Physics

to

## **B.S. in Physics (Biophysics/Medical Physics)**

This four-year plan provides a model for on-time completion of the B.S. in Physics (Biophysics/Medical Physics) at UTRGV by starting at South Texas College.

Year	First Semester		Second Semester		
	STC Requirement	UTRGV Equivalent	STC Requirement	UTRGV Equivalent	
F R E S H M A N	Creative Arts Core	Creative Arts Core	HIST 1301 <b>or</b> HIST 2327 (American History Core)	HIST 1301 <b>or</b> HIST 2327 (American History Core)	
	COSC 1436 (Major)	CSCI 1380 (Integrative & Experiential Learning Core, <b>Required at</b> <b>UTRGV</b> )	CHEM 1411 (Life and Physical Sciences Core)	CHEM 1311 and CHEM 1111 (Free Elective)	
	ENGL 1301 (Communications Core)	ENGL 1301 (Communications Core)	ENGL 1302 (Communications Core)	ENGL 1302 (Communications Core)	
	MATH 2413 (Mathematics Core)	MATH 2413 (Mathematics Core, <b>Required at UTRGV</b> )	MATH 2414 (Major)	MATH 2414 (Major)	
	Third Semester				
	STC Requirement		UTRGV Equivalent		
	HIST 1302 <b>or</b> HIST 2328 (American History Core)		HIST 1302 <b>or</b> HIST 2328 (American History Core)		
	Language, Philosophy & Culture Core		Language, Philosophy & Culture Core		
Year	Fourth Semester		Fifth Semester		
	STC Requirement	UTRGV Equivalent	STC Requirement	UTRGV Equivalent	
s P H O M O R E	CHEM 1412 (Life and Physical Sciences Core)	CHEM 1312 and CHEM 1112	PHYS 2426 (Major)	PHYS 2426 (Life and Physical Sciences Core, <b>Required at UTRGV</b> )	
	GOVT 2305 (Political Science Core)	POLS 2305 (Political Science Core)	GOVT 2306 (Political Science Core)	POLS 2306 (Political Science Core)	
	PHYS 2425 (Major)	PHYS 2425 (Life and Physical Sciences Core, <b>Required at UTRGV</b> )	MATH 2415 (Major)	MATH 2415 (Major)	
	Social & Behavioral Science Core	Social & Behavioral Science Core	Component Area Option Core	Integrative and Experiential Learning Core	

Year	Fall Semester	Spring Semester	
	PHYS 1311 Learning to be a Physicist	PHYS 3402 Modern Physics	
J	PHYS 2327 Physics for Scientists and Engineers III	Choose One Biophysics/Medical Physics Concentration	
U N I O	MATH 3341 Differential Equations	PHYS 3303 Thermodynamics	
	Choose One Biophysics/Medical Physics Concentration	PHYS 3411 Math Methods in Physics I	
R	PHYS 3305 Classical Mechanics	Choose One Biophysics/Medical Physics Concentration	
	Choose 1 Biophysics/Medical Physics Concentration	Choose One Biophysics/Medical Physics Concentration	
Year	Fall Semester	Spring Semester	
	PHYS 3412 Math Methods in Physics II	PHYS 3302 Electromagnetic Theory II	
S E	PHYS 4306 Advanced Physics Lab or PHYS 4101*	PHYS 3304 Optics	
N I	PHYS 4305 Statistical Mechanics	PHYS 4304 Quantum Mechanics II	
O R	PHYS 3301 Electromagnetic Theory I	PHYS 4300 Undergraduate Research Project	
	PHYS 4303 Quantum Mechanics I	Choose One Biophysics/Medical Physics Concentration.	

This degree requires 120 hours and a minimum of 42 advanced (3000 and 4000) credit hours.

\*PHYS 4101 must be taken three times.