

CYBERSECURITY (B.S.)

Degree: Bachelor of Science

Major: Cybersecurity

Concentration: None

Total Hours: 120

Code	Title	Hours
General Education Core Curriculum		
<i>Communication</i>		
ENGL 1301	Composition I	3
Select one of the following:		3
COMM 1315	Public Speaking I	
COMM 1321	Business and Professional Speech	
DSDE 1371	ASL I	
ENGL 1302	Composition II	
FREN 1311	Beginning French I	
SPAN 1311	Beginning Spanish I	
<i>Mathematics</i>		
MATH 2413	Calculus and Analytical Geometry I	4
<i>Life and Physical Sciences</i>		
Select two from the following:		8
BIOL 1406	General Biology I (Majors)	
BIOL 1407	General Biology II (Majors)	
CHEM 1311	General Chemistry I	
& CHEM 1111	and General Chemistry I Laboratory	
CHEM 1312	General Chemistry II	
& CHEM 1112	and General Chemistry II Laboratory	
PHYS 2425	University Physics I	
PHYS 2426	University Physics II	
<i>Language, Philosophy and Culture</i>		
Select three hours from the following:		3
DSDE 1374	Introduction to Deaf Studies	
ENGL 2300	Close Reading II	
ENGL 2322	British Literature	
ENGL 2326	American Literature	
ENGL 2331	World Literature	
ENGL 2376	African-American Literature	
FREN 2312	Intermediate French II	
PHIL 1370	Philosophy of Knowledge	
PHIL 2306	Ethics	
SPAN 2312	Intermediate Spanish II	
<i>Creative Arts</i>		
Select three hours from the following:		3
ARTS 1301	Art Appreciation	
ARTS 1303	Art History I	
COMM 1375	Film Appreciation	
COSC 1324	The Art of Computer Game Development	
DANC 2304	Dance Appreciation	
MUSI 1306	Music Appreciation	
MUSI 1309	Jazz History and Appreciation	

MUSI 1310	History of Rock and Roll	
PHIL 1330	Arts and Ideas	
THEA 1310	Theatre Appreciation	
<i>American History</i>		
Select six hours from the following:		6
HIST 1301	U S History I 1763-1877	
HIST 1302	U S History II Since 1877	
HIST 2301	Texas History	
<i>Government/Political Science</i>		
POLS 2301	Intro to American Government I	3
POLS 2302	Intro/American Government II	3
<i>Social and Behavioral Sciences</i>		
Select three hours from the following:		3
ANTH 2346	Introduction to Anthropology	
ANTH 2351	Cultural Anthropology	
BULW 1370	Business Environment and Public Policy	
CRIJ 1301	Intro to Criminal Justice	
ECON 1301	Principles and Policies	
ECON 2301	Principles of Economics I Macro	
ECON 2302	Principles of Economics II Micro	
FINC 2310	Intro to Consumer Finance	
INEN 2373	Engineering Economics	
PSYC 2301	General Psychology	
PSYC 2315	Lifespan Development	
POLS 1301	Intro to Political Science	
SOCI 1301	Introduction to Sociology	
SOWK 2361	Intro Social Work	
<i>Component Area Option</i>		
ENGL 1302	Composition II	3
MATH 2414	Calculus and Analytical Geometry II	4
Required Major Courses		
<i>Major Courses</i>		
COSC 1172	Thinking, Speaking, and Writing	1
COSC 1173	Programming Lab	1
COSC 1174	Fundamentals of Computing II Lab	1
COSC 1336	Programming Fundamentals I	3
COSC 1337	Programming Fundamentals II	3
COSC 2336	Programming Fundamentals III	3
COSC 2372	Computer Organization Assembly Language	3
COSC 2375	Discrete Structures	3
COSC 3302	Intro to Computer Theory	3
COSC 3304	Algorithms Design and Analysis	3
COSC 3308	Design Programming Languages	3
COSC 3325	Computer Law and Ethics	3
COSC 4272	Senior Assessment	2
COSC 4302	Operating Systems	3
COSC 4310	Introduction to Computer Architecture	3
COSC 4345	Cybersecurity Networks	3
CPSC 4317	Computer Networks	3
CPSC 4340	Database Design	3
CPSC 4355	Data Mining	3
CPSC 4360	Software Engineering	3

