REQUIREMENTS FOR THE BACHELOR OF SCIENCE
POLYTECHNIC INSTITUTE
THE UNIVERSITY OF OKLAHOMA

Academic Year	General Requirements	Program
For Students Entering the Oklahoma State System for Higher Education **Summer 2024 through Spring 2025**	Minimum Total Credit Hours .... **120** Minimum Upper-Division Hours .... **40** **Minimum Retention/Graduation Grade Point Averages:** Overall - Combined and OU .... **2.00** Major - Combined and OU **2.00**	**Cybersecurity** **B264** Bachelor of Science

OU encourages students to complete at least 30 hours of applicable coursework each year to have the opportunity to graduate in 4 years.

GENERAL EDUCATION AND COLLEGE REQUIREMENTS

Courses designated as Core I, II, III, IV, or V are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved list, including at least one upper-division Gen. Ed. course outside of the student's major. **Courses graded P/NP will not apply.**

A grade of C or better is required in each course in the curriculum, including all prerequisite courses.

UNIVERSITY-WIDE GENERAL EDUCATION (MINIMUM 40 HOURS) AND COLLEGE REQUIREMENTS

Code	Title	Credit Hours
Core Area I: Symbolic and Oral Communication		
English Composition		
ENGL 1113	Principles of English Composition	3
ENGL 1213	Principles of English Composition	3
or EXPO 1213	Expository Writing	
Language (0-10 hours in the same language)		
This requirement can be met by two years of the same language in high school:		0-10
Beginning Course (0-5 hours)		
Beginning Course, continued (0-5 hours)		
Mathematics (minimum 3 hours)		
MATH 1823	Calculus and Analytic Geometry I [1, 2]	3
Core Area II: Natural Science (minimum 7 hours, including one laboratory)		
Choose two courses from different disciplines, one must include a laboratory		7
Core Area III: Social Science		
P SC 1113	American Federal Government	3
Choose one course		3
Core Area IV: Arts & Humanities		
Artistic Forms		
Choose one course		3
Western Culture		
HIST 1483	United States to 1865	3
or HIST 1493	United States, 1865 to the Present	
Choose one course (excluding HIST 1483 and HIST 1493)		3
World Culture		
Choose one course		3
Core Area V: First-Year Experience		
Choose one course		3
Total Credit Hours		**37-47**

[1]Major support requirements that also satisfy University General Education requirements.

[2]Students may take MATH 1743 and MATH 2123 or MATH 1914 and MATH 2924 in place of MATH 1823 and 2423.

FREE ELECTIVES

Electives to bring total applicable hours to the minimum total required for the degree including a minimum of 40 upper-division hours.

A grade of C or better is required in each course in the curriculum, including all prerequisite courses.

MAJOR REQUIREMENTS

Code	Title	Credit Hours
Required Courses		
CYBS 3113	Operating Systems Fundamentals	3
CYBS 3123	Introduction to Unix Systems	3
CYBS 3213	Foundations of Cybersecurity	3
CYBS 3223	Applied Statistics for Computing	3
CYBS 3313	Introduction to Cyber Ethics and Law	3
CYBS 3323	Hardware Security	3
CYBS 3743	Cyberforensics Fundamentals	3
CYBS 3813	Network Fundamentals	3
CYBS 3913	Database Fundamentals	3
CYBS 4103	Engineering Secure Software	3
CYBS 4203	Cybersecurity Risk Management and Assessment	3
CYBS 4293	Introduction to Cloud Computing and Security	3
CYBS 4473	Network Security	3
CYBS 4883	Cryptography Fundamentals	3
CYBS 4963	Cybersecurity Capstone	3
Major Electives		
Choose 4 approved CYBS electives from a list maintained by the department		12
Total Credit Hours		**57**

MAJOR SUPPORT REQUIREMENTS

Code	Title	Credit Hours
Math and Science		
MATH 2423	Calculus and Analytic Geometry II [1]	3
C S 1324	Introduction to Computer Programming for Non-Programmers	4
C S 2334	Programming Structures and Abstractions	4
C S 2413	Data Structures	3
C S 2813	Discrete Structures	3
or MATH 2513	Discrete Mathematical Structures	
Total Credit Hours		**17**

[1]Students may take MATH 1743 and MATH 2123 or MATH 1914 and MATH 2924 in place of MATH 1823 and 2423.

