

2017 - 2018 Old Dominion University Catalog
Bachelor of Science in Physics
(Concentration B - Professional) (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 (33 CREDITS)

FALL SEMESTER (17 credits)

SPRING SEMESTER (16 credits)

General Education and Major Coursework:

MATH 211 (4 credits)
 ENGL 110C
 Language and Culture I
 (May be waived, see catalog for details)
 CS 150 (4 credits)
 Oral Communication

VCCS Equivalency:

MTH 173, 263 or 273*
 ENG 111*
[Transfer Guide](#)
 CSC 201 or EGR 126*
[Transfer Guide](#)

General Education and Major Coursework:

ENGL 211C or 231C
 Human Creativity
 Language and Culture II
 (May be waived, see catalog for details)
 MATH 212 (4 credits)
 Human Behavior

VCCS Equivalency:

ENG 112, 210, 115 or 131*
[Transfer Guide](#)
[Transfer Guide](#)
 MTH 174, 264, or 274*
[Transfer Guide](#)

YEAR 2 - SOPHOMORE (31 CREDITS)

FALL SEMESTER (17 credits)

SPRING SEMESTER (14 credits)

General Education and Major Coursework:

CHEM 121N and 122N (4 credits)
 Literature
 Philosophy and Ethics
 PHYS 261N (4 credits)
 Information Literacy and Research: CS 120G or CS 121G

VCCS Equivalency:

CHM 111*
[Transfer Guide](#)
[Transfer Guide](#)
 See note below*
[Transfer Guide](#)

General Education and Major Coursework:

CHEM 123N and 124N (4 credits)
 Interpreting the Past
 PHYS 262N (4 credits)
 Impact of Technology

VCCS Equivalency:

CHM 112*
[Transfer Guide](#)
 See note below*
[Transfer Guide](#)

YEAR 3 - JUNIOR (31 CREDITS)

FALL SEMESTER (16 credits)

SPRING SEMESTER (15 credits)

Major Coursework:

MATH 312 or 285 (4 credits)
 MATH 307 or 280
 PHYS 303
 PHYS 319
 PHYS 323

VCCS Equivalency:

MTH 265 or 277*
 MTH 267 or 279*

Major Coursework:

MATH 316, 401, 421 or 422
 PHYS 355
 PHYS 413
 PHYS 454
 PHYS 452

VCCS Equivalency:

YEAR 4 - SENIOR (25 CREDITS)

FALL SEMESTER (13 credits)

SPRING SEMESTER (12 credits)

General Education and Major Coursework:

PHYS 425
 PHYS 420, 453, or 456
 PHYS 499W or 489W & 490W (C or better required)
 PHYS 120 or 309
Upper Division Gen. Ed. Coursework:
 300-/400-level course (Option D)

VCCS Equivalency:

General Education and Major Coursework:

Select two of the following: PHYS 311, 313, 332, 411, 415, 416 or 417** (6credits)
 Elective***
Upper Division Gen. Ed. Coursework:
 300-/400-level course (Option D)

VCCS Equivalency:

**With at least three credits at the 400-level.

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

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

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

Concentration B (Professional) is designed for students who wish to create a specialized program of study which combines a strong foundation in physics with strong preparation in another field. Such other fields include engineering, medicine, computer science, business, and communications, to name a few.

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.

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.