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CPSC 4361	Secure Software Engineering	3
CPSC 4363	Cybersecurity: Systems	3
MATH 2318	Linear Algebra	3
MATH 3370	Introduction to the Theory of Statistical Inference	3
CRIJ 4333	Cybercrime	3
or COSC 4365	Computer Crime Analysis	
MATH 3322	Introduction to Advanced Mathematics	3
or MATH 2415	Calculus III	
Electives		
Select three hours from the following:		3
COSC 4301	Special Topics	
CPSC 4326	Android Programming	
CPSC 4370	Artificial Intelligence	
CRIJ 4313	Contemporary Issues in Criminal Justice	
Total Hours		120

¹ If these science courses are selected, they must be accompanied by the corresponding 1-hour laboratory course (CHEM 1111 General Chemistry I Laboratory and CHEM 1112 General Chemistry II Laboratory). These additional hours will be applied to the 120-hour requirement for the major.

Course	Title	Hours
First Year		
Fall		
COSC 1336	Programming Fundamentals I	3
COSC 1173	Programming Lab	1
COSC 1172	Thinking, Speaking, and Writing	1
MATH 2413	Calculus and Analytical Geometry I	4
HIST 1301	U S History I 1763-1877	3
ENGL 1301	Composition I	3
Hours		15
Spring		
COSC 1337	Programming Fundamentals II	3
ENGL 1302	Composition II	3
COSC 1174	Fundamentals of Computing II Lab	1
Communication		3
Select four lab science hours from the following:		4
BIOL 1406	General Biology I (Majors)	
PHYS 2425	University Physics I	
CHEM 1311/1111	General Chemistry I	
Hours		14
Second Year		
Fall		
COSC 2336	Programming Fundamentals III	3
POLS 2301	Intro to American Government I	3
HIST 1302	U S History II Since 1877	3
Language, Philosophy & Culture		3
MATH 2414	Calculus and Analytical Geometry II	4
Hours		16
Spring		
Select four Lab Science hours from the following:		4
BIOL 1406	General Biology I (Majors)	
BIOL 1407	General Biology II (Majors)	
PHYS 2425	University Physics I	
PHYS 2426	University Physics II	
CHEM 1311/1111	General Chemistry I	
CHEM 1312/1112	General Chemistry II	

POLS 2302	Intro/American Government II	3
Social and Behavioral Sciences		3
COSC 2375	Discrete Structures	3
COSC 2325	Computer Organization	3
Hours		16
Third Year		
Fall		
MATH 2318	Linear Algebra	3
COSC 3304	Algorithms Design and Analysis	3
COSC 3308	Design Programming Languages	3
MATH 3322	Introduction to Advanced Mathematics	3
or MATH 2415	or Calculus III	
COSC 4302	Operating Systems	3
Hours		15
Spring		
MATH 3370	Introduction to the Theory of Statistical Inference	3
COSC 3302	Intro to Computer Theory	3
Select three elective hours from the following:		3
COSC 4301	Special Topics	
CPSC 4326	Android Programming	
CPSC 4370	Artificial Intelligence	
CRIJ 4313	Contemporary Issues in Criminal Justice	
COSC 3325	Computer Law and Ethics	3
CPSC 4317	Computer Networks	3
Hours		15
Fourth Year		
Fall		
COSC 4345	Cybersecurity Networks	3
CPSC 4340	Database Design	3
COSC 4310	Introduction to Computer Architecture	3
CPSC 4355	Data Mining	3
CPSC 4360	Software Engineering	3
Hours		15
Spring		
CRIJ 4333	Cybercrime	3
or COSC 4365	or Computer Crime Analysis	
CPSC 4361	Secure Software Engineering	3
CPSC 4363	Cybersecurity: Systems	3
COSC 4272	Senior Assessment	2
Creative Arts		3
Hours		14
Total Hours		120