2023 - 2024 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 (16 credits)		SPRING SEMESTER (17 credits)	
General Education and Major Coursework:	VCCS Equivalency:	General Education and Major Coursework:	VCCS Equivalency:
ENGN 110	EGR 120, 121, 122, 124*	ECE 111	ITE 119*
CHEM 121N/122N	CHM 111*	CHEM 123N	CHM 112*
MATH 211	MTH 173, 263, or 273*	MATH 212	MTH 174, 264, or 274*
ENGL 110C (C or better required)	ENG 111*	ENGN 150	EGR 125 or 126*
COMM 101R	CST 100 or 105*	PHYS 231N	PHY 221, 231 or 241*

YEAR 2 - SOPHOMORE (33 CREDITS)

FALL SEMESTER (17 credits)		SPRING SEMESTER (16 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**	EGR 261 or 272*
ECE 201**	EGR 260 or 271*	ECE 287**^	EGR 262 or EGR 271 + 272*
ECE 241**	EGR 265, 270, or 277*	CS 250	CSC 210 or ITP 232*
PHYS 232N	PHY 222, 232 or 242*	CS 252	ITN 171 or 271*
ENGL 211C or 231C (C or better required)	ENG 112, 113, 115, 131, or 137*	CS 381	MTH 288*
		Literature	Transfer Equivalency Guide

YEAR 3 - JUNIOR (31 CREDITS)

FALL SEMESTER (16 credits)		SPRING SEMESTER (15 credits)	
General Education and Major Coursework:	VCCS Equivalency:	General Education and Major Coursework:	VCCS Equivalency:
ECE 302		ECE 346	
ECE 313		ECE 348	
ECE 341		ECE 320	
ECE 306		ENMA 480 (Satisfies Philosophy and Ethics)	
ECE 304		Interpreting the Past	Transfer Equivalency Guide

YEAR 4 - SENIOR (31 CREDITS)

FALL SEMESTER (17 credits)		SPRING SEMESTER (14 credits)	
General Education and Major Coursework:	VCCS Equivalency:	General Education and Major Coursework:	VCCS Equivalency:
ECE 484W (C or better required)		ECE 487 (2 credits)	
ECE 486 (2 credits)		ECE Technical Elective	
ECE Technical Elective		ECE Technical Elective	
ECE 406		Human Behavior	Transfer Equivalency Guide
Human Creativity	Transfer Equivalency Guide	Upper Division General Education	
Upper Division General Education			

TOTAL CREDIT HOURS: 128

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.

The Upper Division General Education requirement is met through the built-in minor in Computer Science.

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.

* C or better required for transfer.

**From John Tyler Community College only: EGR 251 = ECE 201; EGR 261 = ECE 202; EGR 255 + EGR 263 = ECE 287
 & from Germanna Community College: EGR 251 = ECE 201; EGR 252 = ECE 202; EGR 255 + EGR 261 = ECE 287
 & from Northern Virginia Community College: EGR 251 = ECE 201; EGR 252 = ECE 202; EGR 265 = ECE 241

^ EGR 271 (4 cr) + EGR 272 (4 cr) = ECE 201 (3 cr) + ECE 202 (3 cr) + ECE 287 (2 cr) requirements. Both EGR 271 & EGR 272 must be completed to receive credit for ECE 287.

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.