

2017 - 2018 Old Dominion University Catalog
Bachelor of Science in Physics
(Concentration A - Research) (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 (26 CREDITS)

FALL SEMESTER (14 credits)

SPRING SEMESTER (12 credits)

General Education and Major Coursework:

MATH 211
 ENGL 110C
 CHEM 121N/122N*
 Oral Communication

VCCS Equivalency:

MTH 173, 263 or 273*
 ENG 111*
 CHM 111*

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General Education and Major Coursework:

MATH 212
 PHYS 261N
 CHEM 123N/124N*

VCCS Equivalency:

MTH 174, 264 or 274*
 See note below*
 CHM 112*

YEAR 2 - SOPHOMORE (30 CREDITS)

FALL SEMESTER (14 credits)

SPRING SEMESTER (16 credits)

General Education and Major Coursework:

ENGL 211C or 231C
 MATH 312 or 285
 PHYS 262N
 Information Literacy and Research: CS 120G or CS 121G

VCCS Equivalency:

ENG 112, 210, 115 or 131*
 MTH 265 or 277*
 See note below*

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General Education and Major Coursework:

Human Creativity
 Interpreting the Past
 PHYS 319
 PHYS 313+309
 MATH 307 or 280

VCCS Equivalency:

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 MTH 267 or 279*

YEAR 3 - JUNIOR (31 CREDITS)

FALL SEMESTER (15 credits)

SPRING SEMESTER (16 credits)

General Education and Major Coursework:

PHYS 355
 Literature
 PHYS 303
 PHYS 323
 Impact of Technology

VCCS Equivalency:

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General Education and Major Coursework:

MATH 316, 401, 421 or 422
 CS 150
 PHYS 413
 Human Behavior
 PHYS 454

VCCS Equivalency:

CSC 201 or EGR 126 *
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YEAR 4 - SENIOR (33 CREDITS)

FALL SEMESTER (16 credits)

SPRING SEMESTER (17 credits)

General Education and Major Coursework:

PHYS 425
 PHYS 452
 PHYS 420
 PHYS 489W
 Philosophy and Ethics

VCCS Equivalency:

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General Education and Major Coursework:

PHYS 453
 PHYS 456
 Select one of the following: PHYS 411, 415, 416 or 417
 PHYS 490W
 Elective**

VCCS Equivalency:

Upper Division Gen. Ed. Coursework:

300-/400-level course (Option D)

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Language and Culture is not included in this sample (6 credits). This requirement may be waived, see catalog for details.

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

Concentration A (Research) is designed primarily for students preparing to do graduate study in physics and related fields or for students preparing to work professionally upon completion of the B. S. degree in various technical fields requiring the strongest preparation in physics.

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.