2015-2016 Old Dominon University Catalog Bachelor of Science-Interdisciplinary Studies (Cyber Security)

This is a sample four year curriculum with a suggested ordering of courses. Students have the flexibility of re-ordering as needed.

This is an Interdisciplinary Studies Bachelor of Science degree with a Major in Cybersecurity, not an Engineering degree.

*Indicates not automatically waived with transferrable associates degree, C or better required for transfer.

YEAR 1 - FRESHMAN (30-31 CREDITS)			
FALL SEMESTER (16 credits)		SPRING SEMESTER (14-15 credits)	
Lower Division General Education Coursework: Written Communication I (ENGL 110C)	VCCS Equivalency: ENG 111*	Lower Division General Education Coursework: Written Communication II (ENGL 231C)	VCCS Equivalency: ENG 115 or 131*
Oral Communication (COMM 101R)	CST 100, 105 or 110*	Nature of Science I (PHYS 231N preferred- or PHYS 111N also accepted)	PHY 231 or 241; or 111 or 121*
Info. Literacy and Research	Transfer Guide		
Human Behavior (CRJS 215S or SOC 201S)	<u>Transfer Guide</u>	Major Coursework:	
Major Coursework:		MATH 212: Calculus II	MTH 174 or 274*
MATH 211: Calculus I (Satisfies Mathematics)	MTH 173 or 273*	Choose One:	000 004 040
		IT 210: Business Applications w/C++	CSC 201, 210, EGR 125 or EGR 126*
	YEAR 2 - SOPHOMORI	CS 150: Problem Solving & Programming 1 F (30-31 CREDITS)	EGN 123 01 EGN 120
FALL SEMESTER (15-16 credits)		SPRING SEMESTER (15 credits)	
Lower Division General Education Coursework:	VCCS Equivalency:	Lower Division General Education Coursework:	VCCS Equivalency:
Literature Nature of Science II (PHYS 232N preferred-or PHYS	Transfer Guide	Interpreting the Past	Transfer Guide
112N also accepted)	PHY 232 or 242; or PHYS 112 or 122*	Major Coursework:	
Major Coursework:		CS 381 Discrete Math	
Choose One:		Choose One:	
CS 250: Problem Solving & Programming	CSC 202 or 210*	CS 270: Comp Architecture	CSC 206 or 215*
IT 310: GUI Programming C++		IT 317: Princ of Technology Architecture	
Choose One:	050 005*	Choose One:	
CS 170: Intro. Comp. Architecture	CSC 205* ITE 120*	STAT 330: Intro. to Prob/Stat	
IT 201: Intro. to Info. Systems	EGR 277*	ECE 304: Prob/Stat/Reliability	BUS 216*
FCF 241: Fund. Comp. Engineering CS 252 Intro Unix for Programmers	ITN 171 and 172*	BNAL 206: Business Analytics Choose One:	503 210
		CS 361: Adv Data Structures & Algorithms	
		CS 330: Obj Oriented Programming & Design	
		IT 430: OO Programming Java	
YEAR 3 -JUNIOR (30 CREDITS)			
FALL SEMESTER (15 credits)		SPRING SEMESTER (15 credits)	
Lower Division General Education Coursework: ENGL/IDS 307T: Digital Writing	VCCS Equivalency:	Lower Division General Education Coursework:	VCCS Equivalency:
(satisfies Impact of Technology and IDS Core)		Human Creativity	<u>Transfer Guide</u>
Major Coursework:		Philosphy and Ethics (PHIL 230E or 250E)	<u>Transfer Guide</u>
Choose One:*		*Approved elective if PHIL 355E was selected	
PHIL 355E: Computer Ethics			
CRJS 405: Cvber Crime and Cvbersecurity		Major Coursework:	
IDS 300W (IDS Core Course required)		IT 450 Database Concepts	
Choose One:		ECE 346 Microcontrollers	
ECE 355 Intro Networks & Data Comms			
CS 455 Intro Networks & Comms			
IT 361 Systems Analysis		Cyber Foundations**	
YEAR 4 - SENIOR (30 CREDITS)			
FALL SEMESTER (15 cred	·	SPRING SEMESTER (15 credi	•
Major Coursework:	VCCS Equivalency:	Major Coursework:	VCCS Equivalency:
Cyber Foundations** Cyber Foundations**		Cyber Applications**	
Cyber Foundations** Cyber Foundations**		Cyber Applications** Cyber Applications**	
Cyber Applications**			
Cyper Applications		IDS Core Course (either 368 or 493)	

Total Credit hours: 120-122

Upper Division Gen. Ed. Coursework***:

Approved 300-/400-level course

<u>Please Note:</u> This curriculum sheet does <u>not</u> include the University's General Education Language and Culture requirement which will entail an additional six credit hours if it has not been met through high school coursework.

Upper Division Gen. Ed. Coursework***:

Approved 300-/400-level course

^{*} If CRJS 405 is taken, the Lower Division General Education requirement for the E course must still be completed (PHIL 230E, 250E or 355E).

^{**} From approved list -- please see list in catalog and consult with advisor.

^{***}Upper Division General Education requirement can be met thru Option A- Minor in Computer Science IF the student chooses the following CS courses: 150, 250, 252, 361 (or 330) and six hours of CS at 400 level.