

2024 - 2025 Old Dominion University Catalog

Electrical Engineering (BSEE) Dual Degree with Modeling & Simulation Engineering (BSCE) (with VCCS Equivalencies)

The four-year plan is a suggested curriculum to complete this degree program in five 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. Students seeking two degrees must complete a minimum of 150 credit hours.

| YEAR 1 - FRESHMAN (30 CREDITS) | | | |
|--|--|--|--|
| FALL SEMESTER (15 credits) | | SPRING SEMESTER (15 credits) | |
| <u>General Education and Major Coursework:</u> | <u>VCCS Equivalency:</u> | <u>General Education and Major Coursework:</u> | <u>VCCS Equivalency:</u> |
| ENGN 121 | (EGR 121 + ITE 152)* or waived w/ AS | COMM 101R | Transfer Equivalency Guide |
| CHEM 121N/122N** | CHM 111 or (CHEM 111 +112+ 113)* | MATH 212 | MTH 174, 264, or 274* |
| MATH 211 | MTH 173, (MTH 175 + 176), 263, or 273* | ENGN 122 | EGR 125 or 126* |
| ENGL 110C | ENG 111 or ENGL 114* | PHYS 231N | PHY 221, 231, or 241* |

| YEAR 2 - SOPHOMORE (35 CREDITS) | | | |
|--|--|--|-----------------------------------|
| FALL SEMESTER (19 credits) | | SPRING SEMESTER (16 credits) | |
| <u>General Education and Major Coursework:</u> | <u>VCCS Equivalency:</u> | <u>General Education and Major Coursework:</u> | <u>VCCS Equivalency:</u> |
| MATH 307 (280) | MTH 267, 279, 289 or 291* | ECE 202 | See below* |
| ECE 201 | See below* | ECE 287 | See below* |
| CS 381 | MTH 288* | ECE 241 | EGR 265 (NOVA only), 270, or 277* |
| PHYS 232N | PHY 222, 232 or 242* | MATH 312 (285) | MATH 265, 275 or 277* |
| ENGL 231C | ENG 113, 115, 131, or 137* | ECE 250 | CS 210 or ITP 232* |
| Human Creativity | Transfer Equivalency Guide | | |

| YEAR 3 - JUNIOR (35 CREDITS) | | | |
|--|--|--|--------------------------|
| FALL SEMESTER (16 credits) | | SPRING SEMESTER (19 credits) | |
| <u>General Education and Major Coursework:</u> | <u>VCCS Equivalency:</u> | <u>General Education and Major Coursework:</u> | <u>VCCS Equivalency:</u> |
| ECE 302 | | ECE 313 | |
| ECE 304 | | ECE 346 | |
| ECE 461 | | ECE 381 | |
| ECE 341 | | ECE 451 | |
| CS 261 | | ECE 306 | |
| Interpreting the Past | Transfer Equivalency Guide | ECE 320 | |

| YEAR 4 - SENIOR (34 CREDITS) | | | |
|------------------------------|--------------------------|--|--|
| FALL SEMESTER (17 credits) | | SPRING SEMESTER (17 credits) | |
| <u>Major Coursework:</u> | <u>VCCS Equivalency:</u> | <u>General Education and Major Coursework:</u> | <u>VCCS Equivalency:</u> |
| ECE 323 | | ECE 482 | |
| ECE 332 | | ENMA 410 | |
| ECE 406 | | ENMA 480 | |
| ECE 481W | | ECE 4XX*** | |
| ECE 303 | | Human Behavior | Transfer Equivalency Guide |
| ECE 348 | | Literature | Transfer Equivalency Guide |

TOTAL CREDIT HOURS: 138

This 4-year plan does not include 6 credits in Language and Culture, but this requirement may be waived; see ODU catalog for details. The General Education requirements in Information Literacy and Research, Impact of Technology, and Philosophy and Ethics are met through the major.

Electrical & Computer Engineering majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

***Electrical & Computer Engineering students pursuing the double major/degree need their final technical elective course to be a 400-level ECE technical elective course.

Requirements for graduation include a minimum cumulative grade point average of 2.00 overall and in the major and 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 231C, and a writing intensive (W) course in the major with a grade of C or better, and completion of Senior Assessment.

VCCS Equivalencies Continued

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| (ECE 201, 202 & 287) = (EGR 271 + 272) | ECE 202 = EGR 252, EGR 261, EGR 272 |
| ECE 201 = EGR 260, EGR 271 | ECE 287 = (EGR 255 +261) GCC only |
| ECE 201 = EGR 251 (Brightpoint CC/NOVA/GCC/PVCC only) | ECE 287 = (EGR 255 + 263) Brightpoint CC only |
| | ECE 287 = EGR 262 |