

ACADEMIC ADVISING

Partnering with students to successfully navigate college

Location: Main Hall 208

Phone: 719.255.3260

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Current UCCS Students

- Appointments: www.uccs.edu/advising/current-students
- Drop In Advising: Most Wednesdays, 1:00pm - 4:00pm

Prospective Students: www.uccs.edu/admissions/contact

GENERAL ACADEMIC INFORMATION

Minimum Graduation Requirements

1. 120 credit hours
2. 45 upper-division credit hours (3000-4999 level)
3. 2.0 CU cumulative GPA
4. Residency: Last 30 credit hours of 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:

1. All academic policies set forth by the University, College, and academic department in the UCCS Catalog: catalog.uccs.edu
2. 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.

MAJOR INFORMATION

Briefly defined, physics is the science that tries to understand the laws of nature and the relationship between energy and matter. However, it might be more appropriate to define physics as a way of thinking rather than as a profession. The field of physics trains students to take a logical, problem-solving approach in whatever situations they might find themselves. Physics students explore concepts and methods of science that can be applied in many different professional areas and research topics. Physics deals with everything from subatomic particles to black holes and the overall structure of the universe. Physicists use mathematical formulas to try to explain their theories and make predictions. Physicists investigate many of the latest discoveries such as massive neutrinos, blue semiconductor lasers, high temperature superconductors, black holes, and our expanding universe.

Major Requirements				
BS Physics Major (51-53 hours)	Course/Area	Course Title	Credit Hours	
<ul style="list-style-type: none"> • Requires a minimum of 51 to 53 credit hours of PES course work • Requires a minimum of 30 to 39 credit hours of upper-division (3000-4999 level) PES course work. • All PES courses must have a grade of "C" or better. 	PES 1110	General Physics I – Calculus Based	4	
	PES 1120	General Physics II	4	
	PES 1160	Advanced Physics Lab I – Calculus Based	1	
	PES 2130	General Physics III	3	
	PES 2160	Advanced Physics Lab II	1	
	PES 3130	Modern Physics	3	
	PES 3170	Instrumentation Laboratory I	2	
	PES 3180	Instrumentation Laboratory II	2	
	PES 3210	Classical Mechanics	3	
	PES 3310	Principles of Electricity & Magnetism	3	
	PES 3410	Thermodynamics and Statistical Mechanics	3	
	PES 4170	Optics Lab	2	
	PES 4810	Senior Physics Seminar	2	
	Auxiliary Requirements			
	CHEM 1401/1402	General Chemistry I and Lab I	5	
	CHEM 1411/1412	General Chemistry II and Lab II	5	
	Computer Science	<i>Complete one of the following:</i> CS 1090, CS 1120, CS 1150, MAE 1090, PES 3140	3	
	MATH 1350	Calculus I	4	
MATH 1360	Calculus II	4		
MATH 2350	Calculus III	4		
MATH 3400	Differential Equations	3		
Traditional (18 hours)		Energy Science (19 hours)		
PES 3250		PES 2500		
PES 3320		3 Technical Courses from list		
PES 4250		ECON 1010		
PES 4510		GEOL 1010		
PES Elective from list in degree audit		PES 4460		
MATH elective 3100 or higher		2 Technical Courses from list		
Solid State				
PES 3250		PES 3250		
PES 3320		PES 3320		
PES 4150		PES 4150		
PES 4250		PES 4250		
PES 4460		PES 4460		
2 Technical Courses from list				

General Education and Elective Requirements

Composition (9 hours)	<ol style="list-style-type: none"> ENGL 1310 ENGL 1410 ENGL 2090 PORT 3000 (0 Credits) – Writing Portfolio 	
Reasoning Skills (4 hours)	MATH 1350	PES 4170
Area Requirements (27 hours) <ul style="list-style-type: none"> Maximum 2 courses from any one discipline may be applied to the area requirements Courses may not be taken pass/fail 	<ol style="list-style-type: none"> Humanities – 9 credit hours, must include one occurrence of Core Humanities Social Sciences – 9 credit hours, Energy Science must include ECON 1010 Natural Sciences – CHEM 1401, CHEM 1402, CHEM 1411, CHEM 1412, Energy Science includes GEOL 1010 <p>NOTE: Cannot select courses from primary major courses for area requirements.</p>	
Oral Communication, Cultural Diversity, and Global Awareness Requirements	One course from each list (see degree audit). <i>All courses that fulfill these requirements may also count towards other general education or major requirements.</i>	
Compass Curriculum (12 hours) <ul style="list-style-type: none"> Explore and Navigate courses must be outside major and area requirements Writing Intensive, Inclusiveness, and Sustainability courses can count towards other requirements within degree 	Component	Course
	Gateway	GPS 1010
	Explore – Arts, Humanities and Cultures	See Degree Audit
	Explore – Society, Behavior and Health	See Degree Audit
	Explore – Physical and Natural World	See Degree Audit (Energy Science - GEOL 1010)
	Navigate	HUM 3990 (included in LAS area requirements)
	Summit	PES 4810 (included in major requirements)
	Writing Intensive Courses (WIC) <i>Two courses with one upper-division (3000+ level)</i>	<ol style="list-style-type: none"> HUM 3990 (included in LAS area requirements) See Degree Audit
	Inclusiveness	See Degree Audit
Sustainability	See Degree Audit	

Four-Year Degree Plan

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

Year One	✓	FALL	Hours	✓	SPRING	Hours
			ENGL 1310	3		ENGL 1410
		PES 1110/1160	5		PES 1120/2160	5
		MATH 1350	4		MATH 1360	4
		GPS 1010	3		Explore – Arts, Humanities & Cultures Course	3
		TOTAL	15		TOTAL	15

Year Two	✓	FALL	Hours	✓	SPRING	Hours
			PES 2130	3		PES 3130
		CHEM 1401/1402	4		CHEM 1411/1412	5
		MATH 2350	5		MATH 3400	3
		Explore – Society, Behavior and Health Course	3		Computer Science Course	3
					Explore – Physical & Natural World	2
		TOTAL	15		TOTAL	16

Year Three	✓	FALL	Hours	✓	SPRING	Hours
			ENGL 2090	4		PES 3180 (SPRING ONLY)
		PES 3170 (FALL ONLY)	2		PES 3210 (SPRING ONLY)	3
		PES 4170 (FALL ONLY)	2		PES 3410 (SPRING ONLY)	3
		HUM 3990	3		Physics Option Course	3
		Physics Option Course	3		Social Science Elective	3
		TOTAL	14		TOTAL	14

Year Four	✓	FALL	Hours	✓	SPRING	Hours
			Physics Option Course	3		PES 4810
		Physics Option Course	3		Physics Option Course	3
		Physics Option Course	3		Physics Option Course	3
		Humanities Elective	3		General Elective or Physics option Course	2
		Social Science Elective	3		Humanities Elective	3
					Social Science Elective	3
		TOTAL	15		TOTAL	16