2016 - 2017 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).

YEAR 1 - (31 CREDITS)

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

YEAR 2 - (34 CREDITS)

FALL SEMESTER (16 credits)		SPRING SEMESTER (18 credits)	
General Education and Major Coursework:	VCCS Equivalency:	General Education and Major Coursework:	VCCS Equivalency:
CHEM 121N and 122N (4 credits)	CHM 111*	CHEM 123N and 124N (4 credits)	CHM 112*
Literature	Transfer Guide	Interpreting the Past	Transfer Guide
ECE 111 (Meets Information Literacy Requirement)	Dept. approval upon Admission	PHYS 232N (4 credits)	PHY 222, 232 or 242*
ECE 201	EGR 260 or 271*	ECE 202	EGR 261 or 272*
PHYS 231N (4 credits)	PHY 221, 231 or 241*	CS 150 (4 credits)	CSC 201 or EGR 126*

YEAR 3 - JUNIOR (31 CREDITS)

FALL SEMESTER (16 credits)		SPRING SEMESTER (15 credits)	
Major Coursework:	VCCS Equivalency:	Major Coursework:	VCCS Equivalency:
MATH 312 (4 credits)		PHYS 323	
MATH 307		PHYS 425	
ECE 287 (2 credits)	EGR 262*	PHYS 413	
PHYS 319		ECE 332	
ECE 241 (4 credits)	EGR 270 or 277*	MATH 316, 401, 421, or 422 or PHY 355	

YEAR 4 - SENIOR (31 CREDITS)

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

YEAR 5 - (32 CREDITS)

FALL SEMESTER (17 credits)		SPRING SEMESTER (15 credits)	
Major Coursework:	VCCS Equivalency:	Major Coursework:	VCCS Equivalency:
ECE Technical Elective I		PHYS 456	
ECE Technical Elective II		ECE Technical Elective III	
ENMA 480 (Meets Philosophy and Ethics requirement)		ECE 487 (2 credits)	
ECE 485W		Approved Physics Seminar (1 credit)	
ECE 486 (2 credits)		PHYS 411, 415, 416, or 417	
ECE 304		Approved Elective	

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

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.