

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 or CS prefix require that prerequisite 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
<i>Mathematical/Natural Sciences</i>		
MATH 231	Discrete Math	3
STAT 370	Elementary Statistics	3
Major Courses		
AC 121	Cybersecurity Awareness	3
AC 222	Applied Computing Fundamentals	3
AC 322	Applied Programming and Scripting	3
AC 346	Introduction to Computer Networks	3
or AC 321	Applied Networking	
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
ECE 194	Introduction to Digital Design	4
ECE 194L	Introduction to Digital Design Lab	0
APEN 210	Introduction to Facilities Management	3
ECE 477G	Introduction to Hardware Security	3
CS 497Q	Introduction to the Linux Operating System	1

Technical Electives

Select 18 credit hours. At least 9 out of the 18 credit hours must be from the College of Engineering. Up to 2 credit hours of co-op can be used as nondepartmental technical electives. 18

ANTH 562	Introduction to GIS
BADM 162	Business Software: Excel
HLS 310	Emergency Management
HLS 320	Border Security
HLS 330	Legal Issues in National Security
HLS 401	Cyber Security
HLS 403	Physical Security
HLS 405	Intelligence Process
HLS 420	Terrorism
HLS 435	Cybercrime
HLS 470A-Z	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
ENGR 302	Accessible Design
ENGR 501	The Engineer as Leader

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 CS 497Q.

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 401 and AC 402.