

**2014 - 2015 Old Dominion University Catalog**  
**Bachelor of Science in Physics and Electrical Engineering**  
**(Concentration D: Dual Degree Program with Electrical Engineering - 5 Year Plan)**

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

**YEAR 1 - (31 CREDITS)**

**FALL SEMESTER (15 credits)**

General Education and Major Coursework:

MATH 211 (4 credits)  
 ENGL 110C  
 Language and Culture I  
 (May be waived, see catalog for details)  
 COMM 101R  
 ENGN 110 (2 credits)

**SPRING SEMESTER (16 credits)**

General Education and Major Coursework:

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

**YEAR 2 - (34 CREDITS)**

**FALL SEMESTER (16 credits)**

General Education and Major Coursework:

CHEM 121N and 122N (4 credits)  
 Literature  
 ECE 111 (2 credits)  
 ECE 201  
 PHYS 231 (4 credits)

**SPRING SEMESTER (18 credits)**

General Education and Major Coursework:

CHEM 123N and 124N (4 credits)  
 Interpreting the Past  
 PHYS 232N (4 credits)  
 ECE 202  
 CS 150 (4 credits)

**YEAR 3 - (41 CREDITS)**

**FALL SEMESTER (16 credits)**

Major Coursework:

MATH 312 (4 credits)  
 ECE 287 (2 credits)  
 ECE 241 (4 credits)  
 MATH 307  
 PHYS 319

**SPRING SEMESTER (16 credits)**

Major Coursework:

PHYS 303 or ECE 287  
 PHYS 323  
 PHYS 425  
 ECE 313 (4 credits)  
 ECE 332

**YEAR 4 - (30 CREDITS)**

**FALL SEMESTER (15 credits)**

Major Coursework:

PHYS 452  
 PHYS 454  
 PHYS 420  
 ECE 381  
 ECE 387

**SPRING SEMESTER (15 credits)**

Major Coursework:

PHYS 453  
 PHYS 456  
 PHYS 499W or 489W and 490W  
 ECE 302  
 ECE 303

**YEAR 5 - (28 CREDITS)**

**FALL SEMESTER (16 credits)**

Major Coursework:

ECE Technical Elective I  
 ENMA 480  
 Approved Elective  
 ECE 485W  
 ECE 486 (1 credit)  
 ECE 304

**SPRING SEMESTER (12 credits)**

Major Coursework:

ECE Technical Elective II  
 ECE Technical Elective III  
 ECE 487 (2 credits)  
 Approved Physics Seminar (1 credit)  
 PHYS 411, 415, 416 or 417

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

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

Concentration D is a 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.