BS in Cybersecurity

Program Requirements

A minimum total of 120 credit hours is required for the BS in cybersecurity program. All courses with an AC, CS or APEN prefix require that prerequisites courses have to be completed with a grade of *C*- or better. In addition to meeting the requirements of the WSU General Education Program (http://catalog.wichita.edu/undergraduate/academic-information/general-education-program/) and the requirements of the College of Engineering, students in the BS in cybersecurity program must take the following courses:

Course	Title	Hours
General Education (34-35 credit hours)		
Select courses to meet General Education requirements [1]		12
General Education courses that will also meet Program Requirements		
FYAP 102A	First-Year Seminar: Introduction to Technology and Innovation [2, 3]	3
PSY 111	General Psychology [3]	3
PHIL 125	Introductory Logic	3
PHIL 354	Ethics and Computers [3]	3
ECON 201	Principles of Macroeconomics [3]	3
MATH 123	College Trigonometry [3]	3
PHYS 213 & 213L	General College Physics I and General Physics I Lab	5
College/Program Requirements		
PSY 323	Social Psychology [3]	3
PSY 405	Human Factors Psychology	3
Mathematical/Natural Sciences		
MATH 231	Discrete Math	3
STAT 370	Elementary Statistics	3
Major Courses		
AC 121	Cybersecurity Awareness	3
AC 201	Introductory Design Project [1]	1
AC 222	Applied Computing Fundamentals	3
AC 301	Junior Project	2
AC 321	Applied Networking	3
AC 322	Applied Programming and Scripting	3
AC 324	Applied Web Applications and Database Development	3
AC 326	Cyber Operations	4
AC 352	Competitive Ethical Hacking	3
AC 363	Human Threats to Cybersecurity	3
AC 401	Senior Project I	3
AC 402	Senior Project II	3
AC 461	Digital Forensics	3
AC 462	Cyber Physical Systems	4
AC 463	Cyber Risk Management	3
AC 464	Web Application Security	3
ENGR 220	Applied Analog and Digital Electronics	3
Technical Electives		
Select 23 credit hours. At least 9 out of the 23 credit hours must be from the College of Engineering. Up to 2 credit hours of co-op can be used as nondepartmental technical electives.		23
COMM 205	Visual Technologies	
COMM 206	Introduction to Multimedia	
COMM 535	Communication Analysis and Criticism	
ANTH 562	Introduction to GIS	
BADM 162	Business Software: Excel	
HLS 310	Emergency Management	
HLS 320	Border Security	
HLS 330	Legal Issues in Homeland Security	
HLS 401	Cyber Security	
HLS 403	Physical Security	
HLS 405	Intelligence Process	
HLS 420	Terrorism	
HLS 435	Cybercrime	
HLS 470	Special Topics	
HLS 470A	Immigration Policy and Politics	
HLS 470B	The History of U.S. Homeland Security	
HLS 470C	Jihadist Terrorism	
HLS 470D	Insider Threat: Identification, Mitigation, Deterrence and Prevention	
HLS 312	Risk Assessment	
PSY 322	Cognitive Psychology	
PSY 324	Psychology of Personality	
CS 211 & 211L	Introduction to Programming and Prob Slv/Prog Lab	
CS 311 & 311L	Object-Oriented Programming and Object-Oriented Programming Lab	
CS 400 & 400L	Data Structures and Data Structures Lab I	
CS 577	Special Topics in Computer Science	
ECE 194 & 194L	Introduction to Digital Design and Introduction to Digital Design Lab	
ENGR 302	Accessible Design	
ENGR 501	The Engineer as Leader	
ENGR 501H	The Engineer as Leader Honors	
MART 104	Introduction to Game Design	
MART 261	Game Technology and Coding I	
MART 361	Game Technology and Coding II	
MGMT 360	Principles of Management	
MIS 600	Database Management Systems	
MIS 605	Systems Analysis and Design	
MIS 612	Fundamentals of Cloud Computing	
MIS 696	Management of the IS Function	
COMM 255	Introduction to Web Design and Analytics	
Total Credit Hours		**120**

[1] See the requirements of the WSU General Education program (http://catalog.wichita.edu/undergraduate/academic-information/general-education-program/). MATH 131 is not accepted by the program. Required major courses may also count towards General

Education requirements. Students will need to select additional electives to reach 120 credit hours required for graduation with assistance from an advisor.

[2] All first-year college students must take FYAP 102A within their first two semesters. Non-freshmen students transferring into the program, who have not taken the First-Year Seminar course, will need to take ENGR 205 instead of AC 201.

[3] May count as a general education course.

Applied Learning

Students in the BS in cybersecurity are required to complete an applied learning or research experience to graduate from the program. The requirement can be met by completing the final three courses in the project design experience consisting of AC 301, AC 401 and AC 402.