

## 2020 - 2021 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. Courses in green are waived by the completion of an Associate degree (Not eligible for Applied Associate degrees). Associate in Science recommended for ease of transfer.*

#### YEAR 1 - FRESHMAN (29 CREDITS)

FALL SEMESTER (14 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>
MATH 211 (4 credits)	MTH 173, 263 or 273*	MATH 212 (4 credits)	MTH 174, 264, or 274*
ENGL 110C	ENG 111*	ENGL 211C or 231C	ENG 112, 210, 115 or 131*
<span style="color: green;">Human Behavior</span>	<a href="#">Transfer Guide</a>	CS 150 (4 credits)	CSC 201 or EGR 126*
<span style="color: green;">Human Creativity</span>	<a href="#">Transfer Guide</a>	<span style="color: green;">Literature</span>	<a href="#">Transfer Guide</a>
<u>Professional Education Coursework:</u>		<u>Professional Education Coursework:</u>	
STEM 101 (1 credit)		STEM 102 (1 credit)	

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

FALL SEMESTER (14 credits)		SPRING SEMESTER (14 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*
PHYS 261N (4 credits)	See note below*	PHYS 262N (4 credits)	See note below*
<span style="color: green;">Information Literacy and Research: CS 120G or CS 121G or OEAS 130G</span>	<a href="#">Transfer Guide</a>	<span style="color: green;">Oral Communication</span>	<a href="#">Transfer Guide</a>
<u>Professional Education Coursework:</u>		<u>Professional Education Coursework:</u>	
STEM 201		STEM 202	

#### YEAR 3 - JUNIOR (32 CREDITS)

FALL SEMESTER (16 credits)		SPRING SEMESTER (16 credits)	
<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>Major Coursework:</u>	<u>VCCS Equivalency:</u>
MATH 312 or 285	MTH 275 or 277*	MATH 307 or 280	MTH 267 or 279*
PHYS 323		PHYS 319	
PHYS 303		PHYS 103N or 104N**	
PHYS 355		PHYS 468W	
<span style="color: green;">Philosophy and Ethics</span>	<a href="#">Transfer Guide</a>	<span style="color: green;">Interpreting the Past</span>	<a href="#">Transfer Guide</a>

#### YEAR 4 - SENIOR (31 CREDITS)

FALL SEMESTER (16 credits)		SPRING SEMESTER (15 credits)	
<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>Professional Education Coursework:</u>	<u>VCCS Equivalency:</u>
PHYS 413		STEM 485	
PHYS 425		STEM 402	
PHYS 499W or 489W & 490W**		Elective**	
PHYS 120 or 309 (1 credit)			
<span style="color: green;">Impact of Technology</span>	<a href="#">Transfer Guide</a>		
<u>Professional Education Coursework:</u>			
STEM 401			

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

This 4-year plan does not include 6 credits in Language and Culture, but this requirement may be waived; see ODU catalog.

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.

*Note: PHYS 261N and 262N have no VCCS equivalency. However, if you must take Physics courses for the AS degree, you should take PHY 221, 231 or 241 and PHY 222, 232 or 242. These courses transfer as PHYS 231N and PHYS 232N. The Department will assess student's proficiency and substitute for PHYS 261N and 262N if eligible.*