

2017 - 2018 Old Dominion University Catalog

Bachelor of Science in Ocean, Earth and Atmospheric Sciences (Physical Oceanography Concentration)

Sample four year curriculum with a suggested ordering of courses. Students may re-order as needed.

YEAR 1 - FRESHMAN (34-37 CREDITS)

FALL SEMESTER (18 credits)

General Education and Major Coursework:

ENGL 110C
Language and Culture I (May be waived, see catalog for details)

CHEM 121N and 122N (4 credit)

MATH 211 (4 credits) – Calc I

BIOL 121N & 122N (4 credits) ,

SPRING SEMESTER (19 credits)

General Education and Major Coursework:

ENGL 211C or 231C
OEAS 111N (4 credits)- Phys Geol

CHEM 123N and 124N (4 credit)

MATH 212 (4 credits)- Calc II

BIOL 123N & 124N (4 credits)

YEAR 2 - SOPHOMORE (33 CREDITS)

FALL SEMESTER (16 credits)

General Education and Major Coursework:

Human Creativity
Literature
MATH 307 or MATH 280 – Ord. Diff. Eqs.
OEAS 310- Earth Sys.
PHYS 231 (4 credits)

SPRING SEMESTER (17 credits)

General Education and Major Coursework:

Interpreting the Past
Information Literacy and Research
STAT 310- Intro Data Analysis
OEAS 306 - Oceanography
PHYS 232N (4 credits)
OEAS 406 (1 credit) – Matlab

YEAR 3 - JUNIOR (30 CREDITS)

FALL SEMESTER (15 credits)

General Education and Major Coursework:

Human Behavior
GEOG 402 - GIS
OEAS 405 – Phys. Oceanog.
STAT 437- Regress. Analys.
Elective 300/400 level (see list Year-4)

SPRING SEMESTER (15 credits)

General Education and Major Coursework:

Impact of Technology
Philosophy and Ethics
OEAS 415 – Waves & Tides (or senior year)
PHYS 319 – Analytical Mech.
OEAS 451 – Data Coll. & Analysis

YEAR 4 - SENIOR (24-30 CREDITS)

FALL SEMESTER (12-15 credits)

OEAS 441 – Field Study I
Option-A : 2-3 from GEOG-404,419,432, OEAS 430,466, 495#
Option-C : 2-3 from CEE-205,330,482, MATH 401,408, OEAS 466, 495#

9-12 credit elective classes **:

GIS path: GEOG 404 – Remote Sensing

ENG path: CEE 330 – Hydromechanics (with CEE 205 in Jr. year)

MATH path: MATH 408 Numer. Methods

OEAS 430 – Intro to Geophysics

OEAS 495 – Ocean Obs. or Pale Ocean. or Optics/ 403 Pollution

Upper Division Gen. Ed. Coursework:

300-/400-level course (Option D)

SPRING SEMESTER (12-15 credits)

OEAS 442W – Field Study II
Option-B : 2-3 from MATH-401/408/457, OEAS 430, OEAS 495#

9-12 credit elective classes**:

GEOG 419 – Spatial Analys. or GEOG 432 – Advanced GIS

CEE 482 – Intro Coastal Eng.

MATH 401 – Par. Dif. Eqs., MATH 457 – Math in Nature

OEAS 495# (be replaced with perm. #) – Intro ocean Modeling

OEAS 495 – Weather, clim. & Soc. or OEAS 466 – Mitigation & adaptation

OEAS 444 – Communicating Ocean Sciences

**Please consult with your ODU advisor for appropriate 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.

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.