

CYBERSECURITY (BACHELOR OF SCIENCE, B.S.)

Overview

The Bachelor of Science program in Cybersecurity is a workforce generator for the growing field of cybersecurity. Students will gain both theoretical and hand-on skills to improve the security posture of a system. Students will also learn cyber laws, security governance and risk management, and incident response processes. The program prepares students for relevant security certification exams.

Admission

The student must be enrolled in CSC 184 Introduction to Computer Programming or have completed CSC 184 Introduction to Computer Programming with a grade of C or higher, or have an ACT composite score of 25 or higher, or an ACT Science Reasoning score of 28 or higher. In addition, the student must have an overall GPA of at least 2.0.

Requirements

Students who choose this bachelor degree program will have no more than 6 years from admission or subsequent declaration to meet the requirements listed below. If certification, accreditation or statutory requirements change and additional requirements become effective during this time, the new requirements take precedence.

Note: Students pre-admitted into the bachelor degree program (pre-major) have three years to meet admission requirements before moving to the overall 6 year time-frame allowed to complete the program requirements.

Code	Title	Credit Hours
General Studies		42
Students must complete General Studies courses (https://catalog.missouriwestern.edu/undergraduate/university-information/academic-standards-regulations/baccalaureate-degree/#bachelor-general-studies) ¹		
Major Requirements		73
ACT 101	Introduction to Information Technology	3
ACT 301	Applied Database Systems	3
CRJ 100	Introduction to Criminal Justice	3
CSC 184	Introduction to Computer Programming	3
CSC 264	Computer Architecture and Assembly Language Programming	3
CSC 274	Introduction to Unix/Linux	3
CSC 294	Networking and Telecommunications	3
CSC 374	UNIX/Linux System Administration	3
CSC 386	Operating Systems Concepts	3
MAT 111	Introductory Statistics	3
or MAT 111E	Introductory Statistics	
PHL 230	Ethics	3
SEC 100	Introduction to Cybersecurity	3
SEC 200	Computer Hardware and Peripherals	3
SEC 260	Introduction to Digital Forensics	3
SEC 305	Applied Cryptography	3
SEC 310	Securing and Defending Networks	3

SEC 325	Cybercrime	3
SEC 350	Emerging Technologies in Cybersecurity	3
SEC 360	Laws and Ethics in Cybersecurity and AI	3
SEC 380	Critical Infrastructure Threats and Security	3
SEC 400	Cyber Investigations	3
SEC 425	Ethical Hacking ²	3
SEC 445	Security Program Governance ²	3
SEC 490	Cybersecurity Career Preparation	1
SEC 495	Cybersecurity Capstone	3

¹ Courses in general studies may also be required within the major. While the course(s) may satisfy both requirements, the credit hours will count only one time in the overall hours earned.

² 500-level versions of these courses are also available to meet these requirements. Students desiring to take 500 level courses must meet the criteria required for undergraduates to enroll in graduate level courses.

Program Graduation Requirements

- Earn a grade of C or higher in all major coursework.
- Earn an overall GPA of at least 2.0 and a major GPA of at least 2.0.

University Graduation Requirements

- Earn a minimum of 120 credit hours (100 level and higher, maximum of 6 continuing education credit hours applicable).
- Earn a minimum of 30 credit hours in upper-division courses. Lower-division transfer courses accepted as meeting upper-division departmental course requirements cannot be used to fulfill this requirement.
- Earn 30 of the last 45 credit hours at MWSU in institutional coursework (exclusive of credit by examination).
- Participate in required departmental and campus wide assessments.
- Fulfill the Missouri Constitution requirement.
- Successfully pass the Missouri Higher Education Civics Achievement exam.