## PHYSICS B.S.

**Secondary Education Option** 



## **ACADEMIC ADVISING**

Partnering with students to successfully navigate college

Location: Main Hall 208

Phone: 719.255.3260

Website: Academic Advising

#### **Connect With Your Advisor**

**Current UCCS Students** 

• Appointments: <a href="www.uccs.edu/advising/current-students">www.uccs.edu/advising/current-students</a>
Prospective Students: <a href="www.uccs.edu/admissions/contact">www.uccs.edu/admissions/contact</a>

## **GENERAL ACADEMIC INFORMATION**

#### **Minimum Graduation Requirements**

- 128 credit hours
- 45 upper-division credit hours (3000-4999 level)
- 2.0 CU cumulative GPA
- Residency: At least 30 credit hours of the degree must be completed while registered in the College of Letters, Arts, and Sciences at UCCS.

#### **Student Responsibilities**

Students are required to know and follow:

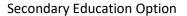
- All academic policies set forth by the University, College, and academic department in the UCCS Catalog: <u>catalog.uccs.edu</u>
- All course prerequisites designated by the University. Failure to meet course prerequisites may result in an administrative drop of the course from a student's schedule. See degree audit for course prerequisites within the academic major.

### **DEGREE REQUIREMENTS**

Explore Physics: B.S. in Physics | Department of Physics & Energy Science (uccs.edu)

		N	lajor Requirements			
	Physics Major	Course/Area	Course Title	Credit Hours		
	(40 hours)	ASTR 1050	Astronomy of the Solar System	3		
•	Requires a minimum of 40 credit hours of ASTR and PES course work, and an additional 30 hours of auxiliary coursework.	ASTR 1060	Astronomy of the Universe	3		
		PES 1110	General Physics I	4		
		PES 1120	General Physics II	4		
		PES 1160	Advanced Physics Lab I			
		PES 2130	General Physics III			
		PES 2160	Advanced Physics Lab II			
•	Requires a minimum of 21 credit hours of upper-division (3000+ level) PES course work.	PES 3130	Modern Physics			
		PES 3170	Instrumentation Laboratory I			
		PES 3180	Instrumentation Laboratory II			
•	All PES courses must have a grade of "C" or better.	PES 3210	Classical Mechanics			
		PES 4810	Senior Physics Seminar			
		Electives	Complete 9 hours of upper-division (3000+ level) PES courses.	9		
	All and the second second second by	Auxiliary Requirements				
•	All auxiliary requirements must be completed in addition to the required major courses and must have a grade of "C-" or better.	BIOL 1300/1310	General Biology: Organismic Biology and Lab	4		
		BIOL 1350/1360	General Biology: Intro to the Cell and Lab	4		
		CHEM 1401/1402	General Chemistry I and Lab	5		
		CHEM 1411/1412	General Chemistry I and Lab	5		
		MATH 1350	Calculus I	4		
		MATH 1360	Calculus II	4		
		MATH 2350	Calculus III	4		
			·			
UCCS Teach Courses		EDUC 1000	Intro to Inclusive Education	3		
	(37 hours)	EDUC 2000	Intro to Educational Psychology	3		
		EDUC 2700	Schools, Society, & Diversity	3		
Αg	rade of "B-" or better must be earned	EDUC 3800	ESL for Educators	3		
in a	Il Education courses.	EDUC 3994	Intro to Professional Year	1		
		UTED 1030	Inquiry Approaches/Lesson Plan Design for Secondary Math/Science Teaching	3		
	irses should be taken in the	UTED 3020	Classroom Interactions	3		
	propriate semester. See the four-year	UTED 4710	Project-Based Instruction (spring only)	3		
pla	n for details.	UTED 4720	Reading in the Content Area			
		UTED 4730	Apprentice Teaching UCCS Teach and Seminar	12		

