2016-2017 Old Dominon University Catalog

Bachelor of Science-Interdisciplinary Studies: Cyber Security

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

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

NOTE: This is a " sample" four year curricult	-	FRESHMAN (30-31 CREDITS)		
CALL SENALSTED (16 and its)			Cuedite	
FALL SEMESTER (16 credits)	Credits	SPRING SEMESTER (14-15 credits)	Credits	SUMMER
Lower Division General Education Coursework:	2	Lower Division General Education Coursework:	3	
Written Communication I (ENGL 110C)	3	Written Communication II (ENGL 231C	3	
Oral Communication	3	recommended)		
Info. Literacy and Research	3	Nature of Science I (must be in sequence)	4	
Human Behavior (CRJS 215S or SOC 201S)	3	Major Coursework:		
Major Coursework:	5	MATH 212: Calculus II	4	
MATH 211: Calculus I (Satisfies Mathematics)	4	Choose One:	Γ	
	•	IT 210: Business Applications w/C++ OR	3 or 4	
		CS 150: Problem Solving & Programming 1	5 01 1	
•	/EAR 2 - S	OPHOMORE (30-31 CREDITS)		
FALL SEMESTER (15-16 credits)		SPRING SEMESTER (15 credits)	Credits	SUMMER
Lower Division General Education Coursework:	ereunto	Lower Division General Education Coursework:	erealto	001111211
Literature	3	Interpreting the Past	3	
Nature of Science II (must be in sequence)	4	Major Coursework:	U	
	•	CS 381: Discrete Math	3	
Major Coursework:		CS 361: Advanced Data Structures & Algorithms	3	
		Choose One:		
		CS 270: Comp Architecture		
CS 252 Intro Unix for Programmers	1	ECE 341: Digital System Design	3	
Choose One:	٦	IT 317: Princ of Technology Architecture Choose One:	-	
CS 250: Problem Solving & Programming	3 or 4	STAT 330: Intro. to Prob/Stat	3	
6 6 6	5014		5	
IT 310: GUI Programming C++ Choose One:	-	ECE 304: Prob/Stat/Reliability		
CS 170: Intro. Comp. Architecture	3 or 4	BNAL 206: Probability, Decision Analysis, & Business		
	5014	Statistics		
ECE 241: Fund. Comp. Engineering	YFAR	3 -JUNIOR (30 CREDITS)		
FALL SEMESTER (15 credits)		SPRING SEMESTER (15 credits)	Cradits	SUMMER
Major Coursework:	cicuits	Lower Division General Education Coursework:	cicuits	SOMMEN
ENGL/IDS 307T: Digital Writing	3	Lower Brision General Eddeation Courseworks		
(Satisfies Impact of Technology and IDS Core)	5			
(Satisfies impact of recimology and ibs core)		Philosphy and Ethics (Can be met by PHIL 355E)	3	
	2			
IDS 300W: Interdisciplinary Theory & Concepts	3	Human Creativity	3 3	
IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis	3 3			
IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics):	3	Human Creativity <u>Major Coursework:</u>	3	
IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics): CRJS 405: Cyber Crime and Cybersecurity*		Human Creativity		
IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics):	3	Human Creativity <u>Major Coursework:</u> IT 450 Database Concepts	3	
IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics): CRJS 405: Cyber Crime and Cybersecurity* PHIL 355E: Computer Ethics	3	Human Creativity <u>Major Coursework:</u>	3	
IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics): CRJS 405: Cyber Crime and Cybersecurity* PHIL 355E: Computer Ethics Choose One:	3	Human Creativity <u>Major Coursework:</u> IT 450 Database Concepts ECE 346 Microcontrollers	3 3 3	
IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics): CRJS 405: Cyber Crime and Cybersecurity* PHIL 355E: Computer Ethics Choose One: ECE 355: Intro Networks & Data Comms	3	Human Creativity <u>Major Coursework:</u> IT 450 Database Concepts	3	
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IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics): CRJS 405: Cyber Crime and Cybersecurity* PHIL 355E: Computer Ethics Choose One: ECE 355: Intro Networks & Data Comms CS 455: Intro Networks & Comms	3 3 3 YEAR	Human Creativity <u>Major Coursework:</u> IT 450 Database Concepts ECE 346 Microcontrollers Cyber Foundations** 4 - SENIOR (30 CREDITS)	3 3 3 3	
IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics): CRJS 405: Cyber Crime and Cybersecurity* PHIL 355E: Computer Ethics Choose One: ECE 355: Intro Networks & Data Comms CS 455: Intro Networks & Comms FALL SEMESTER (15 credits)	3 3 3 YEAR	Human Creativity <u>Major Coursework:</u> IT 450 Database Concepts ECE 346 Microcontrollers Cyber Foundations** 4 - SENIOR (30 CREDITS) SPRING SEMESTER (15 credits)	3 3 3 3	SUMMER
IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics): CRJS 405: Cyber Crime and Cybersecurity* PHIL 355E: Computer Ethics Choose One: ECE 355: Intro Networks & Data Comms CS 455: Intro Networks & Comms FALL SEMESTER (15 credits) Major Coursework:	3 3 3 YEAR Credits	Human Creativity Major Coursework: IT 450 Database Concepts ECE 346 Microcontrollers Cyber Foundations** 4 - SENIOR (30 CREDITS) SPRING SEMESTER (15 credits) Major Coursework:	3 3 3 3 Credits	SUMMER
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IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics): CRJS 405: Cyber Crime and Cybersecurity* PHIL 355E: Computer Ethics Choose One: ECE 355: Intro Networks & Data Comms CS 455: Intro Networks & Comms FALL SEMESTER (15 credits) Major Coursework: Cyber Foundations** Cyber Foundations**	3 3 3 YEAR Credits 3 3	Human Creativity Major Coursework: IT 450 Database Concepts ECE 346 Microcontrollers Cyber Foundations** 4 - SENIOR (30 CREDITS) SPRING SEMESTER (15 credits) Major Coursework: Cyber Applications** Cyber Applications**	3 3 3 3 Credits 3 3	SUMMER
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IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics): CRJS 405: Cyber Crime and Cybersecurity* PHIL 355E: Computer Ethics Choose One: ECE 355: Intro Networks & Data Comms CS 455: Intro Networks & Comms FALL SEMESTER (15 credits) Major Coursework: Cyber Foundations** Cyber Foundations** Cyber Foundations** Cyber Foundations**	3 3 3 YEAR Credits 3 3	Human Creativity Major Coursework: IT 450 Database Concepts ECE 346 Microcontrollers Cyber Foundations** 4 - SENIOR (30 CREDITS) SPRING SEMESTER (15 credits) Major Coursework: Cyber Applications** Cyber Applications** Cyber Applications** IDS 368 or 493	3 3 3 3 Credits 3 3	SUMMER
IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics): CRJS 405: Cyber Crime and Cybersecurity* PHIL 355E: Computer Ethics Choose One: ECE 355: Intro Networks & Data Comms CS 455: Intro Networks & Comms FALL SEMESTER (15 credits) Major Coursework: Cyber Foundations** Cyber Foundations** Cyber Foundations** Cyber Foundations** Cyber Applications**	3 3 3 YEAR Credits 3 3 3	Human Creativity Major Coursework: IT 450 Database Concepts ECE 346 Microcontrollers Cyber Foundations** 4 - SENIOR (30 CREDITS) SPRING SEMESTER (15 credits) Major Coursework: Cyber Applications** Cyber Applications** Cyber Applications** LDS 368 or 493 Upper Division Gen. Ed. Coursework***:	3 3 3 3 Credits 3 3 3 3	SUMMER
IDS 300W: Interdisciplinary Theory & Concepts IT 361: Systems Analysis Choose One (Law and Ethics): CRJS 405: Cyber Crime and Cybersecurity* PHIL 355E: Computer Ethics Choose One: ECE 355: Intro Networks & Data Comms CS 455: Intro Networks & Comms FALL SEMESTER (15 credits) Major Coursework: Cyber Foundations** Cyber Foundations** Cyber Foundations** Cyber Foundations**	3 3 3 YEAR Credits 3 3 3	Human Creativity Major Coursework: IT 450 Database Concepts ECE 346 Microcontrollers Cyber Foundations** 4 - SENIOR (30 CREDITS) SPRING SEMESTER (15 credits) Major Coursework: Cyber Applications** Cyber Applications** Cyber Applications** IDS 368 or 493	3 3 3 3 Credits 3 3 3 3	SUMMER

<u>Please Note:</u> This curriculum sheet does <u>not</u> include the University's General Education Language and Culture requirement.

* 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.