More information in the catalog: (http://ou-public.courseleaf.com/polytechnic-institute/cybersecurity-bachelor-science/).

SUGGESTED SEMESTER PLAN OF STUDY

This plan shows one possible grouping of courses that would allow students to graduate in four years. Please refer to the front of the degree checksheet for official requirements. Students must consult with OU Polytechnic Institute academic advisers to verify that courses selected each semester fulfill the recommended plan and satisfy university, Polytechnic Institute, and major requirements.

Courses designated as Core I, II, III, IV or V are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved list. Two college-level courses in a single world language are required; this may be satisfied by successful completion of 2 years in a single world language in high school. Students who must take language at the University will have an additional 6-10 hours of coursework.

Year		FIRST SEMESTER	Hours		SECOND SEMESTER	Hours
FRESHMAN	ENGL 1113	Principles of English Composition (Core I)	3	ENGL 1213 or EXPO 1213	Principles of English Composition (Core I) or Expository Writing	3
	MATH 1823	Calculus and Analytic Geometry I (Core I)	3	MATH 2423	Calculus and Analytic Geometry II	3
	C S 1324	Introduction to Computer Programming for Non-Programmers	4	C S 2334	Programming Structures and Abstractions	4
	HIST 1483 or HIST 1493	United States to 1865 (Core IV) or United States, 1865 to the Present	3	P SC 1113	American Federal Government (Core III)	3
		Approved Elective, First-Year Experience (Core V) [1]	3		Open Elective, lower-division [2]	3
		CREDIT HOURS	**16**		**CREDIT HOURS**	**16**
SOPHOMORE	C S 2813 or MATH 2513	Discrete Structures or Discrete Mathematical Structures	3		Approved Elective, Western Culture (Core IV) [1]	3
	C S 2413	Data Structures	3		Approved Elective, Natural Science (Core II-Lab)) [3]	4
		Approved Elective, Social Science (Core III) [1]	3		Open Elective, lower-division [2]	3
		Approved Elective, Natural Science (Core II) [3]	3		Open Elective, lower-division [2]	3
		Approved Elective, World Culture (Core IV) [1]	3			
		CREDIT HOURS	**15**		**CREDIT HOURS**	**13**
JUNIOR	CYBS 3213	Foundations of Cybersecurity	3	CYBS 3113	Operating Systems Fundamentals	3
	CYBS 3123	Introduction to Unix Systems	3	CYBS 3313	Introduction to Cyber Ethics and Law	3
	CYBS 3223	Applied Statistics for Computing	3	CYBS 3743	Cyberforensics Fundamentals	3
	CYBS 3323	Hardware Security	3	CYBS 3813	Network Fundamentals	3
		Approved Upper-Division Elective (3000-4000), Artistic Forms (Core IV) [1]	3	CYBS 3913	Database Fundamentals	3
		CREDIT HOURS	**15**		**CREDIT HOURS**	**15**
SENIOR	CYBS 4103	Engineering Secure Software	3	CYBS 4293	Introduction to Cloud Computing and Security	3
	CYBS 4203	Cybersecurity Risk Management and Assessment	3	CYBS 4883	Cryptography Fundamentals	3
	CYBS 4473	Network Security	3	CYBS 4963	Cybersecurity Capstone	3
		CYBS Major Elective	3		CYBS Major Elective	3
		CYBS Major Elective	3		CYBS Major Elective	3
		CREDIT HOURS	**15**		**CREDIT HOURS**	**15**

[1] To be chosen from the University-Wide General Education Approved Course List. Three of these hours must be upper-division (3000-4000). See list in the Class Schedule.

[2] Open electives are not required to be General Education approved.

[3] Courses taken to fulfill the Natural Science requirement must be chosen from the University-Wide General Education Approved Course List (Core II). At least one of the natural science courses must have a laboratory component.