2024 - 2025 Old Dominion University Catalog
Bachelor of Science in Computer Engineering -
Modeling & Simulation Engineering (BSCE) (with 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). AS in Engineering is recommended for ease of transfer.

YEAR 1 - FRESHMAN (33 CREDITS)

FALL SEMESTER (15 credits)		SPRING SEMESTER (15 credits)	
General Education and Major Coursework:	VCCS Equivalency:	General Education and Major Coursework:	VCCS Equivalency:
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 (32 CREDITS)

FALL SEMESTER (17 credits)		SPRING SEMESTER (15 credits)	
General Education and Major Coursework:	VCCS Equivalency:	General Education and Major Coursework:	VCCS Equivalency:
MATH 307 (280)	MTH 267, 279, 289 or 291*	ECE 202	See Below*
ECE 201	See Below*	ECE 287	See Below*
ECE 241	EGR 265 (NOVA only), 270, or 277*	ENGL 231C	ENG 113, 115, 131, or 137*
PHYS 232N	PHY 222, 232 or 242*	CS 381	MTH 288*
ECE 250	CS 210 or ITP 232*	CS 261	
		Literature	Transfer Equivalency Guide

YEAR 3 - JUNIOR (30 CREDITS)

FALL SEMESTER (15 credits)		SPRING SEMESTER (15 credits)	
General Education and Major Coursework:	VCCS Equivalency:	General Education and Major Coursework:	VCCS Equivalency:
ECE 302		ECE 346	
ECE 304		ECE 348	
ECE 306		ECE 320	
ECE 341		ECE 381	
Interpreting the Past	Transfer Equivalency Guide	Upper Division General Education**	

YEAR 4 - SENIOR (31 CREDITS)

FALL SEMESTER (15 credits)		SPRING SEMESTER (15 credits)	
General Education and Major Coursework:	VCCS Equivalency:	General Education and Major Coursework:	VCCS Equivalency:
ECE 481W		ECE 482	
ECE 406		Technical Elective***	
Technical Elective***		ENMA 410	
ENMA 480		Human Behavior	Transfer Equivalency Guide
Human Creativity	Transfer Equivalency Guide	Upper Division General Education**	

TOTAL CREDIT HOURS: 122

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 four-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.

The General Education requirements in Information Literacy and Research, Impact of Technology, and Philosophy and Ethics are met through the major.

Modeling & Simulation Engineering majors (BSCOME) 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.

^CHEM 120 is the equivalent to CHEM 122N for Online students only.

**Upper Division General Education *(choose 1)*
Option D: 6 hours of elective upper-division work from outside of and not required by the student's major and college.
Option A: Any University-approved minor (minimum of 12 hours determined by the department), second degree, or second major
Option B: Any University-approved interdisciplinary minor (specifically 12 hours, 3 can be in the major)

***Computer Engineering-Modeling & Simulation Engineering major students need two technical elective courses selected from one of two options: (1) three 400-level ECE technical elective courses; and (2) two 400-level ECE technical elective courses and one 300-level ECE technical elective course or one approved 300- or 400-level CS/MATH/ENGN 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
(ECE 201, 202 & 287) = (EGR 271 + 272)
ECE 201 = EGR 260 or EGR 271
ECE 201 = EGR 251 (Brightpoint CC/NOVA/GCC/PVCC only)
ECE 202 = EGR 252, EGR 261, EGR 272
ECE 287 = (EGR 255 +261) GCC only
ECE 287 = (EGR 255 + 263) Brightpoint CC only
ECE 287 = EGR 262