

BS Degree in Physics

Business Emphasis (Entrepreneurship)

The following is a sample schedule to help students plan their coursework. These are suggestions and the schedule is flexible. In addition to fulfilling the courses specifically required for this Physics degree, it is important that students also fulfill Liberal Arts and Sciences Curriculum requirements, Writing Intensive, and all other normal graduation requirements.

FIRST YEAR			
FALL	PHYS 200	General Physics I with Lab ¹	4
	MATH 260	Computer Calculus	1
	MATH 261	Calculus I ²	4
	FYE 101	First Year Experience	1
	ENTR 229	Intro to Entrepreneurship	3
		LASC Electives ³	3
	TOTAL CREDITS		16

FIRST YEAR			
SPRING	PHYS 201	General Physics II with Lab	4
	MATH 260	Computer Calculus	1
	MATH 262	Calculus II	4
	ENTR 230	Entrepreneurial Finance	3
		LASC Electives	3
		TOTAL CREDITS	

SOPHOMORE YEAR			
FALL	PHYS 202	20th Century Physics	3
	PHYS 305	Experimental Physics I	3
	PHYS 315	Physics Seminar	1
	MATH 323	Multi-Variable & Vector Calc	4
		LASC Electives	3
		TOTAL CREDITS	

SOPHOMORE YEAR			
SPRING	PHYS 322	Elem Modern Physics	3
	PHYS 350	Comp. Methods for Physical Science	3
	MATH 366	Differential Equations	3
	ENGL 387	Technical Report Writing	4
	ENTR 231	Entrepreneurial Leadership/Org	3
		TOTAL CREDITS	

JUNIOR YEAR			
FALL	PHYS 330	Intermediate Mechanics	4
	PHYS ###	Physics Elective	3
	MATH 327	Intro to Linear Algebra ⁴	3
	ENTR 232	Entrepreneurial Marketing	3
		LASC Electives	3
		TOTAL CREDITS	

JUNIOR YEAR				
SPRING	ENTR 309	Building a Workable Business Plan	3	
	PHYS 306	Experimental Physics II	3	
	PHYS 342	Intro to Research	1	
		LASC Electives	9	
		TOTAL CREDITS		16

SENIOR YEAR			
FALL	PHYS 492	Senior Project	2
	PHYS 469	Internship	3
		LASC Electives ³	9
		TOTAL CREDITS	

SENIOR YEAR			
SPRING	PHYS 315	Physics Seminar	1
		LASC Electives	6
		Electives	7
		TOTAL CREDITS	

¹ If a student cannot take Calculus in the fall of freshman year, please consult your Advisor or the Department Chair about appropriate course(s) to take.
² ACT math scores or a mathematics placement exam is needed to decide whether a student should begin directly in calculus or a different math class.
³ In considering electives, keep in mind that all of the LASC requirements as well as Writing Intensive requirements must be fulfilled.
⁴ Recommended but not required.
⁵ Phys 399 offered on alternating year basis (only during odd years)
⁶ Phys 370 and Phys 430 are offered on alternating year basis (Phys 370 in even years, Phys 430 in odd years)

Core Requirements (31 credits)

Students may substitute PHYS 160 & 161 for PHYS 200 & 201.

COURSE	CREDITS	✓	COURSE	CREDITS	✓
PHYS 200: General Physics I and Lab	4	<input type="checkbox"/>	PHYS 330: Intermediate Mechanics	4	<input type="checkbox"/>
PHYS 201: General Physics II and Lab	4	<input type="checkbox"/>	PHYS 315: Physics Seminar	1	<input type="checkbox"/>
PHYS 202: Intro to 20th Century Physics	3	<input type="checkbox"/>	PHYS 306: Experimental Physics II (WI)	3	<input type="checkbox"/>
PHYS 305: Experimental Physics I (WI)	3	<input type="checkbox"/>	PHYS 342: Intro to Research	1	<input type="checkbox"/>
PHYS 322: Elementary Modern Physics	3	<input type="checkbox"/>	PHYS 492: Senior Project	2	<input type="checkbox"/>
PHYS 350: Computational Methods for Physical Science	3	<input type="checkbox"/>			

Related Requirements (19 credits)

Students are encouraged to take MATH 260 with MATH 261. Students are also encouraged to take Math 327 Linear Algebra (3 credits) and MATH 466 Differential Equations II (3 credits).

COURSE	CREDITS	✓	COURSE	CREDITS	✓
ENGL 387: Technical Report Writing (WI)	4	<input type="checkbox"/>	MATH 323: Multi-Variable & Vector Calculus	4	<input type="checkbox"/>
MATH 261: Calculus I	4	<input type="checkbox"/>	MATH 366: Differential Equations	3	<input type="checkbox"/>
MATH 262: Calculus II	4	<input type="checkbox"/>			

Program Requirements (15 credits)

COURSE	CREDITS	✓
ENTR 229: Introduction to Entrepreneurship	3	<input type="checkbox"/>
ENTR 230: Entrepreneurial Finance	3	<input type="checkbox"/>
ENTR 231: Entrepreneurial Leadership & Organization	3	<input type="checkbox"/>
ENTR 232: Entrepreneurial Marketing	3	<input type="checkbox"/>
ENTR 309: Building a Workable Business Plan	3	<input type="checkbox"/>

Restricted Electives (3 credits)

Must complete 3 credits from the courses listed below.

COURSE	CREDITS	✓
PHYS 312: Analog Electronics	3	<input type="checkbox"/>
PHYS 318: Biophysics and Medical Imaging	3	<input type="checkbox"/>
PHYS 325: Optics	3	<input type="checkbox"/>
PHYS 370: Electromagnetic Theory	4	<input type="checkbox"/>
PHYS 399: Thermodynamics	3	<input type="checkbox"/>
PHYS 430: Quantum Mechanics	3	<input type="checkbox"/>

Recommended Electives (3 credits)

We recommend students consider completing the courses below. Students are not required to complete these courses.

COURSE	CREDITS	✓	COURSE	CREDITS	✓
MKTG 310: Principles of Marketing	3	<input type="checkbox"/>	MGMT 380: Operations Management	3	<input type="checkbox"/>
MGMT 360: Principles of Management	3	<input type="checkbox"/>	MATH 327: Linear Algebra	3	<input type="checkbox"/>