BA Physics - 2 year plan

		Fall	Pre-req courses	units	Term offered			Spring	Pre-req courses	units	Term offered
Year 1	MATH 2310	Applied Linear Algebra	Math 2210 with grade of C- or higher, and Math 2220 as pre- or co-req	4	Fall & Spring		CHEM 2100	General Chemistry I	1 yr HS chemistry or equivalent AND pre- or co-req of one of Math 1301, 1401, 1601, 2210, or 2220	4	Fall & Spring
	PHYS 1500	**Tools for Physicists**	none	**3**	**Fall**		CHEM 2100L	General Chemistry I Laboratory	co-req of CHEM 2100	1	Fall & Spring
	PHYS 3100	**Mathematical Methods of Physics**	MATH 2320 with a grade of C (2.0) or higher, MATH 2310, PHYS 100, PHYS 2510, and a combined 2.0 GPC in 2000-level physics courses	**4**	**Fall**		**PHYS 2600L**	**Introduction to Electronics**	PHYS 2210 & MATH 2310	**1**	**Spring**
	PHYS 3300	**Computational Physics**	PHYS 2510, PHYS 2510L, and a co-req of PHYS 3100	**3**	**Fall**		**PHYS 3400**	**Electricity & Magnetism**	PHYS 3100 with a grade of C- or better & PHYS 2700 with a grade of C- or better or co-req of PHYS 2700	**3**	**Spring**
							PHYS 3800	**Intermediate Physics Laboratory**	PHYS 2600L, PHYS 2700, PHYS 3300 AND a co-req of PHYS 2700 & PHYS 2600L	**2**	**Spring**
								GE courses		3	Fall & Spring
		Total units		**14**				Total units		**14**	
Year 2	**PHYS 3200**	**Classical Mechanics**	PHYS 2510, PHYS 2510L, and a co-req of PHYS 3100	**4**	**Fall**		**PHYS 3500**	**Statistical and Thermal Physics**	PHYS 2700 and PHYS 3100 both with a grade of C- or better	**4**	**Spring**
		PHYS Elective		**6**	**Fall & Spring**		**PHYS 4800**	**Senior Thesis (WI)***	PHYS 3200, PHYS 3400, and PHYS 3800	**2**	**Spring**
		GE courses		3	Fall & Spring			GE courses		3	Fall & Spring
		Total units		**13**				Total units		**9**	
								***Can be substituted by ASTR 4000 Observational Astronomy (WI)**			

NOTES:

1. PHYS courses are in bold.
2. Assumes student have transferred in with the Associate in Science Degree (AS-T) in Physics. Includes intro physics sequence through modern physics, year-long calculus sequence, and multivariable calculus, plus all lower division GEs.
3. An additional 12 units of coursework of the student's choosing across the university will be required for graduation.
4. Completing the requirements of the BS Physics will simultaneously satisfy the following GE requirements:

GE Math (Area B4)

GE Physical Science (Area B1)

GE lab (Area B-lab)

1 out of 2 Writing Intensive courses - upper division (this leaves 1 writing intensive course of the student's choosing upper or lower division

Elective Courses

	Course	Pre-req courses	units	Term offered
PHYS 3600	Data Acquisition and Control	PHYS 2600L, PHYS 3100, PHYS 3300	2	Spring
PHYS 4600	Electronics	PHYS 3600	3	
PHYS 4851-3	Special Topics in Physics	depends on the topic	1-3	
PHYS 4851L-2L	Special Topics in Physics	depends on the topic	1-3	
PHYS 5100	Mathematical Methods of Physics II	PHYS 3100	3	
PHYS 5400	Optics	PHYS 4400	3	Spring
PHYS 5500	Solid State Physics	PHYS 4700	3	Spring
PHYS 5700	Quantum Mechanics II	PHYS 4700 with grade of C (2.0) or better	3	Spring
PHYS 5751-3	Internship		1-3	Fall & Spring
PHYS 5851-3	Special Topics in Physics	depends on the topic	1-3	
PHYS 5851L-2L	Special Topics in Physics	depends on the topic	1-3	
PHYS 5951-3	Independent Study		1-3	Fall & Spring
ASTR 2300	Introduction to Astronomy for Scientists*	PHYS 2510, PHYS 2510L	4	Spring
ASTR 3300	Astrophysics of Planetary Systems	ASTR 2300	3	
ASTR 3310	Astrophysics of Galaxies and Cosmology	ASTR 2300	3	
ASTR 4000	Observational Astronomy (WI)	ASTR 2300, PHYS 3300 or other programming course	3	Fall

*** Does not count as an elective towards the BA or BS physics, but is a pre-req for ASTR 3300, ASTR 3310, and ASTR 4000 which are approved electives for those degrees.**

**** Specific elective courses are not guarenteed to be offered each year, but a selection of electives will be offered each year at the discretion of the department.**