

2016 - 2017 Old Dominion University Catalog
Bachelor of Science in Physics
(Concentration A - Research) (w/ VCCS Equivalencies)

Sample four year curriculum with a suggested ordering of courses. Students may re-order as needed.
** indicates not automatically waived with transferrable associates degree, C or better required for transfer.*
*Courses in **green** are waived by the completion of an Associate degree (Not eligible for Applied Associate degrees).*

YEAR 1 - FRESHMAN (26 CREDITS)			
FALL SEMESTER (14 credits)		SPRING SEMESTER (12 credits)	
<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
MATH 211	MTH 173 or 273*	MATH 212	MTH 174 or 274*
ENGL 110C	ENG 111*	PHYS 231N	PHY 221, 231 or 241*
CHEM 121N/122N*	CHM 111*	CHEM 123N/124N*	CHM 112*
Oral Communication	Transfer Guide		
YEAR 2 - SOPHOMORE (30 CREDITS)			
FALL SEMESTER (14 credits)		SPRING SEMESTER (16 credits)	
<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
ENGL 211C or 231C	ENG 112, 210, 115 or 131*	Human Creativity	Transfer Guide
MATH 312 or 285	MTH 277*	Interpreting the Past	Transfer Guide
PHYS 232N	PHY 222, 232 or 242*	PHYS 319	
Information Literacy and Research: CS 120G or CS 121G	Transfer Guide	PHYS 313+309	
		MATH 307 or 280	MTH 279*
YEAR 3 - JUNIOR (31 CREDITS)			
FALL SEMESTER (15 credits)		SPRING SEMESTER (16 credits)	
<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
PHYS 355	Transfer Guide	MATH 316, 401, 421 or 422	
Literature		CS 150	CSC 201 or EGR 126 *
PHYS 303		PHYS 413	
PHYS 323		Human Behavior	Transfer Guide
Impact of Technology	Transfer Guide	PHYS 454	
YEAR 4 - SENIOR (33 CREDITS)			
FALL SEMESTER (16 credits)		SPRING SEMESTER (17 credits)	
<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
PHYS 425		PHYS 453	
PHYS 452		PHYS 456	
PHYS 420		Select one of the following: PHYS 411, 415, 416 or 417	
PHYS 489W		PHYS 490W	
Philosophy and Ethics	Transfer Guide	Elective**	
<u>Upper Division Gen. Ed. Coursework:</u>		<u>Upper Division Gen. Ed. Coursework:</u>	
300-/400-level course (Option D)		300-/400-level course (Option D)	

Language and Culture is not included in this sample (6 credits). This requirement may be waived, see catalog for details.

Note: Upper division general education (minor) has other options, see catalog for requirements.

Concentration A (Research) is designed primarily for students preparing to do graduate study in physics and related fields or for students preparing to work professionally upon completion of the B. S. degree in various technical fields requiring the strongest preparation in physics.

Requirements for graduation include a minimum cumulative grade point average of 2.00 overall and in the major, a grade of C or better in all courses required for the major, including prerequisite courses, 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University, completion of ENGL 110C, ENGL 211C or 221C or 231C, and a writing intensive (W) course in the major with a grade of C or better, and completion of Senior Assessment.