

2025 - 2026 Old Dominion University Catalog

Bachelor of Science in Physics with a Major in Secondary Physics Education (BS) (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 (13 credits)

General Education and Major Coursework:

MATH 211 (4 credits)
ENGL 110C

VCCS Equivalency:

MTH 173, 263 or 273*
ENG 111*

Human Behavior

[Transfer Equivalency Guide](#)

Human Creativity

[Transfer Equivalency Guide](#)

SPRING SEMESTER (16 credits)

General Education and Major Coursework:

MATH 212 (4 credits)
ENGL 211C or 231C

VCCS Equivalency:

MTH 174, 264, or 274*
ENG 112, 210, 115 or 131*
CSC 221 (If CSC 221 is taught in C++ , transfers as CS 150, if taught in Java, as CS 151, if taught in Python, as CS 153)*

Literature

[Transfer Equivalency Guide](#)

Professional Education Coursework:

STEM 103 (2 credits)

YEAR 2 - SOPHOMORE (28 CREDITS)

FALL SEMESTER (14 credits)

General Education and Major Coursework:

CHEM 121N and 122N (4 credits)
PHYS 261N, 231N, or 226N (4 credits)

VCCS Equivalency:

CHM 111*
See note below*

Information Literacy and Research: CS 120G or CS 121G or OEAS 130G

[Transfer Equivalency Guide](#)

Professional Education Coursework:

STEM 201

SPRING SEMESTER (14 credits)

General Education and Major Coursework:

CHEM 123N and 124N (4 credits)
PHYS 262N, 232N, or 227N (4 credits)

VCCS Equivalency:

CHM 112*
See note below*

Interpreting the Past

[Transfer Equivalency Guide](#)

Professional Education Coursework:

STEM 202

YEAR 3 - JUNIOR (32 CREDITS)

FALL SEMESTER (16 credits)

Major Coursework:

MATH 312 or 285
PHYS 323
PHYS 303
PHYS 355

VCCS Equivalency:

MTH 275 or 277*

Oral Communication

[Transfer Equivalency Guide](#)

SPRING SEMESTER (16 credits)

Major Coursework:

MATH 307 or 280
PHYS 319
ASTP 103N or 104N**
PHYS 468W

VCCS Equivalency:

MTH 267 or 279*

Philosophy and Ethics

[Transfer Equivalency Guide](#)

YEAR 4 - SENIOR (31 CREDITS)

FALL SEMESTER (16 credits)

General Education and Major Coursework:

PHYS 413

PHYS 425

PHYS 499W or 489W & 490W**

PHYS 120 or 309 (1 credit)

Impact of Technology

[Transfer Equivalency Guide](#)

Professional Education Coursework:

STEM 401

SPRING SEMESTER (15 credits)

Professional Education Coursework:

STEM 485

STEM 402

Elective or Language and Culture course if needed**

VCCS Equivalency:

**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.

PHYS 120 is only offered in the fall semester; PHYS 309 is only offered in the spring semester

Students must first declare the 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 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.

This four-year plan is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.