# PHYSICS B.S.





G	eneral Education and Elective Ro	equirements				
Core Writing Requirement (6 hours)	<ul> <li>ENGL 1310, 1308, or 1305 (Students choosing ENGL 1305 must complete ENGL 1300 first.)</li> <li>ENGL 1410</li> <li>Writing Portfolio – PORT 3000 (0 credits) or PORT 4000 (1 credit) or alternative – See Degree Audit</li> </ul>					
Reasoning Skills	MATH 1350 (included in auxiliary requirements)  UTLS 3040 (included in UCCS Teach requirements)  HUM 3990  This course also fulfills Navigate and one Writing Intensive course.  CHEM 1402 (included in auxiliary requirements)  UTED 4730 (Apprentice Teaching)					
Core Humanities (3 hours) Natural Sciences Lab						
Oral Communication						
LAS Language other than English Requirement	Complete two semesters of a language other than English equivalent to 1010 & 1020 with high school, transfer, placement exam, or UCCS coursework. Courses taken to fulfill this requirement may also count toward Compass Curriculum Explore - Arts, Humanities and Cultures or general electives. See degree audit for details.					
Requirement	1 .					
Compass Curriculum	1 .					
<u> </u>	Curriculum Explore - Arts, Humanities and Cultures or g	eneral electives. See degree audit for details.				
Compass Curriculum	Curriculum Explore - Arts, Humanities and Cultures or g  Component	eneral electives. See degree audit for details.  Course				
Compass Curriculum (12 hours) Explore and Navigate courses must be taken in departments other than the	Curriculum Explore - Arts, Humanities and Cultures or g  Component  Gateway	eneral electives. See degree audit for details.  Course  GPS 1010				
Compass Curriculum (12 hours) Explore and Navigate courses must be taken in departments other than the major. Writing Intensive, Inclusiveness, and	Component  Component  Gateway  Explore – Arts, Humanities and Cultures or g  Component  Gateway  Component  Co	Course  GPS 1010  See Degree Audit  UTED 1030 (included in UCCS Teach requirements)  See Degree Audit  BIOL 1350 (included in auxiliary requirements)				
Compass Curriculum (12 hours) Explore and Navigate courses must be taken in departments other than the major. Writing Intensive, Inclusiveness, and Sustainability courses may count	Component  Component  Gateway  Explore – Arts, Humanities and Cultures or g  Component  Gateway  Explore – Arts, Humanities and Cultures (2 courses)  Explore – Society, Behavior and Health (2 courses)	eneral electives. See degree audit for details.  Course  GPS 1010  See Degree Audit  UTED 1030 (included in UCCS Teach requirements)  See Degree Audit				
Compass Curriculum (12 hours) Explore and Navigate courses must be taken in departments other than the major. Writing Intensive, Inclusiveness, and Sustainability courses may count toward other requirements within the	Component  Component  Gateway  Explore – Arts, Humanities and Cultures (2 courses)  Explore – Society, Behavior and Health (2 courses)  Explore – Physical and Natural World (2 courses)	course  GPS 1010  See Degree Audit  UTED 1030 (included in UCCS Teach requirements)  See Degree Audit  BIOL 1350 (included in auxiliary requirements)  CHEM 1401 (included in auxiliary requirements)				
Compass Curriculum (12 hours)  Explore and Navigate courses must be taken in departments other than the major.  Writing Intensive, Inclusiveness, and Sustainability courses may count	Component  Component  Gateway  Explore – Arts, Humanities and Cultures (2 courses)  Explore – Society, Behavior and Health (2 courses)  Explore – Physical and Natural World (2 courses)  Navigate	eneral electives. See degree audit for details.  Course  GPS 1010  See Degree Audit  UTED 1030 (included in UCCS Teach requirements)  See Degree Audit  BIOL 1350 (included in auxiliary requirements)  CHEM 1401 (included in auxiliary requirements)  HUM 3990 (included in LAS area requirements)				
Compass Curriculum (12 hours)  Explore and Navigate courses must be taken in departments other than the major.  Writing Intensive, Inclusiveness, and Sustainability courses may count toward other requirements within the	Component  Component  Gateway  Explore – Arts, Humanities and Cultures or g  Explore – Arts, Humanities and Cultures (2 courses)  Explore – Society, Behavior and Health (2 courses)  Explore – Physical and Natural World (2 courses)  Navigate  Summit	eneral electives. See degree audit for details.  Course  GPS 1010  See Degree Audit  UTED 1030 (included in UCCS Teach requirements)  See Degree Audit  BIOL 1350 (included in auxiliary requirements)  CHEM 1401 (included in auxiliary requirements)  HUM 3990 (included in LAS area requirements)  UTED 4730 (included in UCCS Teach requirements)  HUM 3990 (included in LAS area requirements)				

## **FOUR-YEAR DEGREE PLAN**

Year Four

EDUC 3994

UTED 4720

HUM 3990

Please note that this is an example degree program and your program may vary. Students are responsible for completing all course prerequisites.

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	J	FALL	Hours	J	SPRING	Hours
<b>a</b> )		ENGL 1310	3		ENGL 1410	3
Year One		PES 1110/1160	5		PES 1120/2160	5
r		MATH 1350	4		MATH 1360	4
ea		UTED 1030	3		EDUC 2000	3
>		GPS 1010	3		Explore – Society, Behavior and Health (Inclusiveness)	3
		TOTAL	18		TOTAL	18
			•			
	J	FALL	Hours	1	SPRING	Hours
0		PES 2130	3		PES 3130	3
Year Two		CHEM 1401/1402	5		CHEM 1411/1412	5
Ļ		MATH 2350	4		ASTR 1060	3
ea		ASTR 1050	3		EDUC 2700	3
>		EDUC 1000	3		UTED 3020 (spring only)	3
		TOTAL	18		TOTAL	17
			•			
	J	FALL	Hours	1	SPRING	Hours
ā		PES 3170	2		PES 3180	2
Year Three		Upper-Division (UD) PES Elective	3		PES 3210	3
È		EDUC 3800	3		UD PES Elective	3
ğ		BIOL 1300/1310	4		UTED 4710	3
۶		Explore – Arts, Humanities & Cultures (Inclusiveness)	3		BIOL 1350/1360	4
		TOTAL	15		TOTAL	15
	•		•			
	J	FALL	Hours	1	SPRING	Hours
		PES 4810	2		UTED 4730	12
Jur		UD PES Elective	3			
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1

3

3

3

15

TOTAL

NOTE: Students must complete all course requirements other than UTED 4730 before the final semester.

Explore - Arts, Humanities & Cultures (Sustainability)

12

TOTAL