

2023 - 2024 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 (33 CREDITS)

FALL SEMESTER (16 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>
ENGN 110	EGR 120, 121, 122, 124*	ECE 111	ITE 119*
CHEM 121N/122N or CHEM 120**	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)	
<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***	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 or 251	CSC 210 or ITP 232*
PHYS 232N	PHY 222, 232 or 242*	CS 252	ITN 171 or 271*
CYSE 200T		CS 381	MTH 288*
		ENGL 211C or 231C (C or better required)	ENG 112, 113, 115, 131, or 137*

YEAR 3 - JUNIOR (31 CREDITS)

FALL SEMESTER (16 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 302		ECE 304	
ECE 313		ECE 346	
ECE 341		ECE 381	
CS 361		CS 350	
CRJS 215S or SOC 201S	ADJ 107, 201; SOC 200, 201, 202, 236; SOCI 104, 105, 106, 188; SSC 205	ENMA 480 (Satisfies Philosophy and Ethics)	

YEAR 4 - SENIOR (31 CREDITS)

FALL SEMESTER (14 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 484W (C or better required)		ECE 487	
ECE 486		ECE 419	
ECE 443		ECE 455	
CYSE 301		CS 471	
ECE 355		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	
ECE 470 or MSIM 470		PHIL 355E	
Cyber Approved Program Elective		Literature	Transfer Equivalency Guide
Human Creativity	Transfer Equivalency Guide		

TOTAL CREDIT HOURS: 161

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 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.

ECE 111 and other ECE required courses satisfy the Cyber Operations Information Literacy & Research requirement. ENGN 150 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 419, ECE 455, & ECE 416 are required for the Cyber Operations curriculum and ECE Technical Electives for Computer Engineering curriculum.

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

* C or better required for transfer.

** CHEM 120 is for online program students only

***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

& from Virginia Peninsula Community College: CSC 202 = CS 250

^ 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.