

**BS Physics STANDARD Course of Study**

**FRESHMAN YEAR**

**FALL**

PHYS	1610	Physics I (H)	4	4
PHYS	1610 L	Physics I Lab (H)	2	2
ENGL	1010	College Writing I	3	0
MATH	1310	Calculus I	4	0
		Core (Social Science I)	3	0
			16	6

**SOPHOMORE YEAR**

**FALL**

PHYS	2690	Physics III (H)	4	4
PHYS	2610	Physics of Mat. & Dev.	3	3
CHEM	1210	Chemistry I	3	0
CHEM	1230 L	Chemistry I Lab	1	0
MATH	2310	Calculus III	4	0
			15	7

**JUNIOR YEAR**

**FALL**

PHYS	3530	Electromagnetism I	3	3
MATH	3810	Math Physics I	3	0
PHYS	4130	Mechanics	3	3
PHYS		Physics Elective I	3	3
		Core (Arts and Humanities II)	3	0
			15	9

**SENIOR YEAR**

**FALL**

PHYS	4540	Physics Capstone	3	3
PHYS		Physics Elective II	3	3
PHYS		Physics Elective III	3	3
		Special Elective I	3	0
		Core (Arts and Humanities III)	3	0
			15	9

**FRESHMAN YEAR**

**SPRING**

PHYS	1120	Freshman Physics Seminar	1	1
PHYS	1640	Physics II (H)	4	4
PHYS	1640 L	Physics II Lab (H)	2	2
ENGL	1020	College Writing II	3	0
MATH	1320	Calculus II	4	0
		Core (Arts and Humanities I)	3	0
			17	7

**SOPHOMORE YEAR**

**SPRING**

PHYS	2100	Intro Modern Physics	3	3
PHYS	2620 L	Principles of Lab Automation	3	3
CHEM	1220	Chemistry II	3	0
CHEM	1240 L	Chemistry II Lab	1	0
MATH	2340/2360	Differential Equations	3	0
		Core (Social Science II)	3	0
			16	6

**JUNIOR YEAR**

**SPRING**

PHYS	3380	Optics and Waves	3	3
PHYS	3820	Math Physics II	3	3
PHYS	4350	Intro Quantum Mechanics I	3	3
PHYS	3930 L	Adv. Exper. Physics I	2	2
		Core (Social Science III)	3	0
			14	11

**SENIOR YEAR**

**SPRING**

PHYS	3940 L	Adv. Exper. Physics II	2	2
PHYS		Physics Elective IV	3	3
		Special Elective II	3	0
		Special Elective III	3	0
		Free Elective	1	0
			12	5

Total 120 60 Physics

**BS Physics - Radiological Health Physics Option**

FRESHMAN YEAR

FALL

PHYS	1610	Physics I (H)	4	4
PHYS	1610 L	Physics I Lab (H)	2	2
ENGL	1010	College Writing I	3	0
MATH	1310	Calculus I	4	0
		Core (Arts and Humanities I)	3	0

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SOPHOMORE YEAR

FALL

PHYS	2690	Physics III (H)	4	4
PHYS	2610	Physics of Mat. & Dev.	3	3
CHEM	1210	Chemistry I	3	0
CHEM	1230 L	Chemistry I Lab	1	0
MATH	2310	Calculus III	4	0

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JUNIOR YEAR

FALL

PHYS	4810	Math Methods of Rad Science	3	3
PHYS	4060 L	Nuclear Instrumentation	3	3
BIOL	1110	Principles of Biology I	3	0
BIOL	1170 L	Experimental Biology I	1	0
HSCI	1010	Human Anat and Phys I	3	0
HSCI	1030	Human Anat and Phys I Lab	1	0

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SENIOR YEAR

FALL

PHYS	4010	Rad Safety and Control I	4	4
PHYS	4530	Health Physics Capstone	3	3
PHYS	2010	Health Physics Internship	3	3
		Core (Social Sciences II)	3	0
		Core (Arts and Humanities III)	3	0

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FRESHMAN YEAR

SPRING

PHYS	1120	Freshman Physics Seminar	1	1
PHYS	1640	Physics II (H)	4	4
PHYS	1640 L	Physics II Lab (H)	2	2
ENGL	1020	College Writing II	3	0
MATH	1320	Calculus II	4	0
		Core (Social Science I)	3	0

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SPRING

PHYS	2100	Intro Modern Physics	3	3
PHYS	2620 L	Principles of Lab Automation	3	3
CHEM	1220	Chemistry II	3	0
CHEM	1240 L	Chemistry II Lab	1	0
MATH	2340/2360	Differential Equations	3	0
PHYS	2040	Intro Rad Sciences	3	3

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SPRING

PHYS	4820	Num Methods of Rad Sciences	3	3
MATH	3860	Probability and Statistics	3	0
BIOL	1120	Principles of Biology II	3	0
BIOL	1180 L	Experimental Biology II	1	0
HSCI	1020	Human Anat and Phys II	3	0
HSCI	1040	Human Anat and Phys II Lab	1	0
		Core (Arts and Humanities II)	3	0

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SPRING

PHYS	4020 L	Rad Safety and Control II	4	4
PHYS	4620	Radiation Biology	3	3
PHYS	4240	Environmental Health Physics	3	3
		Core (Social Sciences III)	3	0

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Total 124 58 Physics

**BS Physics - Preparation for Grad School (Recommended course of study)**

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ENGL	1010	College Writing I	3	0
MATH	1310	Calculus I	4	0
		Core (Social Science I)	3	0
			16	6

SOPHOMORE YEAR

FALL

PHYS	2690	Physics III (H)	4	4
PHYS	2610	Physics of Mat. & Dev.	3	3
CHEM	1210	Chemistry I	3	0
CHEM	1230 L	Chemistry I Lab	1	0
MATH	2310	Calculus III	4	0
			15	7

JUNIOR YEAR

FALL

PHYS	3530	Electromagnetism I	3	3
MATH	3810	Math Physics I	3	0
PHYS	4130	Mechanics	3	3
PHYS		Physics Elective I	3	3
		Core (Arts and Humanities II)	3	0
			15	9

SENIOR YEAR

FALL

PHYS	4540	Physics Capstone	3	3
PHYS	4210	Stat Therm	3	3
PHYS	4360	Quantum Mechanics II	3	3
		Special Elective I	3	0
		Core (Arts and Humanities III)	3	0
			15	9

FRESHMAN YEAR

SPRING

PHYS	1120	Freshman Physics Seminar	1	1
PHYS	1640	Physics II (H)	4	4
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ENGL	1020	College Writing II	3	0
MATH	1320	Calculus II	4	0
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			17	7

SOPHOMORE YEAR

SPRING

PHYS	2100	Intro Modern Physics	3	3
PHYS	2620 L	Principles of Lab Automation	3	3
CHEM	1220	Chemistry II	3	0
CHEM	1240 L	Chemistry II Lab	1	0
MATH	2340/2360	Differential Equations	3	0
		Core (Social Science II)	3	0
			16	6

JUNIOR YEAR

SPRING

PHYS	3380	Optics and Waves	3	3
PHYS	3820	Math Physics II	3	3
PHYS	4350	Intro Quantum Mechanics I	3	3
PHYS	3930 L	Adv. Exper. Physics I	2	2
PHYS	3540	Electromagnetism II	3	3
			14	14

SENIOR YEAR

SPRING

PHYS	3940 L	Adv. Exper. Physics II	2	2
		Special Elective II	3	0
		Special Elective III	3	0
		Core (Social Science III)	3	0
		Free Elective	1	0
			12	2

Total	120	60	Physics
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