

**2015 - 2016 Old Dominion University Catalog**  
**Bachelor of Science in Physics**  
**(Concentration C: Teacher Education Licensure) (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.*

**YEAR 1 - FRESHMAN (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>
MATH 211 (4 credits)	MTH 173 or 273*	ENGL 211C or 231C	ENG 112, 210, 115 or 131*
ENGL 110C	ENG 111*	Human Creativity	<a href="#">Transfer Guide</a>
Language and Culture I (May be waived, see catalog for details)	<a href="#">Transfer Guide</a>	Language and Culture II (May be waived, see catalog for details)	<a href="#">Transfer Guide</a>
CS 150 (4 credits)	CSC 201, EGR 126 or ITP 100*	MATH 212 (4 credits)	MTH 174 or 274*
		Human Behavior	<a href="#">Transfer Guide</a>

**YEAR 2 - SOPHOMORE (30 CREDITS)**

**FALL SEMESTER (15 credits)**

**SPRING SEMESTER (15 credits)**

<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
CHEM 121N and 122N (4 credits)	CHM 111*	CHEM 123N and 124N (4 credits)	CHM 112*
Literature	<a href="#">Transfer Guide</a>	Interpreting the Past	<a href="#">Transfer Guide</a>
Philosophy and Ethics	<a href="#">Transfer Guide</a>	PHYS 232N (4 credits)	PHY 222, 232 or 242*
PHYS 231N (4 credits)	PHY 221, 231 or 241*	Oral Communication	<a href="#">Transfer Guide</a>
<u>Professional Education Coursework:</u>		<u>Professional Education Coursework:</u>	
STEM 101 (1 credit)		STEM 102 (1 credit)	

**YEAR 3 - JUNIOR (31 CREDITS)**

**FALL SEMESTER (15 credits)**

**SPRING SEMESTER (16 credits)**

<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>
MATH 307 or 280	MTH 279*	PHYS 355	
PHYS 303		PHYS 413	
PHYS 319		PHYS 103N or 104N	
PHYS 323		<u>Professional Education Coursework:</u>	
<u>Professional Education Coursework:</u>		STEM 202	
STEM 201		SCI 468	

**YEAR 4 - SENIOR (29 CREDITS)**

**FALL SEMESTER (16 credits)**

**SPRING SEMESTER (13 credits)**

<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>Professional Education Coursework:</u>	<u>VCCS Equivalency:</u>
Information Literacy and Research: CS 120G or CS 121G	<a href="#">Transfer Guide</a>	STEM 485	
PHYS 425		STEM 402	
PHYS 499W or 489W & 490W		Elective**	
PHYS 120 or 309 (1 credit)			
Impact of Technology	<a href="#">Transfer Guide</a>		
<u>Professional Education Coursework:</u>			
STEM 401			

\*\*Please consult with your ODU advisor for elective coursework.

Language and Culture I and II may be waived, see ODU catalog for exemptions.

The Professional Education satisfies the upper division general education requirement.

Concentration C (Education) is designed for students who are preparing to be high school physics teachers. This curriculum provides a solid foundation in both contemporary physics and in education pedagogy.

Students must first declare the physics Concentration C) teacher preparation track as their major with the physics departmental advisor. All students must apply for and be admitted into the approved physics teacher preparation program. Students must meet the required criteria for admission by passing the Virginia Board of Education prescribed assessments and earn the minimum required grade point averages (GPA). Please see catalog for details.

Requirements for graduation include completion of ENGL 110C, ENGL 211C or 221C or 231C, and the writing intensive (W) course in the major with a grade of C or better, completion of the Senior Assessment, completion of the Physics Exit Exam with a minimum score of 20th percentile, a minimum cumulative 2.75 GPA, in the major area, and in the professional education core, with no grade less than a C- in the major and the professional education core; successful completion of the Teacher Candidate Internship and a minimum of 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.