

2021 - 2022 Old Dominion University Catalog
Bachelor of Science in Physics and Electrical Engineering
Concentration D: Dual Degree Program with Electrical Engineering - 5 Year Plan (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 - (31 CREDITS)

FALL SEMESTER (15 credits)	SPRING SEMESTER (16 credits)
<u>General Education and Major Coursework:</u> ENGL 110C MATH 211 (4 credits) ENGN 110 (2 credits) Language and Culture I (May be waived, see catalog for details) Oral Communication: COMM 101R preferred	<u>VCCS Equivalency:</u> ENG 111* MTH 173, 263 or 273* EGR 121 or 120* Transfer Guide CST 100, 105 or 110
<u>General Education and Major Coursework:</u> ENGL 231C MATH 212 (4 credits) Human Creativity Language and Culture II (May be waived, see catalog for details) Human Behavior	<u>VCCS Equivalency:</u> ENG 115 or 131* MTH 174, 264, or 274* Transfer Guide Transfer Guide Transfer Guide

YEAR 2 - (32 CREDITS)

FALL SEMESTER (16 credits)	SPRING SEMESTER (16 credits)
<u>General Education and Major Coursework:</u> CHEM 121N and 122N (4 credits) MATH 312 or 285 (4 credits) PHYS 261N (4 credits) ENGN 150 or CS 150	<u>VCCS Equivalency:</u> CHM 111* MTH 265 or 277* See note below* EGR 126 or ITP 132 (all VCCS) or CSC 201 (only accepted from TCC, TNCC, PHCC or PDCCC)*
<u>General Education and Major Coursework:</u> CHEM 123N and 124N (4 credits) MATH 307 or 280 PHYS 262N (4 credits) ECE 201 ECE 111	<u>VCCS Equivalency:</u> CHM 112* MTH 267 or 279* See note below* EGR 260 or 271* EGR 122, or ITE 119

YEAR 3 - JUNIOR (30 CREDITS)

FALL SEMESTER (15 credits)	SPRING SEMESTER (15 credits)
<u>Major Coursework:</u> PHYS 323 ECE 202 ECE 287 (2 credits) ECE 241 (4 credits) Literature	<u>VCCS Equivalency:</u> EGR 261 or 272* EGR 262* EGR 270 or 277* Transfer Guide
<u>Major Coursework:</u> PHYS 319 PHYS 425 PHYS 413 ECE 332 PHY 355	<u>VCCS Equivalency:</u>

YEAR 4 - SENIOR (31 CREDITS)

FALL SEMESTER (15credits)	SPRING SEMESTER (16 credits)
<u>Major Coursework:</u> PHYS 454 PHYS 452 PHYS 420 ECE 302 ECE 387	<u>Major Coursework:</u> PHYS 453 or ECE 323** ECE 313 (4 credits) PHYS 499W or 489W & 490W** ECE 303 ECE 381
	<u>VCCS Equivalency:</u>

YEAR 5 - (34 CREDITS)

FALL SEMESTER (17 credits)	SPRING SEMESTER (17 credits)
<u>Major Coursework:</u> ECE Technical Elective I** ECE Technical Elective II** ENMA 480 (Meets Philosophy and Ethics requirement) ECE 485W ECE 486 (2 credits) ECE 304	<u>VCCS Equivalency:</u> ECE 487 (2 credits) ECE Technical Elective III** ECE Technical Elective IV** PHYS 411, 415, 416, or 417** Interpreting the Past
	<u>VCCS Equivalency:</u> Transfer Guide

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

The Impact of Technology requirement is met with the ECE major.

The Upper Division General Education will be satisfied by completion of the dual majors.

Concentration D is a five-year, dual degree program in physics and electrical engineering. Students will receive a B.S. and B.S.E.E. upon graduation. Concentration D provides the highest level of preparation for both graduate school and positions in industry.

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.

This five-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.