

2025 - 2026 Old Dominion University Catalog

Computer Engineering (BSCE) Dual Degree with Cyber Operations (BS Cybersecurity) (with VCCS Equivalencies)

The five-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.

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*	MATH 212	MTH 264*
MATH 211	MTH (MTH 261+262) or 263*	ENGN 122	EGR 125, 126 or CSC 221*
ENGL 110C	ENG 111 or ENGL 114*	PHYS 231N	PHY 241*
YEAR 2 - SOPHOMORE (33 CREDITS)			
FALL SEMESTER (17 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 or 289 *	ECE 202	See Below*
ECE 201	See Below*	ECE 287	See Below*
ECE 241	EGR 265 (NOVA only), 270, or 277*	CS 261	
PHYS 232N	PHY 242*	CS 252	ITN 171*
ECE 250	CSC 210 or ITP 232*	CS 381	CSC 208 or MTH 288*
		CYSE 200T	
		ENGL 211C	ENG 112 or ENGL 115*
YEAR 3 - JUNIOR (31 CREDITS)			
FALL SEMESTER (15 credits)		SPRING SEMESTER (17 credits)	
<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>	<u>General Education and Major Coursework:</u>	<u>VCCS Equivalency:</u>
ECE Elective: (ECE 302, ECE 306, ECE 314, or ECE 350)		ECE 304	
ECE 355		ECE 346	
ECE 341		ECE 381	
CS 361	CSC 223* (PVCC only)	CS 330 or CS 350	
CRJS 215S or SOC 201S	*See Below	ENMA 480	
		ECE 342	
YEAR 4 - SENIOR (27 CREDITS)			
FALL SEMESTER (12 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>
ECE 481W		ECE 482	
CYSE 301		ECE 419	
ECE 443		ECE 455	
CS 471		CYSE 406 or CRJS 406	
		Interpreting the Past	Transfer Equivalency Guide
YEAR 5 (33 CREDITS)			
FALL SEMESTER (18 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>
ECE 416		CS 390	
CYSE 425W		CS 466	
CS 467		CYSE 368 or CYSE 494	ITN 290
ECE 470		PHIL 355E	
Cyber Approved Program Elective		Literature	Transfer Equivalency Guide
Human Creativity	Transfer Equivalency Guide		
TOTAL CREDIT HOURS: 158			

[This 4-year plan does not include 6 credits in Language and Culture, but this requirement may be waived; see ODU catalog for details.](#)

Students seeking two degrees must complete a minimum of 150 credit hours.

Minor: This program automatically satisfies a minor in Computer Science.

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 and through the completion of a second major/degree.

Computer Engineering and Cyber Operations 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.

ENGN 121 and other ECE required courses satisfy the Cyber Operations Information Literacy & Research requirement. ENGN 122 satisfies the CS 150 requirement in Cyber Operations curriculum. ECE 346 satisfies the CS 170 requirement in Cyber Operations curriculum. ECE 443 satisfies the CS 270 requirement in Cyber Operations curriculum. ECE 416, ECE 419, and ECE 455 are required courses for CyOps curriculum & Technical electives for CpE curriculum.

Cyber Approved Program Elective remaining options: CS 476, CYSE 407, ECE 483, and IT 417.

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.

* C or better required for transfer.

** CHEM 120 is for online program students only