

# 2014 - 2015 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 (33 CREDITS)

##### FALL SEMESTER (17 credits)

<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
MATH 211 (4 credits)	MTH 173 or 273*
ENGL 110C	ENG 111*
Language and Culture I (May be waived, see catalog for details)	<a href="#">Transfer Guide</a>
CS 150 (4 credits)	<a href="#">Transfer Guide*</a>
Oral Communication	<a href="#">Transfer Guide</a>

##### SPRING SEMESTER (16 credits)

<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
ENGL 211C or 231C	ENG 112, 210, 115 or 131*
Human Creativity	<a href="#">Transfer Guide</a>
Language and Culture II (May be waived, see catalog for details)	<a href="#">Transfer Guide</a>
MATH 212 (4 credits)	MTH 174 or 274*
Human Behavior	<a href="#">Transfer Guide</a>

#### YEAR 2 - SOPHOMORE (28 CREDITS)

##### FALL SEMESTER (15 credits)

<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
CHEM 121N and 122N (4 credits)	CHM 111*
Literature	<a href="#">Transfer Guide</a>
Philosophy and Ethics	<a href="#">Transfer Guide</a>
PHYS 231 (4 credits)	PHY 221, 231 or 241*
<u>Professional Education Coursework:</u>	
STEM 101 (1 credit)	

##### SPRING SEMESTER (13 credits)

<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
CHEM 123N and 124N (4 credits)	CHM 112*
Interpreting the Past	<a href="#">Transfer Guide</a>
PHYS 232N (4 credits)	PHY 222, 232 or 242*
<u>Professional Education Coursework:</u>	
STEM 102 (1 credit)	

#### YEAR 3 - JUNIOR (30 CREDITS)

##### FALL SEMESTER (15 credits)

<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>
MATH 307 or 280	
PHYS 303	
PHYS 319	
PHYS 323	
<u>Professional Education Coursework:</u>	
STEM 201	

##### SPRING SEMESTER (15 credits)

<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>
PHYS 355	
PHYS 413	
PHYS 103N	
<u>Professional Education Coursework:</u>	
STEM 202	
STEM 401	

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

##### FALL SEMESTER (14 credits)

<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
PHYS 425	
PHYS 499W or 489W & 490W	
PHYS 120 or 309 (1 credit)	
Elective (4 credits)	
<u>Professional Education Coursework:</u>	
SCI 468	
Language and Culture I and II may be waived, see ODU catalog for exemptions.	

##### SPRING SEMESTER (15 credits)

<u>Professional Education Coursework:</u>	<u>VCCS Equivalency:</u>
STEM 485	
STEM 402	
Elective	

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.